

AN EXPERT PAPER ON ESD, PREPARED BY DR GERRY BATES FOR THE COMMISSIONER FOR SUSTAINABILITY AND THE ENVIRONMENT.

EXECUTIVE SUMMARY

1. Sustainable development is a global ideal that has been incorporated extensively into strategies, policies, plans and legislation in all Australian jurisdictions
2. Principles of ESD may be used in decision-making whether or not ESD is referred to in legislation
3. Legal definitions of ESD are problematic because they tend to treat ESD as a process for, rather than an outcome of, decision-making
4. Where legislation in the ACT refers to ESD, the precise legal obligations of decision-makers to use or apply ESD are not entirely clear
5. It is arguable that, in the ACT, ESD must be applied whenever decisions are being made that raise issues in which ESD is relevant to the decision.
6. The priorities or weightings between the various components of ESD (social, economic, and environmental) are for the decision-maker to determine. However, a 'business as usual' approach to decision-making may well see decisions increasingly challenged for failure to incorporate principles of ESD
7. Determining priorities will involve value judgments that should seek to maximize or, where that is not possible, optimize ESD in decision-making.
8. The practical application of ESD in decision-making can be achieved through:
 - (a) incorporating ESD in strategic planning instruments;
 - (b) project design;
 - (c) environmental assessments of proposals
 - (d) determining criteria in the form of standards or benchmarks against which projects and activities may be assessed;
 - (e) conditions of consent for projects and activities
 - (f) monitoring and adaptive management

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1. That just because legislation does not refer to ESD, that does not mean that ESD is irrelevant to decision-making.
2. Where ESD is referred to in the objects of legislation, the exercise of decision-making powers under other provisions of the legislation may be constrained by, and broadly referable back to, those objects.
'In accordance with'
'Applying' ESD
3. Legislation may refer to requirements that impliedly must, or may, trigger consideration of principles of ESD.
'Public Interest'
4. ESD may be stipulated as a specific consideration in, or matter for, decision-making
5. Where ESD is considered in decision-making, it is open to the decision-maker to weigh or 'balance' the priorities so as to achieve an optimal result that accords with the intention of the legislation under which the power is exercised.
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Introduction:

The purpose of this paper is to:

1. explain the history and development of the concept of sustainable development as a global ideal;
2. explain the rise of the concept of Ecologically Sustainable Development (ESD) in Australia;
3. explore the legal context in which principles of ESD in decision-making must or may be used;
4. explore how principles of ESD may be used in practical decision-making within the boundaries of legal powers and responsibilities.

When dealing with the legal context and practical decision-making in 3. and 4. above this paper will:

- a. refer to legislation in the ACT that introduces the concept of ESD;
- b. interpret the requirements of that legislation in relation to ESD by using legislation and case-law from other jurisdictions;
- c. Include strategies and policies that inform the content and delivery of ESD
- d. use cases from courts and tribunals in other jurisdictions that indicate how practical effect may be given to concepts of ESD in decision-making. This part of the paper will concentrate upon decisions made by courts and tribunals that have the capacity to inform decision-making in government because:
 - (i) the decisions are readily available for public perusal;
 - (ii) the reasoning and analysis is clearly set out;
 - (iii) the conditions of consent or orders of the court or tribunal are included in the final decision.

This paper has been informed by two workshops conducted in Canberra in October 2013 and February 2014. These workshops involved key strategists and thinkers and representatives of government agencies that are involved in day-to-day decision-making in the ACT. The workshops concentrated upon:

- (a) examples of practical decision-making that confronted the participants and explored how past decisions, current strategies and policies, and suggestions contained in an earlier background version of this paper could be used to inform the use of ESD in decision-making in the ACT in the future;
- (b) discussing, with practical examples, how decision-making in the ACT has already used and applied the concept and principles of ESD.

PART A: The Growth of Sustainable Development as a Global Ideal

Although the concept of ‘sustainable development’ is widely known to have been adopted by the Report of the World Commission on Environment and Development (WCED), *Our Common Future* (commonly referred to as the *Brundtland Report*), the starting point for global interest in a sustainable future is the United Nations Conference on the Human Environment in 1972. The outcome of this conference was the formulation of an action plan for international cooperation on environmental problems, the *Stockholm Declaration*, which set out 26 principles relating to the preservation and enhancement of the human

environment.¹ Principle 2 stated that:

The natural resources of the earth, including the air, water, land, flora and fauna and especially representative samples of natural ecosystems, must be safeguarded for the benefit of present and future generations through careful planning or management, as appropriate.

The World Conservation Strategy, published by the International Union for the Conservation of Nature (IUCN) in 1980² asserted that any sound sustainable legislative strategy should include specific legislation aimed at achieving the objectives of conservation by providing for both the sustainable utilisation and the protection of living resources and of their support systems. Comprehensive conservation legislation should provide for the planning of land and water uses and should regulate both direct impacts on the resource, such as exploitation and habitat removal, and indirect ones, such as pollution or introduction of exotic species. In addition, it should include requirements to undertake ecosystem evaluation, environmental assessments, and like mechanisms to ensure the incorporation of ecological considerations into policy-making. The law should also provide for the participation of citizens in the elaboration of policies, for the provision of sufficient information for participation to be effective, and for legal recourse to implement these rights.

In response to, and based on, the World Conservation Strategy, a National Conservation Strategy for Australia was drawn up in 1983.³ It had three major objectives:

1. to maintain ecological systems which are essential to the continuation of life on earth; for example, the recycling of nutrients and natural cleansing of waters;
2. to maintain genetic diversity (the range of genetic features found in living organisms) so as to preserve the natural vigour of plant and animal species on which depend the cultivation of domestic crops and animals and scientific and technical advances; and
3. to ensure the sustainable use of ecosystems and plant and animal species, which sustain agrarian communities as well as major industries.

Most states subsequently drew up their own conservation strategies. Implementation of these strategies, however, was subsequently overtaken by the impetus generated by the notion of sustainable development.

The Brundland Report and Beyond

‘Sustainable development’ has been defined by the *Brundtland Report*, as development that meets the needs of present generations while not compromising the ability of future generations to also meet their needs. The WCED, chaired by the Prime Minister of Norway, Ms Gro Brundtland, and established by the United Nations in 1983, was asked to bring forward proposals for long-term environmental strategies for achieving sustainable development by the year 2000 and beyond, and recommend ways in which the international community of nations could cooperate and take action to achieve that objective. The report was ultimately written in a positive light, but served notice that global strategies for change were required:

This Commission believes that people can build a future that is more prosperous, more just, and more secure. Our Report, *Our Common Future*, is not a prediction of ever increasing environmental decay, poverty, and hardship in an ever more polluted world among ever decreasing resources. We see instead the possibility of a new era of

¹ Available at www.unep.org. It is generally acknowledged that the starting point for international environmental law was the 26 principles for environmental preservation laid down in the Stockholm Declaration: see for example Koester, ‘From Stockholm to Brundtland’ (1990) *Env Policy & Law* 20.1.2, cited in Boer, ‘Implementing Sustainability’ (1992) 14 *Delhi LR* 1 at 24. And on the incorporation of the precautionary principle into international agreements, see de Sadeleer, ‘Environmental Principles: From Political Slogans to Legal Rules’, OUP, Oxford, 2002, Ch 3, p 94 and following. See also Sands, ‘Environmental Protection in the Twenty-first Century: Sustainable Development and International Law’ in Vig et al (eds), *The Global Environment: Institutions, Law and Policy*, CQ Press, Washington, 1999, pp 116–37.

² *World Conservation Strategy: Living Resource Conservation for Sustainable Development*, IUCN, Gland, 1980, available at www.iucn.org

³ *National Conservation Strategy for Australia: Living Resource Conservation for Sustainable Development*, AGPS, Canberra, 1983, available at <http://catalogue.nla.gov.au/Record/2285502>

economic growth, one that must be based on policies that sustain and expand the environmental resource base. And we believe such growth to be absolutely essential to relieve the great poverty that is deepening in much of the developing world.

But the Commission's hope for the future is conditional on decisive political action now to begin managing environmental resources to ensure both sustainable human progress and human survival.

At the heart of the problems of environmental degradation were seen to be two major causes: a dramatically increasing world population, and powerful technological advances that enabled over-exploitation of the world's resources. The report repeatedly emphasises that environment and development must no longer be regarded as separate concerns, but that they are inter-related, and if sustainability is to be achieved, institutional reform will have to follow:

The integrated and interdependent nature of the new challenges and issues contrasts sharply with the nature of the institutions that exist today. These institutions tend to be independent, fragmented and working to relatively narrow mandates with closed decision[-making] processes. Those responsible for managing natural resources and protecting the environment are institutionally separated from those responsible for managing the economy. The real world of interlocked economic and ecological systems will not change; the policies and institutions concerned must.

The imperative to develop policies and mechanisms for sustainable development in a world which was still continuing to destroy natural resources at unprecedented levels, surfaced again at the United Nations Conference on Environment and Development (UNCED), the 'Earth Summit' in Rio de Janeiro in June 1992. This global conference brought together over 170 governments and thousands of delegates, as well as large numbers of non-governmental organisations which held their own conference in tandem with the main event. The formal documents that emerged from the conference included the Rio Declaration (a statement of general principles on sustainability) and Agenda 21 (a general plan to translate the principles into practical decision-making).

The Rio Declaration and Agenda 21

The Rio Declaration sets out 27 principles to guide the international community in achieving sustainable development. For example:

- regard must be had to the environmental needs of future as well as present generations (Principle 3);
- environment protection must be an integral part of development (Principle 4);
- unsustainable patterns of production and consumption must be reduced (Principle 8); and,
- effective environmental laws must be enacted (Principle 11).

Other important principles to be recognised include:

- the precautionary principle (Principle 15); and,
- the polluter pays principle (Principle 16).

As a consensus document, of course, it was bound to have weaknesses; however, the fact that governments have accepted it, and that principles of sustainability now appear in many international agreements, paves the way for the eventual incorporation of many of the principles into customary international law and domestic law. The status of ESD as an emerging norm of customary international law is important in Australia, since the High Court has confirmed that, unless there is a clear legislative direction to the contrary, domestic legislation will be interpreted and applied in conformity with customary international law.⁴

⁴ *Minister for Immigration and Ethnic Affairs v Teoh* (1995) 183 CLR 273; *Kartinyeri v Commonwealth* (1998) 72 ALJR 722. See also Sir Anthony Mason, 'The Influence of International and Transnational Law on Australian Municipal Law' (1996) 7 *Public Law Review* 20 included also in G Lindell (ed), *The Mason Papers* (2007) 269–73; MacIntyre and Mosedale, 'The Precautionary Principle as a Norm of Customary International Law' (1998) 9 *J Env L* 221.

Agenda 21 is an agreed action plan comprising some 40 chapters over 500 pages in length and described as “a blueprint for action in all areas relating to the sustainable development of the planet, from now until the 21st century”. Agenda 21 provides mechanisms in the form of policies, plans, programs and guidelines for national governments, by which to implement the principles contained in the Rio Declaration. To advance the agenda, the plan embraces, for example, the adoption of environmentally sound technology; the provision of financial resources to developing countries; developing database information systems for planning and monitoring; and progressing new institutional and legal arrangements. Chapter 8 of Agenda 21 is concerned with the practicalities of integrating environment and development in decision-making, particularly with regard to the use of environmental law and policy and economic instruments.

World Summits 2002-2012

In 2002 the tenth anniversary of UNCED was celebrated with a World Summit on Sustainable Development 2002, held in Johannesburg. This summit focused on relief of poverty, water, sanitation, and sustainable energy, and in general reaffirmed the international commitment to progressing the principles of sustainable development.⁵ It also added a third pillar to the concept of sustainable development - that of social as well as environmental and economic integration - noting (at [2]) that efforts needed to be taken to:

... promote the integration of the three components of sustainable development — economic development, social development and environmental protection — as interdependent and mutually reinforcing pillars. Poverty eradication, changing unsustainable patterns of production and consumption and protecting and managing the natural resource base of economic and social development are overarching objectives of, and essential requirements for, sustainable development.

Beyond that, it was generally long on aspiration but short on specific action to be taken.

Rio+20 (Earth Summit 2012 or Rio 2012) was the third international conference on sustainable development aimed at reconciling conflicting economic and environmental goals. The two main themes of this conference were how to build a green economy to achieve sustainable development and lift people out of poverty, and how to improve international coordination for sustainable development by building an institutional framework. A non-binding document⁶ *The Future We Want* reaffirmed political commitments to Agenda 21 and the progression of the ideals of sustainable development. A commitment was also made to ‘Sustainable Development Goals’, a set of measurable targets for achieving sustainability. Other commitments cover the role of ‘environmental services’ being taken into account in measuring a nation’s gross domestic product (GDP), an indicator of economic growth, wealth and standard of living; the need to return the living natural resources of the oceans to sustainable levels; a commitment to phase out subsidies on fossil fuels; and the recognition that fundamental changes in patterns of production and consumption must be encouraged.

The Montevideo Programme

In terms of future legal action on sustainability, reference to UNEP’s Montevideo Programme is probably a more useful indicator of trends and possibilities. The aim of this program is to provide a long-term, strategic guidance plan for UNEP in the field of environmental law.⁷ The third phase of the program, covering the first decade of the twenty-first century, included ‘innovative approaches to environmental law’ that encompassed the assessment and use of various market-based instruments, including emissions trading and natural resource

⁵ See www.earthsummit2002.org. The Johannesburg Plan of Implementation can be viewed at www.un.org/esa/sustdev/documents/WSSD_POI_PD/English/POIToc.htm.

⁶ Available at <http://www.un.org/en/sustainablefuture/>

⁷ See www.unep.org/law/About_prog/montevideo_prog.asp.

taxes, promotion of environmentally responsible corporate and institutional behaviour, and appropriate valuation of ecosystem services. Relationship of environment protection measures with trade, security and military activities were also flagged as important issues to be addressed. Montevideo IV,⁸ covering the decade from 2010, concentrates upon achieving effective implementation of, compliance with, and enforcement of environmental law; conservation, management and sustainable use of natural resources; and challenges that confront environmental law, particularly climate change, poverty, access to drinking water and sanitation, ecosystem conservation and protection, environmental emergencies and natural disasters, pollution and new technologies. This fourth phase also looks at the relationship of environmental law with other important and related fields; human rights, trade, security and military activities.

Ecologically Sustainable Development in Australia

Australia has fully embraced the concept of sustainable development through policy initiatives, legislative reform and the courts and tribunals in all jurisdictions. Over the last 25 years, federal, state and territory governments have introduced a broad range of discussion papers and policy initiatives designed to identify and implement sustainable development, and legislation at all levels has been vigorously amended to make ESD a fundamental objective of legislative schemes for environmental and natural resources management.

The process began in June 1990 by the release of Commonwealth government discussion papers on ESD.⁹ Responses to this paper were then used by the Sustainable Development Subcommittee of the Structural Adjustment Committee of Federal Cabinet to finalise the paper for use as a guide for the various working groups that were set up on issues such as air, water and land degradation, biological diversity and climate change. Working groups also dealt specifically with resource-based issues such as forestry, mining, agriculture, fisheries, energy, transport and tourism.¹⁰

The outcome of this process was the finalisation of a National Strategy for Ecologically Sustainable Development (NSED), endorsed by each state and territory government in December 1992,¹¹ by which it was agreed that the future development of all relevant policies and programs, particularly in key industry sectors that utilise natural resources and are national in character, should take place within the framework of the NSED and the Inter-governmental Agreement on the Environment (IGAE).¹²

The Australian government's reference to '*ecologically sustainable development*' was thought to emphasise the necessary integration of economy and environment pursued by WCED:¹³

Ecologically sustainable development means using, conserving and enhancing the community's resources so that ecological resources, on which life depends, are maintained and the total quality of life, now and in the future can

⁸ Available at <http://www.unep.org/delc/Portals/119/MontevideoIV.pdf>

⁹ *Ecologically Sustainable Development* (discussion paper), AGPS, Canberra, 1990. See also *Our Country, Our Future*, AGPS, Canberra, 1989 (statement by Prime Minister Bob Hawke); Australian International Development Assistance Bureau, *Ecologically Sustainable Development in International Development Cooperation, An Interim Policy Statement*, AGPS, Canberra, 1990; Ecologically Sustainable Development Steering Committee, *Draft National Strategy for Ecologically Sustainable Development*, AGPS, Canberra, 1992; *National Strategy for Ecologically Sustainable Development*, AGPS, Canberra, 1992.

¹⁰ See *Ecologically Sustainable Development Working Groups, Final Reports on Agriculture, Energy Production, Energy Use, Fisheries, Forest Uses, Manufacturing, Mining, Tourism and Transport*, AGPS, Canberra, 1991 (these comprehensive and well-researched reports contain a wide variety of recommendations, some quite innovative and far-sighted).

¹¹ At the same time the National Greenhouse Response Strategy and the National Forest Policy Statement were also endorsed by the Council of Australian Governments. The implementation of ESD also encompasses a National Strategy for the Conservation of Australia's Biological and a National Waste Minimisation and Recycling Strategy.

¹² The Agreement is set out in the National Environment Protection Council Act 1994 (ACT) sch 1.

¹³ Commonwealth Government, *Ecologically Sustainable Development*, Commonwealth Discussion Paper, AGPS, Canberra, 1990

be increased.

The NSESD was, however, expressed to be subject to budgetary priorities and constraints in individual jurisdictions.

In an attempt to integrate economic and environmental issues into decision-making and provide a basis for qualitative research, the federal government established a Resource Assessment Commission (RAC) in 1989. Until its demise in 1993, the RAC attempted to integrate economic and environmental factors into decision-making on complex and contentious resource issues such as forestry, mining in the Kakadu conservation zone in the Northern Territory, and coastal protection. In any inquiry, the RAC was required to take into account the various uses which could be made of a resource and then consider the environmental, cultural, social, industry, economic and other values involved in those uses, and make an assessment of losses and benefits involved in the various alternative uses to which the resource might be put.

Since the demise of the RAC, there has been a concerted effort by the Australian federal government to establish its role as the coordinator of national strategies¹⁴ for environmental and natural resources management, implementation of which depends on principles of cooperative federalism. To a large extent, though, the work of the RAC has been continued, largely, though not always, outside the formal inquiry processes, by the Productivity Commission, which either initiates its own investigations or responds to Commonwealth initiated projects. The Commission has produced a number of reports on various environmental and natural resource-based issues,¹⁵ including, for example, reports on sustainable land management,¹⁶ implementation of principles of ESD by Commonwealth government agencies,¹⁷ waste,¹⁸ and impacts of native vegetation and biodiversity regulations.¹⁹ The Commission has also published a number of research papers on environmental issues; for example, biodiversity²⁰ and market-based incentives.²¹

PART B: ESD as a Legislative Concept

Consideration of the potential to use ESD in decision-making must be informed by the legislative context in

¹⁴ These include for example the Oceans Policy; the National Forests Policy; the Australian Weeds Strategy; the National Strategy for the Conservation of Australia's Biological Diversity; the National Action Plan for Salinity and Water Quality (now replaced by Caring for Our Country); the National Strategy for the Management of Coastal Acid Sulfate Soils; the National Programme of Action for the Protection of the Marine Environment from Land-Based Activities; the National Framework for the Management and Monitoring of Australia's Native Vegetation; the National Strategy and Action Plan for the role of Australia's Botanic Gardens in Adapting to Climate Change; the Renewable Energy Target Scheme; the Strategy for Australia's National Reserve System 2009–2030; the National Waste Policy; and the National Strategy on Energy Efficiency.

¹⁵ Available at www.pc.gov.au/publications

¹⁶ A Full Repairing Lease: Inquiry into Ecologically Sustainable Land Management (Report No 60), Industry Commission, IC Inquiry Report, January 1998.

¹⁷ Implementation of Ecologically Sustainable Development by Commonwealth Departments and Agencies, May 1999.

¹⁸ Waste Management, Report No. 38, October 2006

¹⁹ Impact of Native Vegetation and Biodiversity Regulations, Report No. 29, April 2004

²⁰ Constraints on Private Conservation of Biodiversity (July 2001); Harnessing Private Sector Conservation of Biodiversity (December 2001); Cost Sharing for Biodiversity Conservation: A Conceptual Framework (May 2001); see also Assessing Environmental Regulatory Restraints for Aquaculture (February 2004).

²¹ Creating Markets for Ecosystem Services, June 2002.

which those decisions are made.

There are two important considerations in discussing ESD as a legal concept:

1. what is it; that is, how is it defined?
2. what do decision-makers have to do with it; that is, how does the legislation address the responsibilities of public authority decision-makers to actually think about and use the concept of ESD?

Clearly, the principles of ESD are intended to influence, even direct, governmental and therefore corporate and individual decision-making. However, as principles, they tell us little about how to translate the concepts into practical action; that is something that must be considered in the context of each individual proposal. This theme will be further explored in the scheduled workshops. The principles do seem, however, to imply a preventative, or cautionary, approach to decision-making that stresses the necessity, or desirability, of avoiding or at least minimizing adverse environmental impacts.

Definitions of ESD

Although legal definitions of the concept of ESD differ between federal and state legislation, most are fundamentally based on the definition of ecologically sustainable development agreed to by the Commonwealth, states and local government and embodied in the National Strategy on Ecologically Sustainable Development 1992 and the Inter-Governmental Agreement on the Environment 1992. This definition states, in summary:

Ecologically sustainable development requires the effective integration of economic and environmental considerations in decision-making processes. Ecologically sustainable development can be achieved through the implementation of the following principles and programs ... the precautionary principle; intergenerational equity; conservation of biological diversity and ecological integrity; and improved valuation, pricing and incentive mechanisms.

The focus on the four stipulated means of achieving ESD does not reflect all of the principles commonly referred to as the components of sustainable development that are set out in the Rio Declaration. The principles set out in Australian legislation, however, are clearly not intended to be exclusive and other principles may be required to be considered in order to meet defined statutory objectives. For example, many pieces of legislation also require decision-makers to build into their processes of decision-making public participation, access to information and to justice, the polluter pays principle, and the application of environmental impact assessment, all of which are regarded as important components of sustainable development at an international level.

New South Wales has quite consciously adhered to the NSESD definition,²² while at the same time developing policies and legislation that incorporate other principles of sustainable development. Other jurisdictions have used the NSESD definition as a foundation, building in references also to social and

²² Protection of the Environment Administration Act 1991 s 6(2).

economic objectives, short- and long-term decision-making, and global considerations.²³

ESD in the ACT

In the ACT, the legal definition of ESD reflects more the NSW approach:²⁴

“Ecologically sustainable development means the effective integration of economic and environmental considerations in decision-making processes (and to be) achievable through implementation of the following principles:

- (a) the precautionary principle, namely, that if there is a threat of serious or irreversible environmental damage, a lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation;
- (b) the inter-generational principle, namely, that the present generation should ensure that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations;
- (c) conservation of biological diversity and ecological integrity;
- (d) improved valuation and pricing of environmental resources.

Where a number of factors are mandated for consideration without any statutory indication as to the priority or weight to be accorded to the various factors, then the relevance of each of those factors will be interpreted as a question of fact for the decision-maker to determine.²⁵

The implications of this definition are discussed in the next section.

Strategies and policies in the ACT are not necessarily entirely faithful to the legal definition. The ACT Sustainability Policy 2009²⁶ refers to “an understanding of sustainability that recognises the need for a long-term perspective, the need for responsibilities and benefits to be shared equitably, and the interdependence of our economy, environment and society.” Principles of equity and fairness are only partly covered in the legal definition by references to inter-generational, but not intra-generational, equity.

The addition of ‘society’ in the Policy also underscores a ‘triple bottom line’ (TBL) approach; integrating social, economic and environmental concerns. The Policy includes the “guiding principle” of integrating environmental, social and economic goals in policies and activities; and committing the ACT Government to embedding TBL assessment into its day-to-day decision-making processes. A goal of the Triple Bottom Line

²³ For example, the Environment Protection and Biodiversity Conservation Act 1999 (Cth) s 3A emphasises that ‘decision-making processes should effectively integrate both long-term and short-term economic, environmental, social and equitable considerations’. Legislation in Victoria is particularly expansive; see for example the Commissioner for Environmental Sustainability Act 2003 (Vic) s 4

²⁴ Environment Protection Act 1997 (ACT) s 2(2); Waste Minimisation Act 2001 (ACT) s 6; Planning and Development Act 2007 (ACT) s 9, Commissioner for Environment and Sustainability Act 1993 Dictionary; Fisheries Act 2000 (ACT) s 3; Financial Management Act 1996 (ACT) s 11. Only twelve pieces of legislation in the ACT refer to ‘sustainable development’; while nine refer to the ‘precautionary principle’. Twenty pieces of legislation mention the term ‘sustainable’.

²⁵ *Minister for Aboriginal Affairs v Peko Wallsend Pty Ltd* (1986) 162 CLR 24 at 41

²⁶ People, Places, Prosperity: the ACT's Sustainability Policy 2009 available at http://www.cmd.act.gov.au/__data/assets/pdf_file/0003/119730/people_place_prosperity.pdf

Assessment Framework²⁷, commencing in March 2013, is to embed sustainability considerations within the decision-making process.

Interestingly, the new Planning Bill 2013 in NSW s 1.3(2) also states that “sustainable development is achieved by the integration of economic, environmental and social considerations, having regard to present and future needs, in decision-making about planning and development.”

The cumulative effect of the ACT Sustainability Policy 2009 and the Triple Bottom Line Assessment Framework, seems to be to regard integrating social, environmental and economic goals as a guiding principle for sustainability in relation to policies and activities; and TBL assessment as a way of embedding sustainability into decision-making.

From this it may be argued that ‘triple bottom line’ and ESD are really just different labels for the same desired outcome. For example, the Assessment Framework outlines, in Part 8, environmental impacts that should be included in environmental assessments. These matters may be relevant not only in project evaluation but also in policy design. Part 9.3 outlines requirements for climate change impact assessment. These impacts provide a useful checklist of the issues that real life decision-making, whether drawing up and approving policies, or evaluating projects, needs to think about in order to promote ESD.

What should decision-makers do with ESD?

Legal definitions of ecologically sustainable development are problematic because:

- The concepts and principles are expressed in often vague and ambiguous language, making interpretation difficult
- they fail to give any guidance to decision-makers about the practical implementation of principles of ESD
- they tend to treat sustainability as part of a procedure for, rather than as a focus or an outcome of, decision-making;
- they do not prioritise ESD in decision-making
- there tends to be little accountability for pursuing or achieving sustainable outcomes; and
- there are few requirements in legislation for actually monitoring the sustainability of outcomes.

His Honour Justice Paul Stein has summed up the difficulties:²⁸

... the inclusion of the principles in Australian legislation has been largely confined to objectives of statutes or agencies without any real guidance to decision-makers as to whether and how to apply the core principles or what weight to give them. Moreover, some of the principles contain vague statements, some might call them aspirations, as well as ambiguities, inconsistencies and uncertainties. Difficulties of interpretation and application are manifest. There is even discussion on whether the principles are merely guiding or whether they are also operational.

The definition of ESD in ACT legislation illustrates some of these difficulties. For example:

²⁷ Both available at <http://www.cmd.act.gov.au/policystrategic/sustainability>

²⁸ Are Decision-makers Too Cautious with the Precautionary Principle? (2000) 17 *EPLJ* 3.

1. must the effective integration of environmental and economic considerations be achievable *only* through the four principles specified? Or may other principles of sustainable development recognized at a global level be used, either alone or in conjunction with any or all of the four specified principles, to deliver this effective integration?
2. must this effective integration demonstrate achievability through *all four* principles? Or if achievability may be demonstrated through the use of just one of these principles would that suffice?
3. so long as the effective integration is 'achievable' through all or any of the four specified principles, does it matter if none of them are actually applied or used to achieve it?
4. Does 'achievable' imply 'achievement' or the pursuit of 'achievement' and if so how is this to be monitored and evaluated?

Hours could be spent debating these questions, but rather than seeking to tease out the precise meanings of these provisions (which were probably not dissected with any precision in the drafting anyway) it is probably more useful to focus on ways in which ESD may be implemented that are at least arguably consistent with, and unlikely to be inconsistent with, the general legislative intent.

PART C. ESD in Decision-making

There are 5 general propositions that may be stated about using ESD in decision-making:

1. That just because legislation does not refer to ESD, that does not mean that ESD is irrelevant to decision-making.
2. Where ESD is referred to in the objects of legislation, the exercise of decision-making powers under other provisions of the legislation may be constrained by, and broadly referable back to, those objects.
3. Legislation may refer to requirements that impliedly must, or may, trigger consideration of principles of ESD.
4. ESD may be stipulated as a specific consideration in, or matter for, decision-making
5. Where ESD is considered in decision-making, it is open to the decision-maker to weigh or 'balance' the priorities so as to achieve an optimal result that accords with the intention of the legislation under which the power is exercised.

- 1. That just because legislation does not refer to ESD, that does not mean that ESD is irrelevant to decision-making.**

In the ACT the majority of legislation does not refer to ESD so this principle is a good place to start in analyzing the practical usefulness of ESD.

As a general proposition, unless contradicted by a statute itself, it is open to decision-makers to consider and apply principles of ESD even in the absence of statutory instructions so to do.

The emergence of the concept of sustainable development as a global ideal, and its acceptance in Australia as a fundamental consideration in designing environmental policies, clearly establishes ESD as a not irrelevant factor in decision-making that may be considered and applied whenever relevant to do so. This proposition was established in the earliest case on ESD *Leatch v Director General of National Parks and Wildlife Service* [1993] NSWLEC 191, where the precautionary principle was applied to a development that threatened the habitat of an endangered frog despite the fact that the legislation under which the decision was taken did not refer to ESD. Stein J held that applying the precautionary principle to this development was clearly consistent with the scope, purpose and content of the legislation.

In the ACT, the Supreme Court in *Rashleigh v Environment Protection Authority* [2005] ACTSC 18 at [28] referred to a decision made by the Administrative Appeals Tribunal in earlier proceedings that “ the adoption of the precautionary principle is also supported by its inclusion in the WRMP 1999; the Guidelines; its adoption as a matter of current government policy (as set out in 2003-04 Budget Paper No. 3); the strategic principles of the Territory Plan and the Integrated Catchment Management Framework adopted by the government for the Territory.” And in *Animal Liberation v Conservator of Flora and Fauna (Administrative Review)* [2009] ACAT 17 the relevance of the precautionary principle was admitted by the Tribunal in determining an appeal against the issue of a licence for culling of kangaroos in the ACT.

The universality of the relevance of ESD to decision-making in the ACT may perhaps be underlined by the requirements for annual reporting under the Annual Reports (Government Agencies) Act 2004 (ACT) which requires public authority reports to *inter alia*:²⁹

- (a) include a report on how the actions of, and the administration (if any) of legislation by the reporter during the period accorded with the principles of ecologically sustainable development; and
- (b) identify how the outputs (if any) specified for the reporter in budget papers presented to the Legislative Assembly with an Appropriation Act relating to the period contributed to ecologically sustainable development.

These responsibilities on ‘public authorities’³⁰ clearly apply to many agencies that operate under legislation that contains no references to ESD.

Further, in conducting a performance audit of some of these relevant entities, the Auditor-General may, where appropriate, take into account environmental issues relative to the operations being reviewed or examined, having regard to the principles of ecologically sustainable development.³¹ The Auditor-General has commented in its performance audit report of high density residential and commercial developments in the ACT that:

There is a need to identify the full suite of potential environmental sustainability issues for development applications,

²⁹ Environment Protection Act 1997 (ACT) s 158A(2). See also the Commonwealth guidelines for annual reporting *Guidelines for Section 516A reporting – Environment Protection and Biodiversity Conservation Act 1999* available at <http://www.environment.gov.au/epbc/publications/pubs/reporting-guidelines.pdf>

³⁰ Defined in the Annual Reports (Government Agencies) Act 2004 (ACT) Dictionary

³¹ Auditor-General Act 1996 (ACT) s 12

and to integrate these into the development applications process. This applies to both the Directorates responsibilities and referral entities, given that environmentally sustainable development cuts across the responsibilities of all areas of Government..... The Environment and Sustainable Development Directorate should further progress its efforts to advance environmental sustainability and enhance urban design outcomes by reviewing policy and developing a guideline, to provide greater guidance to developers, Case Officers and referral entities, on how to implement ecologically sustainable and urban design principles into the development application process for high density residential and commercial developments.

Proposed territory budgets must also be prepared taking into account the object of ESD.³²

Further evidence of the acceptance in the ACT that the concept of ESD should be central to decision-making by all government agencies is given by the expressed objects of the Commissioner for Sustainability and the Environment Act 1993 (ACT) s 2B, which include to:

(b) ensure regular reporting on progress towards ecologically sustainable development by the Territory and territory authorities; and

(c) encourage decision-making that facilitates ecologically sustainable development; and

(d) enhance knowledge and understanding of issues relating to ecologically sustainable development and the environment; and

(e) encourage sound environmental practices and procedures to be adopted by the Territory and territory authorities as a basis for ecologically sustainable development.

Functions of the Commissioner include investigating complaints in relation to ESD and conducting, on the commissioner's own initiative, investigations into actions of an agency where those actions would have a substantial impact on the environment of the ACT (s.12(1)). Since 'territory authority' and 'agency'³³ are not defined as entities that operate under legislation that already refers to ESD then clearly the Commissioner's functions extend to all government entities not otherwise included in the list of entities that are not able to be investigated by the Commissioner, as set out in s 12(2).

It is also arguable that the adoption of sustainability policies by government also enlivens the powers of decision-makers to consider principles of ESD. Indeed, such an approach may arguably be required. In *BGP Properties Pty Limited v Lake Macquarie City Council* [2004] NSWLEC 399 at [93] McClellan J said:

As foreshadowed in the Inter-Governmental Agreement on the Environment, a National Strategy for Ecologically Sustainable Development was developed with the co-operation of Commonwealth, State and local government (the "ecologically sustainable development strategy"). As with the Inter-Governmental Agreement on the Environment, the endorsement by the Local Government Association of the "ecologically sustainable development strategy" does not legally bind local government authorities to observe the terms of the strategy, but a proper exercise of their powers would mean that local government authorities (and the Court on appeal) would apply the "ecologically sustainable development strategy" unless there were cogent reasons to depart from the policy.

The ACT is a signatory to this agreement.

³² Financial Management Act 1996 (ACT) s 11(4)(c)

³³ See the definitions of 'agency' and 'prescribed authority' in the Dictionary.

The ACT Sustainability Policy 2009³⁴ reference to “an understanding of sustainability that recognises the need for a long-term perspective, the need for responsibilities and benefits to be shared equitably, and the interdependence of our economy, environment and society,” reinforces the view that consideration of such factors by decision-makers would not, at least, be irrelevant in decision-making. The Statement of Strategic Directions in the ACT Territory Plan³⁵ also comprises two sets of principles, one of which is sustainable development. Strategic planning instruments are considered further at **E** below

2. Where ESD is referred to in the objects of legislation, the exercise of decision-making powers under other provisions of the legislation may be constrained by, and broadly referable back to, those objects.

In the ACT, ESD or sustainable development is mentioned in some 12 pieces of legislation, mostly as objectives of that legislation.

Defining the objects of legislation is often more than simply an exercise in expressing the intent of the policy embodied in the legislation; it may guide the parameters of the exercise of legal powers under the legislation.

Such an approach would be complementary to the requirement set out in the Legislation Act 2001 (ACT) s 139 that “in working out the meaning of an Act, the interpretation that would best achieve the purpose of the Act is to be preferred to any other interpretation”.³⁶ The specific functions under the legislation which further these objectives might then be so intricately linked to, or interrelated with, the overarching principles embodied in the objects within the framework of the legislation, that a decision which does not pursue or seek to achieve those overall objectives might be declared legally invalid. For example, in *Blue Mountains Conservation Society Inc v Director General National Parks and Wildlife Service* (2004) 133 LGERA 406, a ministerial approval for filming within a wilderness area of a national park was held invalid because the approval did not promote any management purpose or objective of park management; indeed, by excluding the public while filming was in progress, an objective of the park was effectively denied.

Under the Fisheries Management Act 1994 (Cth) s 3, “the following objectives must be pursued by the minister in the administration of this Act and by AFMA in the performance of its functions”. The emphasis of the objectives is on efficient and cost-effective fisheries management and preserving the sustainability of fisheries resources. In *Australian Fisheries Management Authority v P W Adams Pty Ltd* (1995) 61 FCR 314, the Federal Court stressed that these objectives were not so nebulous as to be incapable of sensible application, and that failure to pursue an objective would amount to a breach of duty. In *Bannister Quest Pty Ltd v Australian Fisheries Management Authority* (1997) 48 ALD 53, Drummond J added that the duty to pursue objectives impliedly amounted to an obligation to seek to achieve them.

‘In accordance with’

³⁴ People, Place, Prosperity: the ACT's Sustainability Policy 2009 available at http://www.cmd.act.gov.au/__data/assets/pdf_file/0003/119730/people_place_prosperity.pdf

³⁵ Available at <http://www.legislation.act.gov.au/ni/2008-27/copy/74258/pdf/2008-27.pdf>

³⁶ See *Woollahra MC v Minister for Environment* (1991) 23 NSWLR 710; *Tasmanian Conservation Trust Inc v State of Tasmania* (2000) LGERA 219; *Cape York Aboriginal Land Council v Executive Director of the Department of the Environment* [2000] QCA 202

One of the main objectives of Territory-owned corporations or subsidiaries in the ACT is to:

if its activities affect the environment—to operate in accordance with the object of ESD.³⁷

It is arguable that a territory-owned corporation would be in breach of this duty if it failed to pursue this objective and sought to achieve it.

Relevantly, this might turn on whether the ‘object of ESD’ is seen to be a process or outcomes driven approach (see below).

There is no doubt at least that ‘in accordance with’ imposes a legal duty on the decision-maker. In *Keech v Western Lands Commissioner* (2003) 132 LGERA 23, where the legislation in question, the Western Lands Act 1901 (NSW) s 2(e), states, as an object of the Act, to ensure that the relevant land “is used in accordance with the principles of ecologically sustainable development”, Talbot J held that the fulfilment of the objectives (which also included social and economic as well as environmental objectives) must guide the actions of the commissioner; and that the economic hardship potentially faced by the applicants as a result of the commissioner’s decision to revoke a cultivation permit did not outweigh the potential impact on the environment from the continuation of the activities permitted by the permit. He said (at [50]):

The Court recognises that one of the objects of the Western Lands Act stated in s 2 is to promote the social, economic and environmental interests of the Western Division. The fulfilment of that objective is not achieved by taking one or other of the nominated interests and addressing it without regard to the other interests.

Where the ‘balance’ lies in addressing these requirements is however clearly for the decision-maker to determine (see 5 below)

The Waste Minimisation Act 2001 (ACT) s 6 goes further still, stating that “the objects of this Act are to be achieved in accordance with the principles of ecologically sustainable development.” Mandated requirements to achieve statutory objectives, let alone in accordance with principles of ESD, are not a common feature of legislation. Although this statutory instruction is that achievement of the objectives of the Act should be ‘in accordance with’ rather than by ‘applying’ principles of ESD, both these statutory instructions are clearly stronger than merely requiring decision-makers to ‘consider’ ESD, which is a common drafting technique.³⁸ How much stronger is debatable. It could be argued that an instruction to ‘achieve in accordance with’ is in fact stronger even than ‘achieve by applying’. Applying principles of ESD would not necessarily result in an achievement of the objects of the Act that was necessarily in accordance with principles of ESD.

The Environment Protection Act 1997 (ACT), whilst repeating the definition of ESD as ‘achievable’ through use of the four enunciated principles, requires only that ESD as defined be ‘promoted’;³⁹ although another object is “to achieve effective integration of environmental, economic and social considerations in decision-

³⁷ Territory-owned Corporations Act 1990 s 7(1)(d).

³⁸ See for example *South East Forest Rescue Inc v Bega Valley Shire Council* [2011] NSWLEC 250 where a development consent was struck out by the Court for failure to consider principles of ESD.

³⁹ Environment Protection Act 1997 (ACT) s 2 (1)(g). See also Utilities Act 2000 (ACT) s 3(e) (objective of the Independent Competition and Regulatory Commission to promote ESD in the provision of utility services)

making processes”,⁴⁰ otherwise known as the ‘triple bottom line’, which would be interpreted in other jurisdictions as a definition of ESD.

It is arguable that the cumulative effect of ACT policies on sustainability, coupled with the placement of ESD as an object of legislation and instructions to decision-makers to ‘promote’ or ‘achieve’ it, recognize that ESD is a preferred outcome of decision-making not just a process to be complied with on the way through to making a decision. On the other hand, none of the agency annual reports that report on sustainability, as required by the Act actually report on what they have done through decision-making to promote or achieve the objects of ESD. Annual reports detail issues such as energy and resource consumption, and emissions of greenhouse gases, by and from agency activities; and may indicate what strategies, action and management plans have been made, and approvals issued, but do not appear to report directly on how ESD has been taken up in agency decision-making that involves other parties in any planned or strategic way or explain how ESD is applied to the formation of action plans or issue of approvals.⁴¹ It is therefore difficult to evaluate whether ACT government agencies in practice regard ESD as an outcome of decision-making.

‘Applying’ ESD

The Fisheries Act 2000 (ACT) s 3 goes further, stating that an object of the Act is to manage sustainably the fisheries of the ACT by applying the principles of ecologically sustainable development. The National Parks and Wildlife Act 1974 (NSW) s 2A(2), similarly states that the objects of the Act ‘are to be achieved by applying the principles of ecologically sustainable development’. In *Anderson v Director-General, Department of Environment and Climate Change* [2008] NSWCA 337, a case involving interference with Aboriginal cultural heritage, the New South Wales Court of Appeal accepted that intergenerational equity was a relevant consideration for the decision-maker in the context of this statutory instruction. Applying principles of ESD effectively means however striking a balance between developmental and environmental objectives.⁴²

More recently, in *Director-General, Department of Environment, Climate Change and Water v Venn* [2011] NSWLEC 118 at [329-330], the Court has said that “an order to remedy a breach of the Parks Act should seek to achieve the objects of the Parks Act by applying the principles of ecologically sustainable development, including the polluter pays principle”.

Another, and perhaps simpler approach, to defining a legal duty whenever ESD is mentioned in the objects of legislation is that set out by Preston CJ in *Telstra Corp Ltd v Hornsby Shire Council* [2006] NSWLEC 133 at [121], where he stated that the principles of ESD:

...are to be applied when decisions are being made under any legislative enactment or instrument which adopts the principles.

⁴⁰ Environment Protection Act 1997 (ACT) s 2(1)(d)

⁴¹ For example, see Environment and Sustainable Development Directorate Annual Report 2012-2013 Part C.19 available at http://www.environment.act.gov.au/about/annual_reports/2012-13_annual_report/section_c/c19_-_ecologically_sustainable_development; Economic Development Directorate Annual Report 2012-2013 Part C.19 available at http://www.economicdevelopment.act.gov.au/_data/assets/pdf_file/0012/497586/2012-13_EDD_Annual_Report.pdf; Community Services Directorate Annual Report 2012-2013 Part C.15 available at http://www.communityservices.act.gov.au/home/publications/annual_reports/2012-2013/annual-report-volume-one/c-legislative-and-policy-based-reporting/c15-ecologically-sustainable-development.

⁴² See *Country Energy v Williams* [2005] NSWCA 318 (this obligation does not preclude the granting of consent for the destruction of objects of Aboriginal heritage)

Although the intention to adopt principles of ESD may be garnered from an objects clause in the legislation, arguably it need not be; the adoption of ESD could be interpreted from the scope and purpose of the legislation. Although this approach has not yet been confirmed by a court, the seed has been sown in *Minister for Planning v Walker* [2008] NSWCA 224 where Hodgson JA said (at [39])

In my opinion, it is a condition of validity that the Minister consider the public interest. Although that requirement is not explicitly stated in the *EPA Act*, it is so central to the task of a Minister fulfilling functions under a statute like the *EPA Act* that, in my opinion, it goes without saying. Any attempt to exercise powers in which a Minister did not have regard to the public interest could not, in my opinion, be a *bona fide* attempt to exercise his or her powers.

And further (at [56]):

I do suggest that the principles of ESD are likely to come to be seen as so plainly an element of the public interest, in relation to most if not all decisions, that failure to consider them will become strong evidence of failure to consider the public interest and/or to act *bona fide* in the exercise of powers granted to the Minister, and thus become capable of avoiding decisions.

And in *Bulga Milbrodale Progress Association Inc v Minister for Planning and Infrastructure and Warkworth Mining Limited* [2013] NSWLEC 48 at [59] it was confirmed that ESD, as an aspect of the public interest, may be taken into account whenever issues relevant to principles of ESD arise.

The objects of the legislation will also influence sentencing considerations where a defendant's actions in committing an offence by taking a prohibited action without first obtaining the necessary approval undermines the legislative objectives of the regulatory scheme by impeding the achievement of ecologically sustainable development.⁴³

3. Legislation may refer to requirements that impliedly must, or may, trigger consideration of principles of ESD.

Some legislation in the ACT refers to the term 'sustainable' otherwise than in the context of 'sustainable development'. For example, an object of the Heritage Act 2004 (ACT) s 3 is to achieve the greatest sustainable benefit to the community from places and objects consistent with the conservation of their heritage significance. The Building Act 2004 (ACT) s 142 also refers to the 'sustainable use of materials' and requires guidelines to be produced; while the long title of the Water Resources Act 2007 (ACT) refers to the sustainable management of water resources, and the objects in s 6 include:

- (a) to ensure that management and use of the water resources of the Territory sustain the physical, economic and social wellbeing of the people of the ACT while protecting the ecosystems that depend on those resources; and
- (b) to protect aquatic ecosystems and aquifers from damage and, where practicable, to reverse damage that has already happened; and

⁴³ *Plath v Rawson* [2009] NSWLEC 178; (2009) 170 LGERA 253 at [49]; *Director-General of the Department of Environment and Climate Change v Rae* [2009] NSWLEC 137; (2009) 168 LGERA 121 at [15]- [19]; *Plath v Hunter Valley Property Management Pty Limited* [2010] NSWLEC 264; *Chief Executive Office of Environment and Heritage v Kyluk Pty Limited (No 3)* [2012] NSWLEC 56.

(c) to ensure that the water resources are able to meet the reasonably foreseeable needs of future generations.

Some legislation, and instruments of management developed under legislation, also use a 'triple bottom line' approach, referring to environmental, economic and social values. For example, one of the objects of the Tree Protection Act 2005 (ACT) in s 3 is to protect "urban forest values" defined as the amenity and economic and environmental benefits derived from the urban forest and the associated tree canopy cover.

To inform decision-making under all this legislation there would seem to be little doubt that principles of ESD would be a relevant consideration; and certainly not irrelevant, in the sense discussed at 1 above.

'Public Interest'

Legislation may also, either expressly or impliedly, make the 'public interest' a mandatory consideration for decision-makers.

Having regard to the subject matter, scope and purpose of the legislation, particularly where the objects encompass principles of ESD, this could enliven the duty to have regard to ESD in decision-making where the principles are relevant to determination of the issue.

This has certainly been the approach of the courts in New South Wales in relation to the statutory directive in the Environmental Planning and Assessment Act 1979 (NSW) s 79C to 'take into consideration such of the following matters as are of relevance', including '(e) the public interest'.

In *Minister for Planning v Walker* [2008] NSWCA 224, the New South Wales Court of Appeal said that the requirement to have regard to the public interest was a central feature of decision-making under statutes such as the Environmental Planning and Assessment Act 1979 (NSW), even if not expressed directly in the legislation. This requirement, however, operates at a high level of generality, and does not of itself require that regard be had to any particular aspect of the public interest, such as principles of ESD, absent any other requirement in the statute. ESD was but one of many objects of the Act, some of which might have no relevance to many decisions. However, if it was considered mandatory to consider ESD, then although that consideration would not require explicit formulation of issues in terms of the various principles and programs specified in definitions of ESD, the consideration would require that the substance of those matters referred to in those principles and programs be addressed.

Importantly, Hodgson J went on to say, however (at [56]):

I do suggest that the principles of ESD are likely to come to be seen as so plainly an element of the public interest, in relation to most, if not all, decisions, that failure to consider them will become strong evidence of failure to consider the public interest.⁴⁴

Where legislation⁴⁵ in the ACT uses the concept of 'public interest' then it is arguable that, where relevant, consideration of ESD should be considered in decision-making. Further, that the 'public interest' may well be central to legislation such as the Planning and Development Act 2007 (ACT).

⁴⁴ See also *Aldous v Greater Taree City Council* [2009] NSWLEC 17; *Kennedy v NSW Minister for Planning* [2010] NSWLEC 129; *Australians for Sustainable Development Inc v Minister for Planning* [2011] NSWLEC 33

⁴⁵ For example Gene Technology Act 2003 (ACT) s 146; Human Rights Commission Act 2005 (ACT) s 48; Planning and Development Act 2007 (ACT) s 261, 407; Environment Protection Act 1997 (ACT) s 130; Heritage Act 2004 (ACT) ss 68, 71.

To summarise:

1. A statement in legislation that a decision-maker must consider the ‘public interest’ does not necessarily include an obligation to consider ESD.
2. However, in most cases, given the all-embracing nature of ‘sustainable development’, ‘public interest’ is likely to include ESD as a mandatory relevant consideration.
3. Where the decision-maker needs to consider ESD, this obligation operates at a level of generality that does not require the decision-maker to consciously address each of the principles of ESD.
4. A failure to address the substance of such principles may, however, reveal a failure to effectively consider ESD and therefore a failure to consider the ‘public interest’.

4. ESD may be stipulated as a specific consideration in, or matter for, decision-making

Where legislation instructs decision-makers to consider or apply ESD, or, as in the ACT, achieve the objects ‘in accordance with’ the principles of ESD, and the concept of ESD is further teased out to include stipulated principles, the question arises whether a ‘global’ approach to considering ESD that effectively engages with the principles of ESD would suffice to carry out the legal obligation; or whether this could only be achieved by considering each of the enumerated principles, which in totality would carry out the obligation to consider or apply ESD, or demonstrate the achievability of the objects of the legislation.

The courts have generally held that in these circumstances, absent any expression of contrary intent in the legislation, the obligation to consider ESD would be satisfied by a ‘global’ approach; that is, considering the matters together rather than separately and independently.⁴⁶ In *Drake-Brockman v Minister for Planning* (2007) 158 LGERA 349 at [132], Jagot J said: ‘The breadth of the unifying theme of ecologically sustainable development explains the ubiquity of the concept in development decisions and discloses the level of generality at which it is capable of operating’.

In the ACT this reasoning may not be appropriate where the expressed obligation is not just to achieve the objects of the Act in accordance with ESD; but to achieve the objects in accordance with the *principles* of ESD. Whether this means exclusively the four principles referred to in the definition is unclear; ‘principles of ESD’ is not specifically defined. It could be argued that:

- (1) principles of ESD is a reference generally to principles of sustainable development and that as a globally recognized concept that should be applied unless the legislation makes it clear that something different is intended. Failure to specifically refer to other principles of sustainable development does not make them irrelevant considerations in decision-making. The obvious argument against this is that where ‘achievement’ is the benchmark rather than simply ‘consideration’ then to interpret that by reference to global concepts of sustainable development would considerably broaden the obligations of the decision-maker, and this may not be justifiable .
- (2) principles of ESD, by contrast to sustainable development more generally, is more particularly defined by the legislation and that ‘achievement’ must be able to be measured by reference to the four principles specifically referred to (ESD is defined as “achievable through implementation of” these four principles not, as in the definition in NSW, “that can be achieved” through implementation of these principles). In

⁴⁶ *Blue Wedges Inc v Minister for Environment, Heritage and the Arts* [2008] FCA 399; *Haughton v Minister for Planning and Macquarie Generation* [2011] NSWLEC 217

this latter case, whether achievement must be measured in relation to each of the four principles specified, or it would suffice if achievement could be measured by reference to only one of the four, is also debatable. It could be argued that any achievement of the objects that was not in accordance with all four of the enumerated principles would not satisfy the statutory instruction.

Although interpreting the intention of the legislation is not easy, it may be suggested that:

1. because the legal obligation on decision-makers is to achieve “in accordance with the principles” of ESD, that this refers to the four principles of ESD specifically referred to in the legislation
2. although ‘applying’ other principles of sustainable development recognized at a global level would also be open to a decision-maker, ‘achievement’ must be measured by reference to the four principles so specified
3. “achievement in accordance with the principles” must at least mean that any discord with any of the stated four principles cannot satisfy the benchmark of ‘achievement’; and that arguably positive accordance with all four principles is required, unlike the situation where simply ‘ESD’ rather than ‘the principles of ESD’ is required to be considered or applied.

For ‘impact track’ development in the ACT the requirement to apply ESD seems to be more clearly expressed. Development consent for a proposal in the impact track cannot be given unless the proposal is consistent with the statement of strategic directions set out in the Territory Plan.⁴⁷ One of these is ‘Principles of Sustainable Development’. This provision effectively incorporates this statement as a mandatory legal requirement of decision-making for impact track development in the ACT.

5. Where ESD is considered in decision-making, it is open to the decision-maker to weigh or ‘balance’ the priorities so as to achieve an optimal result that accords with the intention of the legislation under which the power is exercised.

The true objective of ESD is integration not environmental dominance. ESD introduces the notion of *integrating* economic and environmental factors, although arguably in decision-making this will become a *balancing* exercise where, as inevitably happens, the fulfilment of both objectives cannot be maximised.⁴⁸

This point is perhaps recognised in the Sustainable Planning Act 2009 (Qld) s 8, which defines ecological sustainability as:

.... A balance that integrates

- (a) protection of ecological processes and natural systems at local, regional, State and wider levels; and
- (b) economic development; and
- (c) maintenance of the cultural, economic, physical and social wellbeing of people and communities.

In *Chesol Pty Ltd v Logan City Council* [2007] QPEC 1, Rackemann DCJ said (at [87]):

⁴⁷ Planning and Development Act 2007 (ACT) s 128(1)(b)(i). See also *ibid* s 159(2)(b) (Minister may have the proposal referred if the application seeks approval for a development that may have a substantial effect on the achievement or development of the object of the territory plan as set out in the statement of strategic directions)

⁴⁸ ‘No objective or principle should predominate over the others. A balanced approach is required that takes into account all these objectives and principles to pursue the goal of ESD’: *National Strategy on Ecologically Sustainable Development 1992*, p 2.

It should be noted that the ‘balance’ which is referred to is a balance which relates to each of the limbs in subparagraphs (a) to (c) inclusive (the ecological, economic and social limbs). Further, the balance is not one which prioritises one limb over the other, but rather one which ‘integrates’ each of the limbs. Ecological sustainability, as defined, is as much about economic development and the maintenance of the cultural, economic, physical and social wellbeing of peoples and communities as it is about the protection of ecological processes and natural systems.

The ACT Territory Plan states that its ‘triple bottom line’ objectives are to be pursued in a “balanced and integrated way”.⁴⁹

Clearly, arguments will be generated over where the balance might lie. In *Hunter Environment Lobby Inc v Minister for Planning* [2011] NSWLEC 221 at [22], Pain J acknowledged that considering ESD principles requires the balancing of environmental, economic and social factors; and in Victoria, the Court of Appeal has also interpreted various provisions in the Planning and Environment Act 1987 (Vic) as revealing “the intention that the balancing of competing factors to produce a net community benefit and sustainable development is integral to the policy supporting the Act and, therefore, integral to the Minister’s exercise of discretion”.⁵⁰ Even the NSW Court of Appeal has said that inclusion of a requirement in legislation that ESD principles should be ‘applied’ requires that a balance should be struck between development activities and environment protection.⁵¹

In other words, there are bound to be trade-offs between the often competing components of ESD. ESD attempts to maximise the combined total of economic, social and environmental values of resource use, but to do this some of the elements that make up these values may have to be traded one against the other. Application of ESD may therefore be said to pursue *optimal* protection of environmental values rather than *maximum* protection.

In *Development Assessment Commission v A & V Contractors Pty Ltd* [2011] SASCFC 21 at [78], the South Australian Full Court acknowledged that, under the Development Act 1993 (SA), “the statutory objectives of development plans, and the assessments of proposed developments made against them, is to advance the social and economic interests of the community by ecologically sustainable development which optimises the habitat of its citizens”.

‘Balancing’ is an executive function (subject to judicial review)

Determination of priorities and weighting in individual decisions is for the decision-maker to determine.⁵² Only where the decision-maker has, in a legal sense, given cursory or inadequate attention to a relevant

⁴⁹ Statement of Strategic Directions 1.3, 1.4. The Plan is available at <http://www.legislation.act.gov.au/ni/2008-27/copy/74258/pdf/2008-27.pdf>

⁵⁰ *East Melbourne Group Inc v Minister for Planning* [2008] VSCA 217. See also *The University of Melbourne v Minister for Planning* [2011] VCAT 469.

⁵¹ *Country Energy v Williams* [2005] NSWCA 318 at [67]

⁵² *Minister for Aboriginal Affairs v Peko-Wallsend Ltd* (1986) 162 CLR 24, 41; *Bat Advocacy NSW Inc v Minister for Environment Protection, Heritage and the Arts* [2011] FCA 113

consideration;⁵³ or applied unreasonable weighting, on the evidence, to particular relevant considerations, would such a decision be challengeable in law;⁵⁴ although such a decision may also raise issues that may be challenged on the merits, where the legislation allows for merit review.⁵⁵

In practice, deciding between competing priorities may involve value judgments applied by whoever is making the decision. In such circumstances carefully thought out guidelines or policies might be useful in assisting decision-makers to understand the priorities of government and how values should be weighed, so long as these reflect the legal context. This rarely happens; one reason is because flexibility in decision-making is considered important in order that the decision-maker can respond to the circumstances of each individual case. Another is that value statements can cause controversy where the stated values do not accord with those of certain sections of the community. One recent suggested amendment to the planning system in NSW however seeks to prioritise the economic effects of mining over all other priorities:⁵⁶

In determining whether to grant consent to the proposed development, the significance of the resource is to be the consent authority's principal consideration under this Part.

Accordingly, the weight to be given by the consent authority to any other matter for consideration under this Part is to be proportionate to the importance of that other matter in comparison with the significance of the resource.

Not surprisingly, this is controversial. Would prioritizing the achievement of ESD in decision-making as an outcome rather than a process be less controversial?

One obvious area where differing objectives can come into conflict is the planning and management of land for bushfire mitigation risk, where value judgments about management and protection of biodiversity in the context of threats to life, property and economic interests may have to be made. In this case codes and guidelines may give some priority to certain values. For example, the *Planning for Bushfire Risk Mitigation General Code*⁵⁷ in the ACT incorporates assessment using the *Australian Standard For Risk Management AS/NZS 4360* and *AS 3959*, which also deals with biodiversity conservation, in so far as that is possible commensurate with risk mitigation. The general approach of a court in interpreting statutory provisions that trigger conflicts between risk management and biodiversity protection would also be to accord priority to protection of public health and safety and removal of hazards.⁵⁸

Another example might be where a strategic management plan sets out criteria for sustainability, or criteria for addressing and balancing competing land uses, with no particular statement about priorities. When not all of the criteria can be fully met in approving an application for a proposal, then the decision-maker will have to apply a value judgment, guided perhaps by the overall intent of the plan, to determine whether

⁵³ *Anderson v Director-General DECC* (2008) 163 LGERA 400, 421; *Bat Advocacy NSW Inc v Minister for Environment Protection, Heritage and the Arts* [2011] FCA 113

⁵⁴ For example *Rowe v Lindner* [2006] SASC 176 (undue weight given to the precautionary principle)

⁵⁵ Environmental decision-making may be challenged by seeking judicial review and merits review. Judicial review considers the legality of the decision under challenge. Stated broadly, it is the obligation of a decision-maker to consider all relevant issues before making a decision. The decision should reasonably reflect the evidence gathered. A merits review considers whether the decision was appropriate and acceptable, not whether it was lawful.

⁵⁶ Proposed amendment to State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007 s.12AA(3),(4)

⁵⁷ Available at <http://www.legislation.act.gov.au/ni/2008-27/copy/56703/pdf/2008-27.pdf>

⁵⁸ For example *Parks and Playgrounds Movement Inc v Newcastle City Council* [2010] NSWLEC 231

inconsistency with one of the criterion may be so important that the proposal cannot be approved.⁵⁹ In *Hub Action Group Incorporated v Minister for Planning and Orange Council* [2008] NSWLEC 116, for example, the Court concluded (at [71]):

In this case, whilst adoption of a waste minimisation strategy and operation of a waste disposal facility with a resource recovery facility is beneficial in promoting sustainability, by such means as encouraging more efficient use of resources, reducing unnecessary resource consumption, improving resource recovery and reducing waste generation, by siting the waste disposal facility on prime crop and pasture land, the proposed development impedes achieving sustainability by adversely affecting the long-term use, for sustained agricultural production, of that land.

Value judgments frequently have to be made about the acceptable level of impacts.⁶⁰ In *Anderson v Director-General, Department of Environment and Climate Change* [2008] NSWCA 337, Tobias JA, in the NSW Court of Appeal, said (at [85]) that:

it is difficult to see how inter-generational equity ... can be properly considered without the assessment of the archaeological and cultural significance of the Aboriginal objects on the one hand and the cumulative effect or impact which their destruction may have on the other.

However,

inter-generational equity requires an evaluative judgment as to these matters for otherwise ... all Aboriginal objects found on land must be conserved for the benefit of future generations of the traditional custodians of that land. That cannot be so.

Applying the precautionary principle, or at least a precautionary approach, to potential impacts on Aboriginal heritage might however be an appropriate response.⁶¹

The ACT government has committed to developing a Triple Bottom Line Assessment Framework as a means of embedding issues of sustainability in government policy proposals before policies and practices are finalized.⁶² Whilst this might provide some useful guidance in thinking about policies, programs and projects, the TBL Assessment Framework Discussion Paper (at 3.3) admits that:

Decision-makers will still be required to trade off costs and benefits of alternative proposals and will still need to determine the relative value of these alternatives, not all of which will be directly or readily comparable.

The quality of the assessment will also still depend on the skills of those undertaking the assessment and the availability of information.

⁵⁹ See for example *Wygiren v Kiama Municipal Council* [2008] NSWLEC 1233

⁶⁰ Applying the precautionary principle, or at least a precautionary approach, to potential impacts on Aboriginal heritage therefore might be an appropriate response: see, for example, *Ashton Coal Operations Pty Limited v Director-General, Department of Environment, Climate Change and Water (No 3)* [2011] NSWLEC 1249.

⁶¹ See, for example, *Ashton Coal Operations Pty Limited v Director-General, Department of Environment, Climate Change and Water (No 3)* [2011] NSWLEC 1249.

⁶² See http://www.cmd.act.gov.au/__data/assets/pdf_file/0006/217392/TBL_Assessment_Framework_Discussion_Paper.pdf

In thinking about ‘trade-offs’ between environmental, social and economic values, it must be remembered of course that whilst social and economic values are human-centred and for that reason potentially more flexible, environmental values, more dependant upon natural phenomena, are not so adaptable; at least not over short time-frames. Is there a case here for giving priority to environmental values in any ‘balancing’ exercise?

PART D: Practical application of the principles of ESD

Why Sustainability?

Although this may seem a self-evident question, and the short answer is because legal and/or policy imperatives demand it, searching for the reasons that underpin the policy directives helps to pinpoint what is expected of decision-makers when addressing principles of ESD; at least if an ‘outcomes-based’ approach is considered desirable or required.

Responsibility for future generations is, of course, a central tenet of the notion of ‘sustainability’. The meaning of ‘sustainable development’ is however notoriously difficult to grasp with any degree of precision or certainty. Most people would have a vague idea, or feeling, what it means but be unable to articulate it with any confidence. The desirability of pursuing sustainability would be generally justified as a way of improving the quality of life of both present and future generations. ‘Quality’ would be made up of a mixture of economic, social and environmental influences, the importance of which would vary according to the priority given to each of these elements by the individual; although recognition of the legitimacy of each factor would enhance the value of the others.

The search for ‘quality’ also recognizes the inherent weakness in relying on ‘gross domestic product’ (GDP) as a measure of the health of a community, region or nation. ‘Standard of living’ is not the same as ‘quality of life’. Accordingly it has been proposed that a ‘Genuine Progress Indicator’ (GPI), factoring in environmental data such as losses from pollution, should be used to supplement the GDP in order to produce a more realistic appraisal of the health and wealth of a community or nation. In other words, GPI is effectively ‘net domestic product’, which could fall to zero where social and environmental losses equal economic gains. A GPI has been developed in the U.S. state of Maryland using 26 different indicators (7 economic, 9 environmental and 10 social).⁶³ The State of Vermont has since legislated for the use of a GPI.⁶⁴

By contrast to the concept of ‘sustainable development’, the notion of looking after our children and grandchildren is more ‘understandable’ or ‘inclusive’ and may help to define more easily what is meant by ‘sustainable development’; providing perhaps a ‘launch pad’ for discussion about how to put notions of sustainability into practice.

Focussing on the needs of future generations may be a good way to generate public acceptance of, and action on, sustainability. Educating for a sustainable future, for example, has been for some time the focus of a

⁶³ <http://www.dnr.maryland.gov/mdgpi/>

⁶⁴ <http://www.leg.state.vt.us/docs/2012/Acts/ACT113.pdf>

nationally agreed approach in Australia to education about environmental sustainability.⁶⁵ Perhaps also for this reason, some bodies originally set up to pursue sustainable development, have, more recently, been talking more about sustainable futures. The Australian National Sustainability Council's Annual Report 2013 for example was entitled '*Conversations with the Future*'.⁶⁶ In its introduction to the Report the National Sustainability Council states that:

Decisions and actions taken over the next 10 years will determine whether the next generation of Australians is the first in recent history to be worse-off than their parents and grandparents, or whether they are able to enjoy economic prosperity and stability, environmental amenity and function, and social cohesion that are comparable to – or better than – those we inherited.....The Council considers this first report as a starting point that seeks to stimulate and provide evidence for a conversation between Australians on Australia's future and our collective wellbeing.

The notions of 'sustainability' are all gathered here, but set in the context of inter-generational equity.

Wales, in the United Kingdom, has changed the title of its 'Sustainable Development Bill' to the 'Future Generations Bill'.

The working title of the Bill has been changed to help communicate its purpose and foster better engagement between organisations on how legislation is used to ensure that the decisions of today are better for the long term.....a national conversation will be started on the challenges facing communities, with the aim of building up public awareness about the Bill and engagement.⁶⁷

The Welsh government has closed down the Sustainable Development Commission and appointed a Commissioner for Sustainable Futures.⁶⁸

Engaging with communities about the future for their children and grand-children may well help to explain and justify the necessity to enliven decision-making that pursues strategies for sustainability as an optimal outcome following a process for engaging with strategic and project 'triple bottom line' assessment.

Is becoming 'sustainable' too expensive?

One view commonly pedaled by conservative commentators is that becoming 'green' or being 'sustainable' is too expensive, increasing the costs of doing business beyond what might be deemed acceptable. There are two issues here; the costs of designing a 'sustainable' project, and the costs of not doing so. Whether costs are 'acceptable' is a view based on a 'business as usual' model and moving more towards sustainability outcomes without doubt will challenge a 'business as usual' approach. Evaluation of 'costs' will also depend on commonly applied standards of cost/benefit analysis, and reduction of the components of 'sustainability' to monetary values. Ascribing monetary values to some components of ESD is of course difficult. How does one value for example a tree, maintaining standards for water quality, or delivery of services that provide 'quality of life' rather than just a 'standard of living', as measured by the 'Gross Domestic Product' (GDP)? These components of ESD display 'values' that are not easily reduced to monetary standards but are nevertheless vitally important to the well-being of both individuals and society as a whole. This is

⁶⁵ <http://www.environment.gov.au/resource/educating-sustainable-future-national-environmental-education-statement-australian-schools>

⁶⁶ <http://www.environment.gov.au/system/files/resources/e55f5f00-b5ed-4a77-b977-da3764da72e3/files/sustainable-report-full.pdf>

⁶⁷ <http://wales.gov.uk/topics/sustainabledevelopment/future-generations-bill/?lang=en>

⁶⁸ <http://www.cynnalcyrmru.com/commissioner>

acknowledged, for example, by the reference in the ACT Triple Bottom Line Assessment Framework to a ‘sense of wellbeing’.⁶⁹

Moving more towards sustainability does require a change in mindset that accepts that a rigid application of the principles of traditional cost/benefit analysis will not reveal the ‘true’ costs of a proposal. It is also a fact of course that designing projects with sustainability parameters in mind may well have cost benefits for many businesses; for example, production of waste or excessive use of water or energy is a cost to business that can be reduced by giving more attention to sustainability initiatives in designing a project or retro-fitting.⁷⁰ Whilst initial capital costs may be more expensive than the ‘business as usual’ option, once the ‘payback’ period is achieved on-going operating costs may well become much cheaper than the alternative. This principle has clearly been recognized in the ACT through the establishment of the Carbon Neutral Government Loan Fund,⁷¹ which encourages, amongst other initiatives:

- retrofitting energy efficient lighting and/or control systems throughout an office, facility, streetlights
- improving heating and cooling equipment
- installing smart energy management systems
- installing solar hot water systems
- introducing cogeneration technology
- replacing inefficient equipment such as refrigerators or freezers

Energy efficiency projects funded through this initiative would be expected to have a payback period of less than three years.

Nevertheless, it has to be acknowledged that pursuing sustainable outcomes in the long-term may involve committing to up-front costs that exceed the alternative ‘business as usual’ model. Policies that promote sustainability have to be underpinned by standards that seek to achieve the purpose of the policy. The standards however must be developed with at least a weather-eye open to the costs of compliance with the standards. If costs of compliance are too high then the standards are not likely to be met; compliance may suffer, or projects may fail, and the purposes of the policy may not be realized. On the other hand, watering down standards for compliance to reflect the cheapest compliance costs is also unlikely to deliver the purpose of the policy. For example, requiring energy saving devices to be installed in new housing may appear to conflict initially with the principle of providing cheaper housing. To counteract such an argument decision-makers need to accept that the new ‘business as usual’ model is one that pursues sustainable long-term outcomes; and that ‘cheap’ is a monetary value that reflects neither quality, consistency nor longevity; or takes into account other values recognized by the concept of sustainability. Sanctioning a race to a lowest common denominator or minimum standard, based on lowest possible costs, is not likely to deliver the outcomes sought by sustainability policies.

Failure to build into a project components of sustainability may also trigger other impacts associated with externalisation of the true costs of doing business so that costs fall on the public purse rather than being met

⁶⁹ Triple Bottom Line Assessment Framework for the ACT Government, July 2012, at page 21: available at http://www.cmd.act.gov.au/__data/assets/pdf_file/0020/331373/TBL_Assessment_Framework.pdf

⁷⁰ For an example in the ACT see the project for reducing energy consumption at Dame Pattie Menzies House http://www.actsmart.act.gov.au/__data/assets/pdf_file/0005/498569/Case-study-Energy-reduced-at-Dame-Pattie-Menzies-House.pdf

⁷¹ http://www.environment.act.gov.au/climate_change/actgov_ops/carbon_neutral_government_loan_fund

by the proponent or operator. Generation of packaging and other types of solid waste that will ultimately go to landfill is a good example. Failure to properly calculate costs of on-going maintenance of approved projects, and clearly ascribe responsibility for meeting those costs, is another example. The Government Procurement Act (ACT) 2001 obliges government entities, in seeking ‘value for money’, to have regard to ‘optimising whole of life cycle costs’.⁷² Apart from this however the Act is silent on broader issues of sustainability.

Traditional economics cannot be the only driver of the ‘affordability’ of measures to promote ‘sustainable’ outcomes. Once one factors into decision-making values that are not easily reduced to money, then failure to implement objectives for achieving sustainable outcomes may well become more ‘expensive’ in the longer term than the ‘business as usual’ option. Promotion of sustainability outcomes in decision-making needs to become the new ‘business as usual’ model.

Sustainability in Decision-making

The legal obligations on decision-makers under some legislation in the ACT raises the question, of course, about how decision-making is to ‘accord’ with principles of ESD so that objectives of the legislation may be ‘achieved’. It would seem difficult to ‘accord with’ the principles of ESD if those principles of ESD are not actually considered and, if necessary, applied in real time decision-making.

Requirements on decision-makers to consider or apply principles of ESD, or to achieve statutory objectives ‘in accordance with’ principles of ESD, may be given more explicit and practical meaning in planning instruments, requirements for environmental assessment of projects and activities, consideration of applications to develop and use natural resources, and imposition of conditions on approvals. As Preston J

In order to achieve sustainability ... hortatory statements of principle and aspirational goals are insufficient; the grand strategy must be translated into action. This involves not only institutionalizing the principles of ecologically sustainable development in policies and laws, but also ensuring that functions under those policies and laws are exercised in a way so as to promote and implement the principles of ecologically sustainable development. This involves good governance.

remarked in *Hub Action Group Inc v Minister for Planning* (2008) 161 LGERA 136 at [2]:

Thinking about sustainability frequently raises the following issues:

1. Is this product designed to last longer (war on in-built obsolescence)?
2. Are the components of this product re-usable/recyclable?
3. Is this product ‘green’ or ‘organic’?
4. Does this activity rely on artificial or natural inputs?
5. Does this activity perpetuate or seek to address ‘unsustainable’ behaviour?
6. Does the design of this building or product maximise the use of infinite natural resources rather than finite natural resources?
7. Does adopting a ‘sustainable’ approach increase the costs of doing business?

⁷² Government Procurement Act (ACT) 2001 s 22A(3)(d)

Determining that an activity, product or building is ‘sustainable’ is not an easy task. In particular, principles of sustainability require us to question the life-cycle costs of the product, materials or activity. And this may involve value judgments about where the ‘balance’ may be drawn when some parts of the life cycle do not appear so sustainable. For example, ethanol is held out to be a partly suitable replacement for petroleum for use in internal combustion engines. Ethanol is derived from fermentation of sugar. Growing sugar cane to produce ethanol for use as a source of alternative energy has implications for the use of land for food production. Where does the balance lie? Or if petrol driven engines are to be partly replaced by electric vehicles, how is that electricity produced? From renewable or non-renewable resources? When collecting eWaste for ‘recycling’ does it matter that this waste is then shipped off to China for treatment?

To help answer the question whether a proposed activity or a product is really ‘sustainable’ we therefore first have to address the criteria by which we are going to evaluate ‘sustainability’. These criteria may be encapsulated, for example, in strategic plans and by the use of benchmarks or standards for procurement, development or project design.

A ‘Whole of Government’ approach to decision-making

A strategic approach to implementation of principles of ESD must be enlivened by a ‘whole of government’ approach that recognizes that decision-making by individual agencies of government will have cumulative and operational impacts on sustainability outcomes across government as a whole. A whole of government approach cannot maximize opportunities for ‘sustainable’ decision-making unless all government decision-makers (agencies and individuals) are ‘reading from the same page’ or ‘speaking the same language’ when it comes to acknowledging the meaning and purpose of ESD in decision-making.

ACT triple bottom line and sustainability policies are directed at all forms of government decision-making; but co-ordinating decision-making to pursue, and be directed by, a whole of government approach is not so easy if relevant diverse agencies across government do not share a common and accepted understanding about what decision-making for sustainability involves. Most governments lack cohesive organizational structures for sustainability.

The absence of a truly integrated whole of government approach to sustainability is perhaps illustrated by a front page article in the Canberra Times of January 12 2014 that alleges that designs for blocks of land in new Canberra suburbs are being drawn up with no attention to the energy efficiencies that might be possible with more attention to passive solar design. The reason given was that designers of blocks were hamstrung by planning regulations about overshadowing of neighbouring properties. There was no indication in the article that the need for an integrated approach to resolving these issues was acknowledged (although subsequent communications indicate that the matter is being considered). On the other hand, the declared intention of the West Belconnen project is clearly to integrate environmental protection, resource efficiency, affordable housing and social sustainability into the design parameters of that project.⁷³

A whole of government approach may help to maximize, rather than simply optimize, sustainability values in decision-making if taken across a broad enough landscape. To achieve this decision-makers need to reach agreement about the way they will approach questions of sustainability. The following suggested framework

⁷³ See <http://talkwestbelconnen.com.au/sustainability/>

for thinking about sustainability in decision-making is derived from suggestions made by the Chief Justice of the NSW Land and Environment Court, Brian Preston, at a seminar in Canberra on February 14, 2014. This draws on the Court's experiences in evaluating and implementing sustainability criteria in decision-making.

1. What is ESD? This needs to acknowledge that ESD is not just a process to be gone through in reaching a decision but is an intended outcome of decision-making. Care should be taken to also ensure that decision-making does not become 'formulaic', ticking the boxes of criteria to be considered, or triple bottom lines to be assessed, rather than being purpose or objective driven.
2. What are our objectives in making this decision? What are the component parts of the decision that will achieve the overall objective of sustainable decision-making? This may involve for example meeting certain thresholds for water quality, emissions of greenhouse gases, and use of 'green' building products.
3. How can the various principles of ESD (precaution, inter and intra-generational equity, internalization of costs, biodiversity conservation is fundamental and so on) help us to achieve these objectives?
4. Does the decision involve a polycentric problem? Striving towards sustainability as an outcome of decision-making may well trigger cumulative impacts, so that reaching a decision about one particular objective of decision-making may well trigger other issues that need to be considered. For example, seeking to conserve biodiversity in relation to future land releases may impact on the principle of intra-generational equity by making it harder for government to provide affordable housing. The apparent resolution of one issue may well require the decision-maker(s) to go back and review the impacts of that proposed decision on other identified issues of sustainability. Identifying all the potential impacts of decision-making 'up front' is obviously important and emphasizes the need for 'whole of government' consideration of proposals at a level appropriate to the perceived or possible impacts. A decision-maker that sees the need to refer such a proposal to other government agencies may only reach such a conclusion if that decision-maker is 'reading from the same script' as other government entities. Ultimately, decision-making that optimizes the approach to all the relevant issues may be based on government policies and strategies; or perceived and negotiated values.
5. What level of analysis do we need to address these issues? Are we looking at sustainability within the borders of the ACT, or further afield, even globally? The approach to this question may well be assisted by the availability of easily referenced data on the issues involved; for example by reference to standards such as those for 'green' buildings or energy and water saving products.
6. Where do we draw the boundaries? There will be 'downstream' impacts and also potential benefits of decision-making. For example, 'in-filling' in established Canberra suburbs will have potentially beneficial effects on preservation of 'greenfield' sites but potentially negative impacts because of strains and stresses on community relations and provision of community services. Should calculations of greenhouse emissions, or savings, for particular activities in the ACT also take into account the possible impacts on greenhouse emissions outside the ACT, even globally?
7. What values are involved? How do we measure what is 'valuable'? For example, statements about ESD ascribe no particular priorities to the various principles of ESD, beyond stating that biodiversity conservation should be 'fundamental' to decision-making. Whether this is an expression of priority is open to conjecture. Government policies and legislation frequently appear to 'value' threatened native wildlife and ecosystems more highly than non-threatened species and ecosystems. Values may also be identified in government strategies; but not reflected in particular projects. Values may have to be prioritized and optimized for particular projects or activities. For example, if a particular proposal with a capital expenditure of say \$30 million, and generating regular employment, will need to remove 25% of a threatened ecosystem, at what point does the ecosystem become too 'valuable' to be lost, weighed against the competing economic and social advantages of the project? Such value judgments cannot be legitimately made unless decision-makers

are in agreement about what the relevant values are, and how to measure them, even if there is some disagreement when it comes to optimizing those values for use in a particular project or activity.

8. A recognition that environmental impact assessments (EIA) are project specific and generally poor on cumulative impacts and alternatives. Environmental assessments drawn up by a proponent of a proposed project or activity need to be rigorously assessed by the decision-maker(s) to address these issues. Conditions of consent should also reflect the information contained in, and the evaluation of, the EIS; in other words, there should be a clear correlation between what has been assessed and what has been approved.

9. Costs need to be internalized otherwise the true costs of a decision will impact on society as a whole. For example, failure to insist that products meet 'end of life' disposal criteria inevitably places costs of disposal on the general population. Decision-making that allows development to take place in certain areas may well have downstream impact costs on provision of public facilities such as schools and other community facilities. In the end, cost sharing arrangements may be worked out between public/private parties or public/public entities; but the true costs need to be evaluated 'up front' to enable this to occur in a transparent and informed way.

10. Where the impacts of decision-making are uncertain, use of the precautionary principle may assist a principled approach to decision-making. Where the precautionary principle is triggered, threatened environmental impacts are assumed to be actual (unless the proponent shows otherwise) and prevention, mitigation or compensation measures should be implemented. The fundamental approach should be, first, to avoid possibly significant impacts; if this is not entirely possible, mitigate those impacts; and, only as a last resort, consider compensating or offsetting those impacts. Avoidance, mitigation and compensation measures may be written into conditions of consent. Where there is uncertainty or imperfect knowledge, steps should be taken to reduce these. For example, conditions of consent may also require further research to be conducted, such as collection of baseline data, so as to reduce or clarify the perceived uncertainties; and should require regular monitoring of impacts (to judge whether intuitions or predictions were correct); reporting of monitoring results; establishment of evaluation criteria against which the results of monitoring can be assessed to judge whether the objectives of the conditions are being fulfilled ('performance criteria'); and powers to require changes to operating conditions to meet the outcome-based approval ('adaptive management'). An approval may establish a 'step wise' approach in which a licence holder may not proceed to the next stage of a project until the preceding stage has been satisfactorily evaluated by the decision-maker for compliance with the outcome-based objectives of the consent.

11. After making assumptions and proposing measures for the prevention, mitigation and compensation of environmental impacts, the acceptability of the project or activity and its environmental impacts, needs to be evaluated. There also needs to be a weighing against all other factors, the economic, social and other environmental factors.

12. A clear understanding of what has been approved. Decisions should lock in value judgements that have been made earlier in the decision-making process. Conditions of approval should be clear, certain and enforceable. They should reflect what has been assessed and evaluated and not be so general that the expected outcomes are unclear, even if there is some flexibility in the means of achievement. Outcome based conditions should establish a clear understanding that approval only extends to the project or activity that has the stated impact. Criteria for acceptable impacts should establish a benchmark for compliance with such conditions. Any deviation from the approved impacts may need to be re-evaluated and 'adaptive management' employed.

13. Sustainable decision-making also involves "meta-adaptive management". Decision-makers can learn from implementation of earlier approvals (such as information and knowledge on biodiversity presence,

behaviour, response and success of mitigation measures) to provide feedback for future decision-making regarding the next approval and assess the cumulative impacts of all prior approvals.

14. If the measures proposed or agreed upon cannot achieve stipulated objectives and outcomes then the application should be refused.

This section will consider the implementation of principles of ESD in decision-making:

- (a) in both strategic and project planning; and
- (b) in circumstances where ESD is used both as a 'global response' and where specific principles of ESD are used, in making decisions.

PART E: Tools for implementing sustainability in decision-making

1. Strategic planning

Strategic planning and natural resource management policies and plans can introduce strategic directions or relevant criteria that will guide or direct practical approaches to sustainability in planning for impacts on the use of land and other natural resources. Water management plans, for example, may be directed to sustainable use.⁷⁴ Action plans for threatened species and ecosystems may indicate management objectives that give guidance to, or impose mandatory requirements on, decision-making.⁷⁵ The ACT Waste Management Strategy 2011-2025⁷⁶, with its declared focus on waste minimization, resource recovery and carbon neutrality, is clearly progressing principles of sustainability. Similarly, the ACT Sustainable Energy Policy 2011-2020, with its declared focus on clean energy, energy efficiency and sustainable transport, coupled with the enactment of the Climate Change and Greenhouse Gas Reduction Act 2010 (ACT), is setting a strategic approach towards the generation and sustainable use of sustainable energy resources. As part of the Carbon Neutral ACT Government Framework, adopted by in August 2012, all government directorates are also now required to develop Resource Management Plans to identify cost saving opportunities, help monitor energy and water use, and manage waste production, reducing the agency's overall environmental impacts.⁷⁷

Like any other strategic approach of course these strategies will need to be translated into practical requirements for evaluation of projects and activities. Information gained from early strategic planning should percolate down into decision-making processes.

In the ACT the *Canberra Plan – Towards our Second Century* 2008⁷⁸, establishes the priority of a sustainable city that includes sustainability as an objective in planning, urban design and transport infrastructure and that responds to climate change. Strategic environmental assessments prepared under the

⁷⁴ See *Murrumbidgee Groundwater Preservation Association Inc v Minister for Natural Resources* (2005) 138 LGERA 11; *Harvey v Minister Administering Water Management Act 2000* (2008) 160 LGERA 50.

⁷⁵ Action plans under the Nature Conservation Act 1980 (ACT) are available at http://www.environment.act.gov.au/cpr/conservation_and_ecological_communities/information_on_action_plans

⁷⁶ Available at <http://www.environment.act.gov.au>

⁷⁷ http://www.environment.act.gov.au/climate_change/actgov_ops

⁷⁸ http://www.cmd.act.gov.au/__data/assets/pdf_file/0013/120217/canberra_plan_text_V5.pdf

Planning and Development Act 2007 (ACT) must include descriptions of environmental, social and economic characteristics.⁷⁹

Interestingly, the ACT Nature Conservation Strategy 2013-23⁸⁰ has removed any reference to the precautionary principle, used in the previous version, and now contains no specific references to either ESD or the principles of ESD; although clearly the content of the Strategy can be said to be implementing the concept of ESD, in particular the precautionary principle and conservation of biological diversity.⁸¹ For example, an adaptive management approach to both strategic planning and issue of project approvals⁸² may be seen to be part of a precautionary approach. The Strategy states in Pt 4 that:

A dynamic natural resource management (NRM) planning framework will be developed to adaptively manage conservation investments across public and privately managed land. Inherent in this approach will be a shift away from reliance upon static planning documents towards more flexible tools designed for adaptive management and feedback into implementation cycles.

The Pest Animal Management Strategy 2012-22⁸³ also states, at page 2:

Management programs for reducing pest animal damage should have clearly defined objectives and performance criteria. These are used, in combination with operational and performance monitoring, to evaluate the success of the management program and to allow for adaptive management of the pest animal problem.

This Strategy, and also the ACT Weeds Strategy 2009-19, also avoid any direct references to ESD although they do repeatedly refer to social, environmental and economic impacts; and the weeds strategy admits (at 1.1) that “weed management is essential for the sustainable management of natural resources and the environment and for social well-being.”

Perhaps the reason why none of these ACT biodiversity strategies actually admit the relevance of ESD directly is that neither of the supporting pieces of legislation – the Nature Conservation Act 1980 (ACT) and the Pest Plants and Animals Act 2005 (ACT) refer directly to principles of ESD; although one of the objects of the latter Act is to promote a strategic and sustainable approach to pest management (s.3(b))

Environmental planning instruments such as the Territory Plan and associated structure plans can also promote sustainable management and utilisation of natural resources, and require application of principles of ESD, thus empowering decision-makers to refuse applications for development consent or other authorisations that do not promote such principles, or impose conditions directed towards sustainable outcomes.⁸⁴ This empowerment of course stretches to tribunals hearing merits appeals, where they effectively ‘stand in the shoes’ of the original decision-maker.

The Territory Plan

⁷⁹ Planning and Development Regulation 2008 (ACT) reg 17(1)(c)

⁸⁰ Available at http://www.environment.act.gov.au/cpr/nature_conservation_strategy

⁸¹ See also the Implementation Plan available at http://www.environment.act.gov.au/__data/assets/pdf_file/0009/268767/2013-2018_Nature_Conservation_Strategy_Implementation_Plan.pdf

⁸² On adaptive management as a condition of development consent see

⁸³ Available at http://www.environment.act.gov.au/__data/assets/pdf_file/0012/252120/PAMS_WEB.pdf

⁸⁴ For example by requiring offices and public buildings to incorporate design features that promote ESD; see ESD Design guide for Office and Public Buildings available at <http://www.environment.gov.au/sustainability/government/publications/esd-design/index.html>

The Statement of Strategic Directions in the ACT Territory Plan⁸⁵ comprises two sets of principles, one of which is sustainable development. One of the purposes of this statement is to guide environmental impact statements, planning reports and strategic environmental assessments.⁸⁶

The principles of sustainable development in the Plan adopt a ‘triple bottom line’ approach; that is, the Plan gives equal weight to environmental, social and economic objectives. These objectives are to be pursued:⁸⁷

in a balanced and integrated way, having regard to both short-term and long-term factors, such that present needs can be met without prejudicing the welfare of future generations, and without serious or irreversible loss of life-supporting natural resources or damage to the environment.

Wherever appropriate, the broader global and regional context and potential cumulative impacts of decisions will be taken into account. Where there are threats of serious or irreversible damage, lack of full scientific certainty should not be used as a reason for failing to prevent environmental degradation.

The principles of environmental sustainability reflect a wide range of strategic approaches that encompass building design, waste minimization, energy conservation, maintenance of biological diversity, integrated catchment management, and minimization of pollution and greenhouse gas emissions.⁸⁸

The Auditor-General’s Performance Audit Report *Development Application and Approval System for High Density Residential and Commercial Developments*⁸⁹ states that:

The (Environment and Sustainable Development) Directorate has identified at a high level how the principles of environmental sustainability can be built into planning and development activities.⁹⁰ Those that apply to high density residential and commercial developments include:

- ☐ ☐ ☐ minimising impact on biodiversity through appropriate design and siting of buildings;
- ☐ ☐ ☐ reducing greenhouse gas emissions by locating buildings close to public transport facilities and providing for walking and cycling facilities;
- ☐ ☐ ☐ reducing emissions of greenhouse gases through energy efficiency measures and through use of renewable energy;
- ☐ ☐ ☐ reducing potable water use and recycling water where appropriate;
- ☐ ☐ ☐ reducing stormwater runoff;
- ☐ ☐ ☐ improving indoor air quality; and
- ☐ ☐ ☐ using sustainable building products.

⁸⁵ Available at <http://www.legislation.act.gov.au/ni/2008-27/copy/74258/pdf/2008-27.pdf>

⁸⁶ Planning and Development Act 2007 (ACT) s 52(2)(c)

⁸⁷ Statement 1.3, 1.4

⁸⁸ Statement 1.5 - 1.11. Note also the Water Use and Catchment General Code, available at <http://www.legislation.act.gov.au/ni/2008-27/copy/63112/pdf/2008-27.pdf>, which sets out principles relating to water use and environmental values.

⁸⁹ Report 4/12 available at www.audit.act.gov.au

⁹⁰ See ESDD Sustainable Design http://www.actpla.act.gov.au/topics/design_build/siting/sustainability

The Directorate has integrated some of these into the development application process. For example, development proposals are assessed under the Waterways Water Sensitive Urban Design General Code of the Territory Plan. The code provides a method for implementing water sensitive urban design to assist in achieving specific targets in the ACT Government's 'think water, act water' strategy. The Directorate Case Officers undertake the assessment of the development proposal against the general code, with large scale or complex developments referred to the internal Infrastructure Policy Team, who have expertise in water management.

However:

The Directorate acknowledges that there is a gap between that high level framework and its application in development assessment processes that could usefully be filled by clear policy that sets standards for these matters.

Development consent for a proposal in the 'impact track' cannot be given unless the proposal is consistent with the statement of strategic directions.⁹¹ This provision effectively incorporates this statement as a mandatory legal requirement of decision-making for impact track development in the ACT.

Structure plans for particular regions in the ACT also incorporate sustainable development as an objective. For example, the structure plan for the Kingston foreshore⁹² states that one of its objectives is to achieve best practice environmentally sustainable development.⁹³ Another general objective is to undertake development using best practice environmentally sustainable development principles.⁹⁴ Strategies are then to be developed to preserve biodiversity and natural habitats; reduce energy and water use; and ensure recycling of waste products.⁹⁵

Such provisions are important because:

1. they help to 'trickle down' the meaning of the legislative context into strategic plans that give more focused attention to the individual components of sustainability in real life planning;
2. they provide a bridge between the legislative objectives and evaluation of individual projects, providing a firmer footing for imposition of conditions on development to achieve the planned objectives.

They do however have to be translated into more specific requirements for project design.

Land Releases in the ACT

Strategic environmental assessment, as a 'regional' approach, has clear advantages over environmental assessment on a project-by-project basis. Not only will an environmental assessment be conducted over a much wider area than that encompassed by a single project, thus enabling a more integrated assessment of potential cumulative impacts; but such an approach may also obviate the necessity for a raft of individual

⁹¹ Planning and Development Act 2007 (ACT) s 128(1)(b)(i). See also *ibid* s 159(2)(b) (Minister may have the proposal referred if the application seeks approval for a development that may have a substantial effect on the achievement or development of the object of the territory plan as set out in the statement of strategic directions)

⁹² Available at <http://www.legislation.act.gov.au/ni/2008-27/copy/68159/pdf/2008-27.pdf>

⁹³ Structure Plan page 3 item 3

⁹⁴ Structure Plan page 4, general objectives item (b)

⁹⁵ Strategy page 4 4(c),(e-g)

environmental assessments, triggered every time an application for development consent is lodged. For example, in NSW an environmental planning instrument may become 'biodiversity certified' if, as a result of strategic assessment of biodiversity values, the Minister is satisfied that the instrument will lead to maintenance or improvement of biodiversity values.⁹⁶ The practical effect of this is to remove procedural and substantive requirements for obtaining development consent that would otherwise be triggered by potential impacts on biodiversity; for example, the necessity to lodge a species impact statement where threatened species and ecosystems might be involved. The Commonwealth EPBCA also enables the Minister to take a less onerous approach to assessment of environmental impacts of individual actions if those actions have already been assessed as part of a strategic policy, plan or program.⁹⁷

These advantages are recognized in the Gungahlin Final Strategic Biodiversity Plan 2013, (at page 7):⁹⁸

Firstly, the Plan if approved, will streamline the process for the rest of development in Gungahlin, by removing the requirements for further assessment of individual developments under the EPBC Act. Development would be able to proceed without additional costs and uncertainty improving land supply and affordability while achieving strategic benefits to the management of MNES and biodiversity in Gungahlin.

Secondly, the Plan would result in the establishment and management of a consolidated offset package rather than numerous small offsets which would typically be the result of multiple, ad hoc assessments through the referral process and possible subsequent approval under Part 9 of the EPBC Act. The establishment of small offsets on an 'as required' basis does not guarantee results or improvement to values at a landscape scale. Smaller scale offsets are also accompanied by greater administrative costs which are typically passed onto consumers resulting in an increased cost to housing and associated development without an equivalent gain. The establishment of a large, consolidated addition to the existing reserve system, with an associated financial component targeted at improving offset values would help to achieve environmental outcomes at a landscape scale while minimising the inefficiencies experienced through the smaller scale, site-by-site approach.

In summary, the strategic assessment of development has clear benefits over the alternative of numerous smaller release areas including the potential to:

- minimise delays of individual referrals and economic impacts of delaying land release;
- reduce inefficiencies caused by site-by-site implementation of offsets;
- achieve environmental outcomes for affected MNES and biodiversity conservation in general at a landscape scale; and
- enable consideration of the ACT's history of protecting MNES, as relevant to Gungahlin where significant areas have been withdrawn from potential development and permanently protected for conservation.

The Gungahlin plan was developed in the context of a strategy for land releases that had been developed in the 1970s. In a sense the economic and social parameters had been set and environmental considerations then had to be continuously fed into the land release proposals to avoid, mitigate and offset environmental impacts. In other words, considerations of sustainability were shaped by the proposal. It is arguable however that to properly inform sustainability outcomes, strategies for ecosystems and biodiversity protection, and fire management, need to be the first strategies adopted prior to any decisions being made to release land. Otherwise proposals for consuming uses (that produce profits) tend to foreclose non-consuming uses (that do not produce profits). Another advantage of such an approach is that preserving pockets of threatened species in isolated developments, which tends not to demonstrate great ecological integrity, and is expensive to manage, can be replaced by a more integrated plan for ecosystems management. Future land release

⁹⁶ Threatened Species Conservation Act 1995 (NSW) ss 126B-126N. Certification has, for example, been bestowed on the State Environmental Planning Policy (Sydney Region Growth Centres) 2006.

⁹⁷ Environment Protection and Biodiversity Conservation Act 1999 (Cth) s 87

⁹⁸ http://www.economicdevelopment.act.gov.au/__data/assets/pdf_file/0007/480175/8024_R01_V9-The-Plan.pdf

programs have an opportunity to do the sustainability planning upfront; developing a biodiversity and fire management strategy before feeding in triple bottom line data to identify suitable sites that offer the best possible outcomes, given the imperatives to provide affordable housing options within reasonable commuting distance whilst avoiding and mitigating impacts on biodiversity. The Objectives of the Indicative Land Release Programs 2013-14 to 2016-7⁹⁹ however stress mostly the economic and social development of the Territory, including ‘contributing to the vision’ of sustainable development. This does not suggest a fully integrated whole of government strategic approach.

2. Project design

In Hub Action Group Inc v Minister for Planning (2008) 161 LGERA 136 Preston J remarked (at [3]) that implementing sustainability requires that the principles of ESD “inform project design, including the nature, scope, extent, life and other features of a proposed development and its location”.

In the ACT the Auditor-General has commented that:

The Territory Plan sets the strategic direction for planning and development in the ACT. Key directions are environmental sustainability and high quality, creative design. With respect to the latter, it sets clear goals to preserve Canberra’s ‘garden city’ and ‘bush capital’ qualities, and expects urban design to acknowledge Canberra as the national capital.

However:

The Directorate has not fully integrated environmentally sustainable development and urban design principles into development application processes for high density residential and commercial developments. This needs to be addressed through the provision of relevant information and guidance for developers, referral entities and Directorate Case Officers involved in supporting the development application process.

The Auditor-General also commented there is limited guidance for applicants and assessors of development applications in meeting the urban design principles of the Canberra Spatial Plan.

The role of referral agencies

Environmental sustainability in urban design is not something that can be achieved solely by those who determine applications for development. The Auditor-General has commented that it will be important to incorporate the ‘one Government’ approach that would support referral entities appropriately incorporating similar considerations in their advice and input into development applications. Not surprisingly therefore:

There is an understandable reliance on referral entities to assess and provide advice on environmental sustainability issues as part of the current development application referral process. This includes advice from the Conservator of Flora and Fauna in respect of nature conservation and regulated or registered trees; the Environment Protection Authority in relation to waste water, air, contaminated sites, hazardous material, noise and water quality; and, Heritage ACT in respect of the conservation of cultural, natural and Aboriginal heritage assets.

However:

⁹⁹ http://www.economicdevelopment.act.gov.au/__data/assets/pdf_file/0007/456568/130603_web_ILRP_201314_201617.pdf

the Directorate has approved development applications not supported by referral entities. For example, on two occasions the Environmental Protection Authority did not support a development application that failed to provide a noise management plan, which is a mandatory requirement under the Territory Plan for certain developments. However, the Directorate approved the development application, with a condition of approval that the applicant provides a noise management plan endorsed by the EPA.¹⁰⁰

Further:

Currently, only the Conservator of Flora and Fauna has an opportunity to review a decision prior to finalisation. As a member of the Major Projects Review Group, the Conservator of Flora and Fauna representative is able to provide further advice and options for consideration and endorsement by the Major Projects Review Group, where inconsistencies exist between a development application decision and the Conservator's advice. For all other referral entities, they are not informed as to whether their advice has been accepted by the Directorate until they receive a copy of the final Notice of Decision. The lack of opportunity to comment means they are unable to provide the Directorate with additional information that may be necessary for a robust approval decision, including alternatives, to ensure compliance of the development.

The Auditor-General recommended that given the important role of case officers and referral entities in the development assessment process, that training should be provided, supported by documentation on how to integrate environmental sustainability principles into the development application process. One way of doing this would be to establish codes or guidelines for the uptake of principles of sustainability in project design.

Codes, Guidelines and Standards

Setting out practical approaches to delivering sustainable outcomes may be progressed by way of mandatory codes¹⁰¹, establishing clear standards for project design,¹⁰² or by voluntary guidelines,¹⁰³ with in-built benefits for compliance. Codes and guidelines may set standards or benchmarks for measuring sustainability; for example, that emissions of greenhouse gases should be below stated thresholds; that a certain proportion of a product should be re-usable and/or recyclable; or that the use of water or energy should be constrained within stated limits.

In the ACT Territory Plan there are a number of general codes, for example the Water Use and Catchment General Code (the 'Water Code'),¹⁰⁴ which encompasses water quality and environmental values; and the Estate Development Code, which encompasses environment protection.¹⁰⁵ The Water Code prescribes that water use in defined areas is limited to certain purposes and must be in accordance with prescribed

¹⁰⁰ This condition would seem to be supported by the Planning and Development Act 2007 (ACT) s 165(3)(a), (d), (h) or (m)

¹⁰¹ See for example the Queensland Development Code: Sustainable Buildings <http://www.dsdp.qld.gov.au/resources/laws/queensland-development-code/current-parts/mp4-1-sustainable-buildings.pdf>. In Victoria, the Code of Practice for Timber Production 2007, published under the Conservation, Forests and Lands Act 1987 (Vic), has been interpreted as imposing a mandatory obligation on VicForests to apply the precautionary principle when planning logging operations in state forests; *Environment East Gippsland Inc v VicForests* [2009] VSC 386; *Environment East Gippsland Inc v VicForests* [2010] VSC 335.

¹⁰² See for example the BASIX Code for energy and water efficiency of certain buildings in NSW <https://www.basix.nsw.gov.au>

¹⁰³ See for example the ESD Design Guide for Office and Public Buildings <http://www.environment.gov.au/sustainability/government/publications/esd-design/index.html>; Queensland Sustainable Buildings Guideline <http://www.dsdp.qld.gov.au/resources/guideline/qdc-4-1-sustainable-buildings-guideline.pdf>. And for a local government sponsored guideline see <http://www.shellharbour.nsw.gov.au/FileData/pdf/ESBDBBackgroundPaper.pdf>. Although guidelines would normally not impose mandatory standards, statutory interpretation may reveal that was indeed the intent of the legislature; see *Byron Ventalink P/L v Byron SC* (2005) 142 LGERA 215 (*heritage guidelines mandatory*)

¹⁰⁴ <http://www.legislation.act.gov.au/ni/2008-27/copy/63112/pdf/2008-27.pdf>

¹⁰⁵ <http://www.legislation.act.gov.au/ni/2008-27/copy/94071/pdf/2008-27.pdf> element 5

environmental values. There appears to be no feedback mechanism built into this code so it is difficult to evaluate how effective is the code and whether it is open to ‘adaptive amendment’ based on informed further information.

The *UK Code for Sustainable Homes*¹⁰⁶ states that:

In the short-term, Code compliance is voluntary but home builders are encouraged to follow Code principles set out in this publication because the Government is considering making assessment under Code standards mandatory in the future.

Compliance with higher levels of the *Code* are still voluntary, but compliance is being steadily made mandatory by ‘step-change’ increases set out in the building regulations. Implementing the Code is assisted by technical guidance.¹⁰⁷

Design categories within the Code cover:

1. Energy and CO₂ Emissions – Operational Energy and resulting emissions of carbon dioxide to the atmosphere (different minimum standards that must be met at each level of the Code)
2. Water – Internal and external water saving measures specified (minimum standards that must be met at each level of the Code).
3. Materials – The sourcing and environmental impact of materials used to build the home (minimum standards present).
4. Surface Water Run-off – Management of surface water run-off from the development and flood risk (minimum standards present).
5. Waste – Storage for recyclable waste and compost, and care taken to reduce, reuse and recycle construction materials (minimum standards present).
6. Pollution – The use of insulation materials and heating systems that do not add to global warming.
7. Health and Well-Being – Provision of good daylight quality, sound insulation, private space, accessibility, and adaptability (minimum standards present for Code Level 6 only).
8. Management – A Home User Guide, designing in security, and reducing the impact of construction.
9. Ecology – Protection and enhancement of the ecology of the area and efficient use of building land.

Government sponsored codes trigger innovations in private enterprise and industry associations that seek to deliver, or better, the standards required by the codes.¹⁰⁸ For example, it is claimed that the

BREEAM (BRE Environmental Assessment Method) is the leading and most widely used environmental assessment method for buildings. It sets the standard for best practice in sustainable design and has become the de facto measure used to describe a building's environmental performance.¹⁰⁹

Codes often use declared standards to pinpoint particular aspects of a project or activity. There are, for example, international standards for meeting sustainability parameters in building construction;¹¹⁰ for energy

¹⁰⁶ Available at http://www.planningportal.gov.uk/uploads/code_for_sust_homes.pdf. See also the *Code for Sustainable Homes: Cost Review* available at <https://www.gov.uk/government/publications/code-for-sustainable-homes-cost-review>. For case studies involving the use of the Code see <https://www.gov.uk/government/organisations/department-for-communities-and-local-government/series/code-for-sustainable-homes-case-studies>

¹⁰⁷ See <https://www.gov.uk/government/publications/code-for-sustainable-homes-technical-guidance>

¹⁰⁸ See for example the French Haute Qualité Environnementale <http://www.haute-qualite-environnementale.com>; and the LEED scheme in the USA and Canada <http://www.usgbc.org/LEED/>

¹⁰⁹ See <http://www.breeam.org/page.jsp?id=86>. See also Green Building Council of Australia <http://www.gbca.org.au>

¹¹⁰ SO/TS 21929-1:2006 Sustainability in Building Construction–Sustainability Indicators; ISO 21930:2007 Sustainability in Building Construction–Environmental Declaration of Building Products.

efficiency in residential dwellings and small commercial buildings,¹¹¹ and for environmental and energy management generally.¹¹² The Building Code of Australia requires (section J) reference to AS/NZS 4859 (materials for the thermal insulation of buildings), AS 2047 (windows in buildings), AS/NZS 3500 (plumbing and drainage), AS 3823 (performance of electrical appliances) and AS 1668 (use of ventilation and air-conditioning). Both the Building Code and the Plumbing Code have regulatory status in Australia.

Standards need to reflect Government Policies

Standards for project design, whether contained in codes or otherwise, should clearly reflect and promote the preferred outcomes of government policies. Focussing on the stated outcomes of policies that underpin the production of standards should help to give purpose and definition to the standards. If this is not the case then there may appear to be an apparent mismatch between the aim of the policy and the standards expected to deliver it. Sometimes this is not the fault of the standards, which may have to tread a cautious line between ‘raising the bar’ on project design, and the technical realities and costs of so doing. Policies can be created in a ‘vacuum’ where pursuit of preferred outcomes is lauded without any practical acknowledgement of the means of achievement.

One way of ‘bridging the gap’ between a policy and standard setting for individual projects is an ‘implementation plan’ or ‘action plan’. This may for example stipulate general performance standards and evaluation criteria for certain types of projects that requires more ‘in-depth’ consideration of the practical considerations inherent in delivering the aims of the policy, including time-frames over which certain aspects of the policy may be achievable. The draft ACT Water Strategy for example promises that “(A)ction plans will detail how strategies will be converted to targets/actions/ programs/works.”¹¹³ On the other hand, neither policies nor action plans should be expected to descend to the level of individual project design. This means that there is usually a discretion built into the production of standards that recognizes the practicalities of delivering the aims of the policies on which they rest. Too conservative an approach to costs and technical achievement may however fail to deliver the move away from ‘business as usual’ implicitly demanded by the policy. Whatever the stance taken by the standards setter, however, it should be made quite clear that the standards are based on the apparent dictates of the policies that underpin them; and new standards should be guided by this principle.

It helps of course if the policy is itself underpinned by legislated objectives. This gives the policy a credence and probable longevity that may be lacking in policies that have no obvious connection with legislative initiatives; and this link may enable standards setters to be rather more innovative and progressive in their approach. The objectives of declared government policies also need to be equally clear in focusing on the expected or preferred outcomes of those policies. Lack of clarity about the outcomes that are to be pursued by the policy understandably leads to hesitation and confusion in the mind of the standards setter when addressing the likely implications that the production of the standards will have on the regulated community.

Furthermore, reference of current and proposed new standards to all government agencies that might, or whose clients might, be affected by them should become the norm of standard setting. A review of current

¹¹¹ ISO 13153:2012, *Framework of the design process for energy saving single family residential and small commercial buildings*

¹¹² ISO 14001, ISO 50001

¹¹³ Draft ACT Water Strategy 2013, page 22, available at http://www.environment.act.gov.au/_data/assets/pdf_file/0006/267630/Draft_ACT_Water_Strategy_-_water_for_the_future.pdf

standards, as well as referral of proposed new standards, to ascertain to what extent they reflect current government policies, and any action or implementation plans, should help to integrate standard-setting within the context of whole-of-government strategic decision-making. In other words, standard setting should become a whole-of-government exercise, not just left to the agency that develops, or has carriage of, those standards. The Office of the Commissioner for Sustainability and the Environment could become the focal point for undertaking a review of current standards to determine to what extent they demonstrate a whole-of-government approach to decision-making; whilst performing an integrating role for production of future standards in a similar context.

Green Certification Schemes

Green certification schemes can be useful for determining whether the body awarding the certification believes that materials or products are more ‘sustainable’, at least where the assessment methodology is clearly explained. This may help in assessing, and setting conditions for approval of, projects and activities. To be reliable and avoid ‘greenwashing’, certification schemes should incorporate thorough life-cycle analysis and independent verification by a reputable third party. For example, the Green Building Council of Australia assesses various other certification schemes for compliance with its own standards for ‘green star’ rating in respect of environmental design and construction of buildings and communities.¹¹⁴ Some of the more reputable certification schemes internationally include Green Seal,¹¹⁵ Ecologo,¹¹⁶ Compostable Logo¹¹⁷ and Green Guard.¹¹⁸

Translating sustainable design into conditions of consent

One of the best ways of demonstrating approaches to real life decision-making involving project design that incorporates principles of sustainability is to look at recorded cases involving merits review. At this point, final conditions of consent will have incorporated information and advice received from:

- (a) the proponent of the project;
- (b) submitters or objectors;
- (c) any relevant environmental assessment
- (d) referral agencies
- (e) the original decision-maker

Since conditions of consent are often detailed and lengthy, they will not be set out in this document; but some references will be given to examples that can be easily accessed and that demonstrate real life decision-

¹¹⁴ See <http://www.gbca.org.au/green-star/materials-category/product-certification-schemes/2933.htm>. And for a development in Canberra based on the green star rating system see <http://www.brindabellabusinesspark.com.au/bbp-buildingsforlease/images/3MolongloDr.pdf>

¹¹⁵ <http://www.greenseal.org>

¹¹⁶ <http://www.ecologo.org/en/>

¹¹⁷ <http://www.bpiworld.org/BPI-Public/Program.html>

¹¹⁸ <http://www.greenguard.org/en/index.aspx>

making undertaken by the Land and Environment Court of NSW after identifying and taking into account all relevant factors.

In an urban setting, for example, extensive and detailed environmental consent conditions can be reviewed in the following cases:

CSA Architects Pty Limited v Woollahra Council [2009] NSWLEC 1054 and *Mosman Church of England Preparatory School v Warringah Council* [2009] NSWLEC 1190 (demolition and/or erection of a building)
Fabcot Pty Limited v Byron Shire Council [2010] NSWLEC 1013 (conditions of consent for an on-site sewage management system)

In *Drake-Brockman v Minister for Planning* (2007) 158 LGERA 349, the requirement that the proposal should demonstrate initiatives relative to ESD translated into specific consideration at the approval stage of public transport issues, standards for water use, wastewater reuse and energy consumption, and greenhouse gas emissions ratings.

In *Environment Protection Authority v Forestry Commission of New South Wales* [2013] NSWLEC 101, conditions for project design required by a court order as a response to an offence involving an endangered ecological community (EEC) were set out as follows (Annexure A):

The objective of this project is to develop and assess mechanisms to reduce or remove the risk of harm to the EEC in the course of forestry operations on State forest estate. The project aims to do this by removing or reducing uncertainty and ambiguity through improved identification on the ground by accurate spatial mapping of its occurrence where possible, or by the targeted application of field identification guidelines where mapping is not feasible.

1. Diagnostic characteristics for the Endangered Ecological Community will be identified based on a review of the Scientific Committee determinations, and the advice of independent and suitably qualified botanical/ecological experts.
2. A map will be produced for the Endangered Ecological Community where it occurs on State forest estate.
3. Mapping will be done using ADS-40 high resolution imagery projected in a three dimensional GIS environment using specialised computer hardware (based on Maguire et al 2012) at an operationally practical scale based at the best available resolution.
4. The imagery will be interpreted by specialist mappers, field validation and existing vegetation sample plots will be used to support the interpretation. The mapping will be coordinated by the EPA Forestry Section.
5. If for some reason mapping is not possible the project will produce an accurate and reliable field identification guideline to allow for the identification of the Endangered Ecological Community on the ground during harvest planning, compartment mark-up ahead of the logging operation, and in compliance audits by the EPA.
6. The accuracy of the map and its effectiveness to address the project objectives will be considered through a review process to be conducted as the last step of the project.....

Detailed conditions of consent for the management of ecosystems and biodiversity can also be found in *Gerroa Environment Protection Society Inc v Minister for Planning and Cleary Bros (Bombo) Pty Ltd (No 2)* [2008] NSWLEC 254; *Ironstone Community Action Group Inc v NSW Minister for Planning and Duralie Coal Pty Ltd* [2011] NSWLEC 195 (including noise and dust management); and *Newcastle & Hunter Valley Speleological Society Inc v Upper Hunter Shire Council and Stoneco Pty Limited (No 2)* [2010] NSWLEC 104

Failure in an application for development consent to specify with sufficient certainty all design and operational aspects of a proposal may well lead to a refusal of consent: for example, *Greenwood v Warringah*

Council [2013] NSWLEC 1119 (refusal of consent for expansion of landfill and waste recovery operation because of insufficient detail about essential matters such as exiting site contamination and remediation works, soil and water management investigations and plans, a stormwater management plan, a revegetation and rehabilitation management plan with detailed landscaping species and distances from stockpiles so as to minimise bushfire risk, weed removal and revegetation of embankments adjoining the natural bushland, a traffic management plan and a comprehensive operational plan).

An alternative view postulates that issues of sustainable design, such as energy efficiency and waste management, are more appropriately considered at the building approval stage, rather than at the development assessment and approval stage. For example, a building approval would be accompanied by an energy efficiency rating that takes into account the materials and internal fittings used in construction. However, if the purpose of sustainability policy is to drive consideration of such issues at the earliest possible opportunity in the design of a project, then it is arguable that such considerations should not be deferred until a later stage of the approval process.

One important function of conditional consents, often omitted, is to build into the consent process a ‘feedback loop’ to inform the decision-maker whether conditions are working to encourage the outcomes sought by the consent. This has two advantages; the decision-maker can learn from the process, which will have advantages for future projects; and the operational environment of the current consent can be modified if provisions for ‘adaptive management’ are included as conditions of consent.

Adaptive Management as a Condition of Development Consent

One of the most effective ways in which precaution can be used in real life decision-making is to impose conditions for adaptive management; specifically, to require ongoing monitoring, assessment and regulation of impacts from risks or changes in the operating environment.

Adaptive management enables a response to changes over time. By contrast, traditional decision-making would issue a development consent fixed at a particular point in time that would take no account of changes in the operating environment; or indeed whether predictions made in an environmental assessment, and on which consent might be based, prove accurate. Conditions for adaptive management can also effectively establish ‘hold points’ which require the achievement of stipulated threshold standards before moving to the next step of a project. In *Environment Protection Authority v Forestry Commission of New South Wales* [2013] NSWLEC 101 for example the conditions of consent required that:

after each step of the project, all involved parties will assess the project tracking, including problems encountered, resourcing, budgetary constraints and so forth. This assessment will be used to assess the need for modifications to the project design and outcomes. Any changes to the project scope will be agreed and formalised between all involved parties.

Identifying, setting, monitoring and evaluating performance standards is an essential feature of such an approach.

In *Newcastle & Hunter Valley Speleological Society Inc v Upper Hunter Shire Council and Stoneco Pty Limited* [2010] NSWLEC 48, Preston CJ emphasised (at [148]) that:

Adaptive management is a concept which is frequently invoked but less often implemented in practice. Adaptive management is not a ‘suck it and see’, trial and error approach to management, but it is an iterative approach involving explicit testing of the achievement of defined goals. Through feedback to the management process, the management procedures are changed in steps until monitoring shows that the desired outcome is obtained. The monitoring program has to be designed so that there is statistical confidence in the outcome. In adaptive management the goal to be achieved is set, so there is no uncertainty as to the outcome and conditions requiring

adaptive management do not lack certainty, but rather they establish a regime which would permit changes, within defined parameters, to the way the outcome is achieved.

In this case, conditions were put in place to cover the possibility that hitherto unknown cave-dwelling stygofauna and troglafauna, which might be adversely impacted by blasting and quarrying operations, might be found on the subject site. Preston CJ also said (at [162]):

Prudence would also suggest that some margin for error should be retained until all the consequences of the decision to proceed with the development plan, programme or project are known. This allows for potential errors in risk assessment and cost-benefit analysis. Potential errors are weighted in favour of environmental protection. Weighting the risk of error in favour of the environment is to safeguard ecological space or environmental room for manoeuvre.....One means of retaining a margin for error is to implement a step-wise or adaptive management approach, whereby uncertainties are acknowledged and the area affected by the development plan, programme or project is expanded as the extent of uncertainty is reduced...

An adaptive management approach might involve the following core elements:

monitoring of impacts of management or decisions based on agreed indicators; promoting research, to reduce key uncertainties; ensuring periodic evaluation of the outcomes of implementation, drawing of lessons, and review of adjustment, as necessary of the measures or decisions adopted; and establishing an efficient and effective compliance system: see “Guidelines for applying the precautionary principle to biodiversity conservation and natural resource management” in Appendix A to R Cooney and B Dickson (eds), *Biodiversity and the Precautionary Principle, Risk and Uncertainty in Conservation and Sustainable Use*, Earthscan, 2005 p. 304, Guideline 12.

For example,¹¹⁹ in *Ulan Coal Mines Ltd v Minister for Planning* [2008] NSWLEC 185, a condition on the approval for a coal mine - that the scale of mining operations should be adjusted to match available water supply - was held to be an appropriate precautionary and adaptive management response to dealing with residual uncertainties about future water supply.

Similarly, in *Wildlife Protection Society of Australia Inc and Minister for the Environment, Heritage and the Arts* [2008] AATA 717, the tribunal required that a plan for kangaroo culling should incorporate a trigger that would require the suspension of the harvest in any zone where departmental officers had reason to believe that the population within that zone had declined by 30 per cent (or 34 per cent in the case of red kangaroos).¹²⁰

In *Lawyers for Forests Inc v Minister for the Environment Heritage and the Arts* [2009] FCAFC 114, it was argued that risks to the marine environment from the effluent of a proposed pulp mill should be met by application of the precautionary principle. In upholding the minister’s decision to approve the proposal, the Full Court said (at [47]):

Although on the evidence no significant impacts were likely, the conditions were designed to deal with a residual risk from unexpected trends or events, and were imposed in accordance with the precautionary principle for the purpose of guarding against them by resort to monitoring and management.

In Barrington - Gloucester - Stroud Preservation Alliance Inc v Minister for Planning and Infrastructure

¹¹⁹ See also, for example, *David Kettle Consulting P/L v Gosford City Council* [2008] NSWLEC 1385 (trial period to allow for monitoring of extraction of groundwater for a bottling plant); *Pidun v Dac* [2004] SAERDC 10 (impact of oyster farm on seagrass communities); *APP Corporation Pty Ltd and City of Perth* [2008] WASAT 291 and [2011] WASAT 132 (monitoring of effects of rooftop wind generators); *Xstrata Coal Qld Pty Ltd v Friends of the Earth, Brisbane Co-Op Ltd* [2012] QLC 13 (monitoring regime for deep aquifers); *Gallo and Williams v Chief Executive, Department of Environment and Resource Management* [2012] QLC 0015 (conditions for monitoring and managing a water licence).

¹²⁰ Kangaroo culling has also been held to be a precautionary approach to protecting other threatened species: *Animal Liberation v Conservator of Flora and Fauna* (Administrative Review) [2009] ACAT 17.

[2012] NSWLEC 197, the court admitted that it was:

implicit in the Department's recommendation for approval, that it is possible to develop the gas field by adaptive management, using modern geological, hydrogeological and drilling techniques, with acceptable minimisation of risks. The proponent has proposed, and the Department's conditions of approval require, the progressive development of the preliminary conceptual hydrogeological model supporting the application into a fully operational numerical model. This model will be based on the results of the more extensive drilling and geological testing which will accompany the gas field development. It will be an important tool in adaptive management. Since this development will be a complex task requiring the DG's approval, the Commission has included a requirement in the conditions of approval that the model be peer reviewed to assist the Department and relevant agencies in their assessment of the model, its outputs and its application in adaptive management.

The conditions of approval also require extensive monitoring of groundwaters and surface waters for quantity and quality through the life of the project in order to continually assess any adverse or non-planned environmental impacts. 'Hold Point' conditions are specified in the approval conditions, should any such impacts become apparent, with the 'Hold Points' being established using risk analysis. These are important measures to ensure adaptive management action is initiated early enough to avoid any adverse impacts arising from unanticipated geological faults encountered during development of the gas field.

Conditions of development consent can also require covenants to protect sensitive ecological habitat and/or environmental management plans as a means of addressing and managing future risks.¹²¹

3. Environmental Assessment - Projects

Instructions to consider ESD when designing a project or activity may be incorporated into the requirements for environmental assessment of a proposal. For example, in NSW the planning regulations require:¹²²

the reasons justifying the carrying out of the development, activity or infrastructure in the manner proposed, having regard to biophysical, economic and social considerations, including the principles of ecologically sustainable development.

In the ACT an EIS, which is obligatory for proposals in the impact track unless otherwise exempted,¹²³ must include a statement about the proposal's compatibility with the principles for environmental sustainability in the Territory Plan.¹²⁴ A scoping document for an EIS must also include each potentially significant environmental impact that must be addressed in the EIS; and may also include:¹²⁵

- (a) requirements in relation to the methods of assessment to be used in the EIS;
- (b) for each potentially significant environmental impact identified in the scoping document—a requirement that the proponent of the development proposal to which the scoping document relates consider ongoing management, monitoring or reporting regimes;

¹²¹ For example, *Garners Beach Habitat Action Group Inc v Cassowary Coast Regional Council (No 2)* [2010] QPEC 140; *Newcastle & Hunter Valley Speleological Society Inc v Upper Hunter Shire Council and Stoneco Pty Limited* [2010] NSWLEC 48; *Metropolitan Property Group v Moreland CC* [2011] VCAT 1285.

¹²² Environmental Planning and Assessment Regulation 2000 (NSW) Sch 2 cl 7(1)(f)

¹²³ Planning and Development Act 2007 (ACT) s 127

¹²⁴ Planning and Development Regulation 2008 (ACT) reg 50(2)(e)

¹²⁵ Planning and Development Regulation 2008 (ACT) reg 54(1)(d), (3)

- (c) a list of impacts that are not significant environmental impacts that can be addressed through an altered design or in some other way.

Importantly, an environmental impact is ‘significant’ if:¹²⁶

the cumulative or incremental effect of a proposed development might contribute to a substantial adverse impact on an environmental function, system, value or entity.

One of the dangers of leaving considerations of sustainability to be applied at the project specific stage is that the cumulative impacts of many similar decisions may be ignored when assessing the impacts of a particular proposal; the ‘death of a thousand cuts’ scenario. Whilst an isolated decision may not, in itself, be particularly significant, the combined effect of many similar decisions may very well prove unsustainable when assessed as a whole. For example, the cumulative impact of many isolated decisions is one of the reasons why hundreds of species of biodiversity and ecological communities are now on threatened species lists around the country. There is nothing as unsustainable as potential extinction. The Planning and Development Act clearly introduces a legal obligation to consider cumulative adverse environmental impacts in determining the content of an EIS.

For assessment in the merit track, consideration must be given to:¹²⁷

the probable impact of the proposed development including the nature, extent and significance of probable environmental impacts.

Arguably, since a decision-making authority may determine the content of an EIS,¹²⁸ and may ask the applicant for further information about a proposal,¹²⁹ these provisions enable the decision-maker to require, for example, that building design incorporate ESD initiatives, covering matters such as choice of building materials, water and energy efficiency, ventilation and lighting, and heating and cooling;¹³⁰ and indicate how ongoing adaptive management of the project may be progressed. Referral entities also have powers to advance such considerations, particularly since the decision-maker may not approve a proposal in the merit track against the advice of the referral entity except in restricted circumstances;¹³¹ and not at all where a regulated tree is concerned.¹³²

4. Government procurement

Government procurement policies can also adopt a strategic approach to encouraging sustainability. Although the Government Procurement Act (ACT) 2001 (the ‘Procurement Act’) makes no mention of ESD directly, it does oblige government entities, in seeking ‘value for money’, to have regard to ‘optimising whole of life cycle costs’.¹³³ One issue that would be triggered by such an obligation is to have regard to the costs of maintenance when designing or approving projects. Maintenance funding should be calculated, and clearly provided, for the anticipated life of the project, specify who or which entity is to bear the costs of

¹²⁶ Planning and Development Act 2007 (ACT) s 124A

¹²⁷ Planning and Development Act 2007 (ACT) s 120(f)

¹²⁸ Planning and Development Act 2007 (ACT) s 212

¹²⁹ Ibid s 138(4)(f)

¹³⁰ See for example http://www.planning.nsw.gov.au/asp/pdf/08_0098_star_city_appendix_t_esd_report_cundall.pdf; <http://www.planning.nsw.gov.au/asp/pdf/ESD%20Report.pdf>

¹³¹ Planning and Development Act 2007 (ACT) s 119(2)

¹³² Planning and Development Act 2007 (ACT) s 119(3)

¹³³ Government Procurement Act (ACT) 2001 s 22A(3)(d)

maintenance, and provide for a maintenance fund to be established from which monies for maintenance will be applied. This fund should be quarantined against access for funding for other purposes. This should enable provisions for adequate maintenance to be calculated up-front, and built into investment decisions, project design and approvals. Failure to do so may well result in a shortfall of funding to maintain significant public assets and controversy about the roles and responsibilities of government agencies to manage such issues.

Nevertheless, despite any direct reference to ESD in the Procurement Act, the ACT Government's Sustainability Policy 2009, *People, Place, Prosperity*, includes principles for sustainable procurement to be incorporated into the ACT's procurement processes. The ACT Waste Strategy 2011-2025 for example states (at page 18)

In 2011 the ACT Government released its *Action Plan for Australian Packaging Covenant 2011-2016*. The ACT Government commits in the Action Plan to use procurement to reduce packaging where possible, for example through establishing packing quantities as a criteria in its tender documentation for stationery contracts. These "green" or "sustainable procurement" requirements are also a component of the ACTSmart Business and ACTSmart Office recycling programs.

However, the ACT Auditor-General's *Performance Audit Report: Management of Recycling Estates and E-waste*¹³⁴ also states (at page 7) that in the procurement process for contracts for e-waste between 2008-2011, greater attention should have been given to balancing social, economic and environmental factors in the e-waste tendering process.

The Sustainable Energy Policy 2011-2020¹³⁵, following the lead established by the National Strategy for Energy Efficiency, also comments (at page 17) that:

To facilitate increased efficiency in office buildings across the Territory the ACT Government is participating in the National Green Leasing Policy (NGLP). This is a COAG initiative that aims to increase energy efficiency in commercial buildings by establishing minimum standards for offices leased to Australian Governments from the private sector.

The NGLP¹³⁶ has been adopted by the Commonwealth, State and Territory governments, to leverage their position as major tenants of buildings to improve the environmental performance of buildings and lower greenhouse gas emissions. As occupiers of up to 30% of commercial office space across Australia, such a procurement policy is bound to have a significant effect on the office market.

In a standard commercial lease, obligations on both parties are generally fixed for the term of the lease. By contrast, targets in green leases must generally be maintained, or improved, over the term of the lease. These obligations are commonly to be shared by the parties. Much will depend upon the age of the building services in allocating responsibilities.

The next step in 'greening' office buildings is to give more attention to improving the efficiency and sustainability of existing buildings, which make up the vast majority of commercial office buildings in Australia. Adopting green leasing policies should encourage greater awareness of sustainability issues when refurbishing and up-grading existing buildings.

Retrofitting existing buildings also provides an opportunity to consider moving towards zero greenhouse gas emissions. The Zero Carbon Existing Buildings Plan¹³⁷ claims that this can be achieved through a planned

¹³⁴ Available at <http://www.audit.act.gov.au>

¹³⁵ Available at <http://www.environment.act.gov.au>

¹³⁶ To view the *Green Lease Handbook* go to <http://ee.ret.gov.au/energy-efficiency/non-residential-buildings/green-leases-private-sector>

¹³⁷ <http://bze.org.au/buildings>

energy efficiency retrofit of the existing building stock, onsite renewable energy generation, and electrifying current gas appliances.

5. The Role of the Auditor-General

The office of the Auditor-General (A-G) has a pivotal role in progressing the uptake of principles of sustainability within government decision-making processes; and urging a transition to whole of government decision-making. The A-G has strong statutory powers to demand access to information and documentary records;¹³⁸ and may at any time conduct a performance audit of a Territory directorate or entity, taking into account, where appropriate, environmental issues relative to the operations being reviewed or examined, having regard to the principles of ecologically sustainable development.¹³⁹ To its credit, the A-G has taken on this role already, and its work is referred to in other parts of this report.

6. The Role of the Commissioner for Sustainability and the Environment

As well as investigating complaints about environmental management by Territory authorities, and issues relating to ESD, the Commissioner may also conduct,

on the commissioner's own initiative, investigations into actions of an agency where those actions would have a substantial impact on the environment of the ACT.¹⁴⁰

Subject to, and for the purposes of this Act, the commissioner may obtain information from any person, and make any inquiries, as the commissioner decides;¹⁴¹ and the Act includes extensive powers to inspect documents¹⁴², require the production of documents and other information and question persons.¹⁴³

An initiative that the Commissioner might consider is to develop key indicators of sustainability performance. These indicators could be set by consultation with relevant government agencies, and informed by government policies. They could also reflect, or be informed by, the key indicators adopted for Genuine Progress Indicators (GPI) outlined at page 24 of this report. Government agencies already are legally obliged to report on how their actions have accorded with principles of ESD (see pages 12-13 of this report) so it would seem that setting key indicators of sustainability performance might be a useful initiative that would help to standardize and inform reporting standards, allowing comparisons of data and establishing trends for informing future policies. The Commissioner's powers of investigation would allow the Commissioner's Office to determine the extent to which relevant government agencies are using key indicators of sustainability performance.

F. Using the Precautionary Principle

The precautionary principle is triggered by the satisfaction of two conditions precedent: first, a threat of serious or irreversible environmental damage; and second, a lack of scientific certainty as to that damage.¹⁴⁴

¹³⁸ Auditor-General Act 1996 (ACT) ss 14-14D

¹³⁹ Ibid s 12

¹⁴⁰ Commissioner for Sustainability and the Environment Act 1993 s 12(1)

¹⁴¹ Ibid s 15(5)

¹⁴² Ibid s 16(2); subject to disclosures certified by the Minister that would not be in the 'public interest' ; ibid s 17(6)

¹⁴³ Ibid s 17

¹⁴⁴ *Telstra Corporation Ltd v Hornsby Shire Council* [2006] NSWLEC 133 per Preston CJ at [128].

Unless these conditions precedent are present, the precautionary principle need not be applied.¹⁴⁵ Below this threshold it would however seem axiomatic that a cautious, or precautionary, approach should nevertheless be employed so as to reduce the risk below the threshold that might trigger application of the precautionary principle.¹⁴⁶ In Queensland, for example, both the Planning and Environment Court and the Land Court have endorsed the cautious, or a precautionary, approach, in the absence of, or to avoid, any circumstances that might trigger the precautionary principle.¹⁴⁷

The precautionary principle has, not surprisingly, been described as ‘vague’ and ‘fuzzy’ because it does not define precaution or indicate how much precaution should be taken. It is therefore notoriously difficult to apply as a legal standard rather than as an approach to decision-making on the merits.

It has become however clear that the precautionary principle is more than just a ‘political aspiration’.¹⁴⁸

Opinions will not only differ on the nature and magnitude of possible damage, but also whether such damage is a threat, and if it is whether it could be described as either serious or irreversible.¹⁴⁹ In *Telstra Corporation Ltd v Hornsby Shire Council* [2006] NSWLEC 133, Preston CJ said at [132]:

... the assessment of whether the threats are serious or irreversible will be enhanced by broadening the range of professional expertise consulted and seeking and taking into account the views of relevant stakeholders and rightholders. The former is important because of the inter-disciplinary nature of the questions involved. The latter is important because different judgments, values and cultural perceptions of risk, threat and required action play a role in the assessment process.

This concept has to be translated, of course, into a workable and practical standard that is capable of administrative and judicial application. For example, in *SHCAG Pty Ltd v Minister for Planning and Infrastructure and Boral Cement Limited* [2013] NSWLEC 1032, an appeal against a decision allowing the continued operation of a colliery, the Court said (at [89-90]):

We are satisfied that the precautionary principle is activated as the risk of significant environmental harm currently remains uncertain, based on the evidence before us, as the proposal may result in the following:

1. the dewatering of the Hawkesbury Sandstone groundwater aquifer, which would change its ecology and may prevent future access to bore water for irrigation purposes; and/or
2. an adverse impact on the health of the Wingecarribee River by discharging pollutants in the water discharged from

¹⁴⁵ See, for example, *Paltridge v District Council of Grant* [2011] SAERDC 23 (no scientific evidence about serious health impacts from wind farms); *Elliott v Brisbane City Council* (2002) QPELR 425; *St Helen's Area Landcare and Coastcare Group Inc v Break O'Day Council* [2007] TASSC 15.

¹⁴⁶ See, for example, *Wiseowl Investments Pty Ltd and Shire of Busselton* [2010] WASAT 150; *Xstrata Coal Qld Pty Ltd v Friends of the Earth, Brisbane Co-Op Ltd* [2012] QLC 13; *MyEnvironment Inc v VicForests* [2012] VSC 91.

¹⁴⁷ *Telstra Corporation Limited v Pine Rivers Shire Council* (2001) QPELR 350 per Newton DCJ at 381; *De Lacey v Kagara Pty Ltd* [2009] QLC 77 (requirement to conduct further base-line studies in respect of threatened bat and plant species). The court remarked that ‘An often overlooked aspect of objections hearings before the Land Court relate to whether or not the Precautionary Principle is relevant’; *Xstrata Coal Qld Pty Ltd v Friends of the Earth, Brisbane Co-Op Ltd* [2012] QLC 13.

¹⁴⁸ *Murrumbidgee Ground-Water Preservation Association v Minister for Natural Resources* [2004] NSWLEC 122 at 178; *Port Stephens Pearls Pty Ltd v Minister for Infrastructure and Planning* [2005] NSWLEC 426 at [54]–[55];

¹⁴⁹ See generally the factors suggested by Preston CJ in *Telstra Corporation Ltd v Hornsby Shire Council* [2006] NSWLEC 133 at [131] based on suggestions by Deville and Harding, *Applying the Precautionary Principle*, Federation Press, Sydney, 1997; de Sadeleer, *Environmental Principles: From Political Slogans to Legal Rules*, Oxford University Press, Oxford, 2005, pp 163–5. See also World Commission on the Ethics of Scientific Knowledge and Technology, *The Precautionary Principle*, UNESCO, Paris, 2005. And for practical application, see, for example, *De Brett Investments PL and Australian Fisheries Management Authority* [2004] AATA 704; *Humane Society International and Minister for the Environment and Heritage* [2006] AATA 298.

the mine.

In *Telstra Corporation Ltd v Hornsby Shire Council* [2006] NSWLEC 133 Preston J made a careful analysis of how the precautionary principle should be applied in practice:¹⁵⁰

- (a) the application of the precautionary principle and the concomitant need to take appropriate precautionary measures is triggered by the satisfaction of two conditions precedent; first, a threat of serious or irreversible environmental damage; and second, a lack of scientific certainty as to that damage (at [128]). These conditions are cumulative. Once both of these conditions or thresholds are satisfied, precautionary measures should be taken to avert the anticipated threat of environmental damage, but they should be proportionate (at [128]);
- (b) it is not necessary that serious or irreversible environmental damage has actually occurred, it is the threat of such damage that is required. Moreover, the environmental damage threatened must attain the threshold of being serious or irreversible (at [129]). If there is no threat of serious or irreversible environmental damage, or if there is no (or no considerable) scientific uncertainty, the precautionary principle will not apply (at [130]-[149]);
- (c) if the two conditions precedent or thresholds are satisfied, the precautionary principle will be activated. At this point there is a shifting of the evidentiary burden of proof and a decision maker must assume that the threat of serious or irreversible environmental damage is no longer uncertain but is a reality. The burden of showing that this threat does not in fact exist or is negligible effectively reverts to the proponent of the development (at [150]-[155]);
- (d) the precautionary principle permits the taking of preventative measures without having to wait until the reality and seriousness of the threats become fully known (the concept of preventative anticipation) (at [156]);
- (e) the precautionary principle should not be used to try to avoid all risks. A zero risk precautionary standard is inappropriate. Similarly the precautionary principle cannot be based on a purely hypothetical approach to the risk, founded on mere conjecture which has not been scientifically verified (at [157]-[160]);
- (f) the type and level of precautionary measures that will be appropriate will depend on the combined effect of the degree of seriousness and irreversibility of the threat and the degree of uncertainty. The more significant and more uncertain the threat, the greater degree of precaution required. Some margin for error should be retained until all of the consequences of the decision to proceed with a development are known. One means of retaining a margin for error is to implement a step-wise or adaptive management approach, whereby uncertainties are acknowledged and the area affected by the development is expanded as the extent of the uncertainty is reduced (at [161]-[165]);
- (g) the precautionary principle embraces a concept of proportionality. That is to say, measures should not go beyond what is appropriate and necessary in order to achieve the objectives in question. Where there is a choice between several appropriate measures, recourse should be had to the least onerous measure. A reasonable balance must be struck between the stringency of the precautionary measures, which may have associated financial, livelihood and opportunity costs, and the seriousness and irreversibility of the potential threat (at [166]-[178]);
- (h) the precautionary principle, where triggered, does not necessarily prohibit the carrying out of development until full scientific certainty is attained. Were it otherwise it would result in a "paralysing bias" in favour of the status quo and would ban "the very steps that it requires" (at [179]-[181]); and
- (i) the precautionary principle is but one of the set of principles of ESD. It should not be viewed in isolation but rather as part of the package of ESD principles (at [182]-[183]).

A good example of translating this approach into practical decision-making is *Hamilton v Sutherland Shire Council* [2012] NSWLEC 1015, in which the commissioner had to determine whether a particular tree should be pruned or removed as a hazard in circumstances where the tree was also habitat for native wildlife (at [65-73]):

¹⁵⁰ This analysis in *Telstra* has also been applied in Victoria; see *Rozen v Macedon Ranges Shire Council* [2010] VSC 583; *Environment East Gippsland Inc. v VicForests* [2010] VSC 335 at [188] and [203]-[211], and in Western Australia; see for example *Telstra Corporation Ltd and Shire of Murray* [2009] WASAT 117 at [64]. It has also been cited with approval by the Federal Court in *Lawyers for Forests Inc v Minister for Environment, Heritage and the Arts* (2009) 165 LGERA 203 at [89]; and by the South Australian Supreme Court in *Rowe v Lindner (No.2)* [2007] SASC 189 at [60].

The application of the principle and therefore the need to take precautionary measures requires two conditions to be satisfied: a threat of serious or irreversible environmental damage, and scientific uncertainty of the damage [128].

At [130], threats to be considered may be direct, indirect, incremental, cumulative, and or the result of other actions. At [131] factors to be considered in assessing the seriousness of a threat are listed; at [132]-[135] the assessment process requires appropriate scientific input. At [138] Preston CJ states: *The precautionary principle does not apply, and precautionary measures cannot be taken, to regulate a threat of negligible environmental damage...*

In regards to the applicability of the first test to the matter before me, while it may be argued by some that the removal of one dead tree with perhaps only one hollow is negligible or at least not serious or irreversible environmental damage, it could also be argued that it is a serious threat when the cumulative impacts are considered. The impact of urban development on remnant bushland is often described as 'death by a thousand cuts'. Often, most at risk are large old trees that may be perceived as posing a risk to safety. As hollow formation takes many years, it is often only in these older trees that hollows are found. The listing of 'loss of hollow-bearing trees' and 'removal of dead wood and dead trees' as key threatening processes under the TSC Act, significantly elevates the importance of retaining dead trees with hollows wherever possible. The many references in SSDCP to the need to retain hollow-bearing trees indicate to me that council considers the removal of such trees to be a serious threat to local biodiversity and to the success of its Greenweb strategy.

Therefore, I find that there is a threat of serious environmental harm and thus the second test of 'full scientific certainty' must be considered.

Returning to *Telstra*, "a lack of full scientific certainty" is considered at [140] - [149]. Questions to be considered include: the sufficiency of any evidence; the level of uncertainty - perhaps due to methodology; the potential to reduce the uncertainty within a reasonable time frame; and the level of certainty required in the context of the magnitude of the environmental damage.

In the matter before me, it has to be said that neither party has established, with any modicum of certainty, that the hollow is used by native fauna, or indeed if it is capable of being used, as no aerial inspections have been undertaken nor have any targeted surveys been carried out. Similarly, it has not been adequately established if there are any other hollows present that cannot be observed from the ground. The applicant assumes that the trunk has a high proportion of sound wood that would limit the formation of future hollows, but there is no evidence of this.

While there are reports of incidental sightings of birds and a perhaps a possum, this evidence cannot be verified and therefore cannot be relied on. The applicant proposes the installation of nest boxes in other trees. As each species that nests in hollows has very specific spatial requirements, the appropriate selection and positioning of nest boxes requires some specialist knowledge as to the species likely to be displaced from the tree to be removed. While some assumptions may be made from desktop searches of wildlife databases, the spatial scale of those resources may be less applicable to local areas of bushland and may be limited to listed species and not the broader range of fauna that may require protection now to avoid eventual listing.

On this basis, there is clearly insufficient evidence to determine whether the removal of the tree will result in the loss of current habitat for an unknown number of species. In this regard I find Mr Fraser's conclusions (given at [17]) to be focussed on 'significant' habitat and 'significant' species rather than the broader consideration of 'habitat'. Because of the methodology, that is, a limited ground level inspection, the level of uncertainty is high. I consider that the potential to reduce the level of uncertainty within a reasonable time frame exists if the dangerous limbs are removed and the targeted survey recommended by the parties' ecologists is implemented. The results of the survey would not only inform a decision to keep or remove the trunk but, anticipating that it may eventually be removed on safety grounds, it would also inform the appropriate choice and location of nest boxes.

As I find that the two conditions or threshold tests are satisfied, the precautionary principle is activated.

In *BGP Properties Pty Ltd v Lake Macquarie CC* [2004] NSWLEC 399, a case in which a subdivision proposal was refused by the court because of unacceptable impacts on important wetlands, bushland and threatened species, McClellan J said that where there is a lack of scientific certainty, the precautionary principle must be utilised. As Stein J said in *Leatch*, this will mean that the decision-maker must approach the matter with caution but will also require the decision-maker to avoid, where practicable, serious or irreversible damage to the environment.

McClellan J further went on to say in *Murrumbidgee Ground-Water Preservation Association v Minister for Natural Resources* [2004] NSWLEC 122 at 178, that the statutory recognition of the precautionary principle

has made it: "... a central element in decision making process and cannot be confined. It is not merely a political aspiration but must be applied when decisions are being made under the Water Management Act and any other Act which adopts the principles";¹⁵¹ and that the minister was required to be informed by the principle when deciding to make a water management plan.

In *BT Goldsmith Planning Services Pty Ltd v Blacktown City Council* [2005] NSWLEC 210, the question confronting Pain J was whether the precautionary principle had application to a situation where no final decision was being made as to whether development consent ought be granted, but rather a step in the assessment process was being considered; namely, whether a species impact statement was required. Following the lead given by McLellan J her Honour concluded that the principle was "not merely confined to the final decision as to whether development consent, a licence or approval ought be granted. Rather, decision-makers must consider the precautionary principle whenever decisions are being made under an Act that adopts the precautionary principle as is the case here".

The precautionary principle has in fact been applied quite extensively in Australia in the context of merits review. Examples include:

Northcompass Inc v Hornsby Shire Council [1996] NSWLEC 213 (scientific uncertainty about the environmental impact of a proposed bioremediation plant for the treatment of green waste);

Cabbabe v Baw Baw SC [2001] VCAT 747, *Skye Environmental Services Pty Ltd v Frankston CC* [2004] VCAT 682, *McDonald v Moorabool SC* [2005] VCAT 1764, *Rozen v Macedon Ranges SC* [2009] VCAT 2746 and *Simpson v Ballarat CC* [2012] VCAT 1399 (threats to potable water quality);

Brunsdon v The Council of the City of Wagga Wagga [2003] NSWLEC 168 (concerns about odour, waste and effects of increased rainfall on a proposed piggery);

Simmons v Esk Shire Council [2006] QPEC 101 (threats to water quality and odour);

Lindner v Regional Council of Goyder (No 2) [2006] SAERDC 67 (impacts on natural water resources from overuse);

MD Bleasel v Kingborough Council [2007] TASRMPAT 124 (effects of floating pontoon on environmentally sensitive coastal zone);

Green and Australian Fisheries Management Authority [2008] AATA 1074 (refusal to depart from precautionary approach outlined in fisheries management policy);

Castle v Southern Rural Water [2008] VCAT 2440 and *Alanvale Pty Ltd v Southern Rural Water* [2010] VCAT 480 (uncertainties over impacts on groundwater);

Gippsland Coastal Board v South Gippsland Shire Council [2008] VCAT 1545 and *Myers v South Gippsland Shire Council* [2009] VCAT 1022 (severity of storm events coupled with rising sea levels created a reasonably foreseeable risk of inundation of the subject land);

Environment East Gippsland Inc v VicForests [2010] VSC 335 (refusal to allow logging of native forests until further surveys done to establish presence or otherwise of various threatened species);

Burtenshaw v Dunn [2010] QLC 70 (mining leases each subject to a special condition that no chemicals must be used in the processing and separation of the mined material in order to prevent contamination of water supplies);

Wattleup Road Development Company Pty Ltd and Western Australian Planning Commission [2011] WASAT 160 (refusal of subdivision unless and until adequate air quality monitoring for potential dust impacts completed and reviewed);

¹⁵¹ See also *Providence Projects Pty Ltd v Gosford City Council* [2006] NSWLEC 52; *Gales Holdings Pty Ltd v Tweed Shire Council* [2006] NSWLEC 85.

Parker v Minister for Sustainability, Environment, Water, Population and Communities [2012] FCAFC 94 (refusal to allow importation of a certain species of cat).

It is clear, however, that in using the precautionary principle in this way the response should be proportionate to the risk,¹⁵² and that ‘the precautionary principle, where triggered, does not necessarily prohibit the carrying out of a development plan, program or project until full scientific certainty is attained’.¹⁵³ Neither does it involve placing an onus upon the applicant to extinguish, with absolute certainty, the risk of environmental harm,¹⁵⁴ or indeed dictate any particular course of action.¹⁵⁵

Using Precaution in Strategic Assessments

The precautionary principle is not just a project-based tool. It can, and perhaps should much more often, be used as a tool in drawing up strategic assessments. For example, the Gungahlin Strategic Assessment Consultation Draft Biodiversity Plan¹⁵⁶ (the Draft Biodiversity Plan) and the Gungahlin Strategic Assessment Report¹⁵⁷ (SEA) were released for consultation comment in March 2013. The focus of the assessment was on impacts on Matters of National Environmental Significance (MNES) following development of greenfield sites; although broader biodiversity and conservation management objectives important to the ACT, as well as cumulative impacts, including regional connectivity in the southern tablelands, were also considered.

The SEA recommended that environmental impacts in the suburbs of Moncrieff, Jacka, Taylor, Kinlyside, Crace, Horsepark North, Throsby and Kenny be adaptively managed, avoided, mitigated and offset, under the supervision of the ACT Government. The SEA clearly acknowledges the need to promote the highest standards of biodiversity management, within a policy imperative that commits the ACT Government to provision of new low-cost housing, thus providing an excellent example of how the search for optimal sustainability solutions can be conducted within a legislative and policy framework that encompasses environmental, social and economic factors.

The Environmental Defenders Office (ACT) (EDO), in its comments on the SEA, queried whether the lack of comprehensive baseline data in relation to the biodiversity values of the assessed areas, and the presence or absence of some species, had been addressed with a rigorous regard to the precautionary principle. Public commentary on the draft plan was addressed in a subsequent Supplementary Report.¹⁵⁸ The report stresses (at page 9) that:

¹⁵² *Telstra Corporation Ltd v Hornsby Shire Council* [2006] NSWLEC 133 at [166]–[178]. See also *Hamilton v Sutherland Shire Council* [2012] NSWLEC 1015 (retaining the trunk of a tree as a habitat for wildlife while allowing pruning of the branches to address the possibility of limbs falling onto an adjoining property); *Dual Gas Pty Ltd v Environment Protection Authority (includes Summary) (Red Dot)* [2012] VCAT 308 at [214].

¹⁵³ Per Preston CJ in *Telstra Corporation Ltd v Hornsby Shire Council* [2006] NSWLEC 133 at [179]. See also *Heavenly Queen Temple Society Inc v Maribyrnong CC* [2005] VCAT 875; *Hasan v Moreland CC* [2005] VCAT 1931; *Rozen v Macedon Ranges SC* [2007] VCAT 1814; *King v Minister for Planning; Parkesbourne-Mummel Landscape Guardians Inc v Minister for Planning; Gullen Range Wind Farm Pty Limited v Minister for Planning* [2010] NSWLEC 1102; *Hunter Environment Lobby Inc v Minister for Planning* [2011] NSWLEC 221.

¹⁵⁴ *Histpark Pty Ltd v Maroochy Shire Council* (2002) QPELR 134 per Robertson DCJ at 141; *Shannon v Dalby Town Council* [2004] QPEC 62 per Wilson DCJ at [28]; *Dual Gas Pty Ltd v Environment Protection Authority (includes Summary) (Red Dot)* [2012] VCAT 308 at [214].

¹⁵⁵ *Bridgetown/Greenbushes Friends of the Forest Inc v Executive Director of the Department of Conservation and Land Management* (1997) 94 LGERA 380 per Templeman J at 432.

¹⁵⁶ http://www.economicdevelopment.act.gov.au/__data/assets/pdf_file/0019/432082/Biodiversity-Plan.pdf

¹⁵⁷ http://www.economicdevelopment.act.gov.au/__data/assets/pdf_file/0003/432084/Assessment-Report.pdf

¹⁵⁸ http://www.economicdevelopment.act.gov.au/__data/assets/pdf_file/0005/480182/8024_R04_V3-Supplementary-Report.pdf

Conservative estimates have been made on the extent of habitat and communities, and worst case scenarios determined for loss of habitat due to development.

The Report agreed (at page 10) that:

Indirect offsets are not always successful, in particular around research and negative results/application of trials. ...this is recognised in the Plan through controls and measures proposed to limit the risk of failure of indirect actions including:

- indirect actions will comprise 10% or less of total investment;
- ☐ investment in indirect actions will be guided by the PIT to ensure informed decisions around such actions are made;
- an adaptive management framework to ensure that new knowledge, including an understanding of what does not work, is to be incorporated in the ongoing management.

Principles of ecologically sustainable development were addressed in Part 3 of the Final Report.¹⁵⁹ In relation to the precautionary principle the report states (at pages 42-43:

To satisfy the precautionary principle, emphasis has been placed on the anticipation and prevention of environmental damage at an early stage, rather than a reactive response.

The environmental impact assessment and the strategic assessment processes are precautionary in nature, as they provide a procedure to assess and evaluate the uncertainty of environmental impacts prior to development proceeding.

The process of planning for Gungahlin since the 1980s has also demonstrated a precautionary approach. This is evident through the numerous variations to the Territory Plan resulting in alteration of development footprints to avoid areas of environmental value and the creation of nature reserves. Nature reserves created through this process include Percival Hill, Mulangari, Gungaderra, Crace, Goorooyarroo and Mulligan's Flat.

As part of the requirements for approval under the PD Act, a risk based assessment is required in order to consider the range of activities and associated direct and indirect impacts that would result from a proposed action. This Preliminary Risk Assessment (PRA) process allows for the identification of information gaps and risks to the broader environment including social, economic and environmental factors within which Commonwealth requirements are also considered. Accordingly, this process facilitates design review and refinement such that avoidable impacts can be defined and requirements for subsequent mitigation and offsetting can be considered. The precautionary principle is accordingly the central tenet to the PRA in ensuring that proposals do not progress in a manner that is uninformed.

The final Biodiversity Plan¹⁶⁰ subsequently adopted a range of avoidance and mitigation measures, before moving to direct and indirect offset strategies and on-going management that encompasses monitoring against specific performance indicators for each MNES, and development of an adaptive management system where results of monitoring will be used to review and adapt management activities. During the construction process, activities would be managed by a Construction Environment Management Plan (CEMP) prepared by the contractors and subject to approval, monitoring, reporting and audit by relevant ACT Government authorities.

Caution and prevention

The precautionary principle is theoretically triggered by a threat of serious or irreversible harm. Below that threshold it is nevertheless, as a number of commentators have said, 'axiomatic' that a cautionary approach should be adopted in dealing with environmental risks. In *Dixon and Australian Fisheries Management*

¹⁵⁹ http://www.economicdevelopment.act.gov.au/__data/assets/pdf_file/0009/480177/8024_R02_V7-Assessment-Report.pdf

¹⁶⁰ http://www.economicdevelopment.act.gov.au/__data/assets/pdf_file/0007/480175/8024_R01_V9-The-Plan.pdf

Authority [2000] AATA 242, the tribunal suggested that Australian Fisheries Management Authority (AFMA) could use a precautionary approach even if the threshold was not met, at least so long as AFMA was pursuing other mandated statutory objectives. While triggering the threshold might require a precautionary approach, failure to trigger the threshold did not necessarily mean the principle could not be used. And if, as the court said in *CSR Limited v Caboolture Shire Council* (2001) QPELR 398, this statement of principle does not depart in any important way from the approach that the court has taken conventionally with such matters, does the distinction between a cautionary or precautionary approach, and the precautionary principle per se, serve any worthwhile purpose, particularly where environmental risks are subject to evaluation in project design and conditions of consent that require monitoring and adaptive management?

In the approach to the precautionary principle in Europe there is no mention of ‘serious or irreversible harm’; the principle is a risk management tool,¹⁶¹ the core concepts of which are risk, damage and proportionality.¹⁶² On the other hand, the principle has been activated largely in cases involving risks to human health rather than the environment.¹⁶³ It has been more difficult to persuade the European Court of Justice to apply the principle in ‘environmental’ litigation, though the arguments mostly have not been strong.¹⁶⁴ In responses to risks, the Europeans distinguish more between prevention and precaution. The distinction is essentially that prevention will apply to known, likely or anticipated risks, while precaution is applied to potential, uncertain or hypothetical risks.¹⁶⁵ Although the origin of the concept of the precautionary principle, the German concept of *vorsorge*, merges concepts of prevention and precaution, German case law nevertheless seems to have accepted this distinction.¹⁶⁶

In Australia, the distinction between a cautionary and precautionary approach is necessary only because of the threshold of ‘serious or irreversible harm’. A cautionary approach is in fact consistent with both a preventive and a precautionary approach. In *Telstra Corp Ltd v Hornsby Shire Council* [2006] NSWLEC 133 at [156], Preston CJ acknowledged that the precautionary principle ‘permits the taking of preventative measures without having to wait until the reality and seriousness of the threats become fully known’.

Would it be more useful for practical decision-making if prevention and precaution were to replace reliance on caution and precaution? Or at least if legislation and policy emphasised the need for a cautionary approach that triggers a response in decision-making that is appropriate and proportionate to the likelihood of the risk eventuating and the severity of the impact if it does? An ascertainable, though uncertain, risk of ‘serious or irreversible harm’ would then simply be met by an appropriate risk-weighted response. Would prevention and precaution have more to offer decision-makers in practical responses to environmental risk-taking than caution and precaution?

¹⁶¹ Communication from the Commission on the Precautionary Principle COM (2000) 1.

¹⁶² See de Sadeleer, *Environmental Principles: From Political Slogans to Legal Rules*, OUP, Oxford, 2002, Ch 3, pp 92–3.

¹⁶³ *Pfizer v European Commission T-13/99* (banning antibiotics as additives in animal foodstuffs supported by interpretation of precautionary principle); *Alpharma Inc v Council T-70/99*.

¹⁶⁴ See *Land Oberösterreich und Österreich v Commission T-366/03* (ban on genetically modified crops not supported by application of precautionary principle); *Commission v Italian Republic C-173/05* (environmental tax on methane gas; defence based on precautionary principle failed); though occasionally the court does uphold member action based on a precautionary approach: see, for example, *Bluhme C-67/97* (prohibition on import of a particular type of bee justified to protect endemic species).

¹⁶⁵ See de Sadeleer, *Environmental Principles: From Political Slogans to Legal Rules*, OUP, Oxford, 2002, Ch 3, p 91.

¹⁶⁶ De Sadeleer, above, at p 125

G. Intergenerational equity

The principle of intergenerational equity is inextricably linked with sustainable development. The principle provides that current generations hold the environment in trust for the benefit of future generations. There exists a moral and ethical obligation to hand over to subsequent generations a stock of environmental wealth comparable to that which was handed on to us by our forebears.

This principle is recognized in the ACT for example in the objects of the Water Resources Act 2007 (ACT) s 6(c) “to ensure that the water resources are able to meet the reasonably foreseeable needs of future generations.”

Obviously, it is not possible to absolutely identify the needs of future generations; but what we probably can be confident of are those needs that are biologically based, particularly in terms at least of safety and survival.

In *Hub Action Group Inc v Minister for Planning* [2008] NSWLEC 116 this principle was clearly central to the decision to protect prime agricultural land from the development of a waste facility.¹⁶⁷

The attainment of intergenerational equity was also a central feature in *Taralga Landscape Guardians Inc v Minister for Planning* [2007] NSWLEC 59, which involved an application for development consent for 69 wind turbines. In approving the development, Preston J, after stressing that principles of ESD were central to any decision involving the development of new energy resources said(at [74]):

...the attainment of inter-generational equity in the production of energy involves meeting at least two requirements. The first requirement is that the mining of and the subsequent use in the production of energy of finite, fossil fuel resources need to be sustainable. Sustainability refers not only to the exploitation and use of the resource (including rational and prudent use and the elimination of waste) but also to the environment in which the exploitation and use takes place and which may be affected ... the second requirement is, as far as practicable, to increasingly substitute energy sources that result in less greenhouse gas emissions for energy sources that result in more greenhouse gas emissions, thereby reducing the cumulative and long-term effects caused by anthropogenic climate change. In this way the present generation reduces the adverse consequences for future generations.

This principle is of particular relevance when considering applications for projects that might exacerbate the effects of climate change; for example, by the release of greenhouse gases or by planning for development in areas at risk of coastal inundation. In *Gray v Minister for Planning* [2006] NSWLEC 720, the applicant successfully challenged the failure of the decision-maker to address emissions of greenhouse gases released by the burning of coal either in Australia or overseas (‘scope 3’ emissions) in considering an application for approval of a large coal mine. The precautionary principle and intergenerational equity were cited as elements of ESD of particular relevance to this decision.

¹⁶⁷ Fragmentation and loss of sustainable agricultural land was also the focus of an appeal in *Agonic Holdings Pty Ltd v Lithgow City Council* [2008] NSWLEC 1347. See also *Glenella Estates P/L v Mackay Regional Council* [2010] QPEC 132 (need for residential development did not override the need to protect good quality agricultural land).

Intergenerational equity is also clearly a factor in considering applications for development that might impact on heritage, particularly Aboriginal heritage. For example, it was said in *Anderson v Director-General, Department of Environment and Conservation* (2006) 144 LGERA 43, that failure to have regard to the significance of Aboriginal objects in a case where an application had been made for the destruction of those objects would be an infringement of the principle of intergenerational equity, and that was a relevant consideration before issuing a consent. Following this case, the respondent requested the applicant to provide further assessment of the cumulative impact of development in the area on Aboriginal sites. In a subsequent case, following the respondent's analysis of these matters and grant of consent, *Anderson v Director-General, Department of Environment and Climate Change* [2008] NSWCA 337, Tobias JA said (at [85]) that 'it is difficult to see how inter-generational equity ... can be properly considered without the assessment of the archaeological and cultural significance of the Aboriginal objects on the one hand and the cumulative effect or impact which their destruction may have on the other'. However, 'inter-generational equity requires an evaluative judgment as to these matters for otherwise ... all Aboriginal objects found on land must be conserved for the benefit of future generations of the traditional custodians of that land. That cannot be so'. In the event, the respondent was held to have properly evaluated these matters before giving consent under s 90 of the Act to destruction of, or damage to, Aboriginal objects.

In *F & D Bonaccorso P/L v City of Canada Bay Council (No 2)* [2007] NSWLEC 537 at [60], Biscoe J also remarked that environmental impact statements and heritage impact statements both served the principle of intergenerational equity. 'Once a heritage listed building is demolished it is lost forever to future generations. A photograph of it in an archive is but a reminder of what once was.'

H. Conservation of biological diversity and ecological integrity

The foreword to the Global Biodiversity 3 report (2010) makes the point that "to tackle the root causes of biodiversity loss, we must give it higher priority in all areas of decision-making and in all economic sectors.....conserving biodiversity cannot be an afterthought once other objectives are addressed - it is the foundation on which many of these objectives are built. We need a new vision for biological diversity for a healthy planet and a sustainable future for humankind."¹⁶⁸

In the definition of ESD adopted in Australia by the NSESD and the IGAE, conservation of biological diversity and ecological integrity is expressed to be a 'fundamental consideration' in decision-making. Whether this means that it should be given priority weighting against other factors that influence decision-making is unclear. At any rate, any reference to 'fundamental consideration' has been omitted in the definition of ESD adopted in the ACT.

It is clear however that use of the precautionary principle may address impacts on biodiversity in decision-making; particularly where threatened species are involved. Equally clear from perusing grounds of appeal in relation to development consents is that biodiversity may be given short shrift by decision-makers anxious to promote development. In particular 'ecological integrity' rarely gets assessed and 'threatening processes' receive scant acknowledgement. In practice, impacts on biodiversity are likely to trigger some of the most

¹⁶⁸ Global Biodiversity Outlook 3 <http://www.cbd.int/gbo3/>

controversial arguments about value judgments in decision-making; and some of the most detailed assessments by courts and tribunals in merits review of such decisions.¹⁶⁹

In response to heightened awareness about the importance of biodiversity to decision-making, most jurisdictions have accepted that offsets may be appropriate where avoidance and mitigation cannot entirely preclude impacts on biodiversity¹⁷⁰ but where development is otherwise justified. In the ACT for example, for each potentially significant environmental impact (not just biodiversity), an EIS must include a statement of the approach proposed to be taken to the environmental management of the land to which the proposal relates, including any proposed impact prevention, mitigation or offsetting measures to deal with the environmental impact of the proposal.¹⁷¹ And in preparing a strategic assessment under the Planning and Development Act 2007 (ACT), a person must consider how the environmental impacts can be managed through mitigation, offsetting, avoidance or another way.¹⁷² A range of possible offset actions that could be implemented in the ACT have been suggested by Gibbons¹⁷³ and used in the Gungahlin Strategic Assessment.¹⁷⁴

Offsets are intuitively contentious, for obvious reasons: first, what is certain is that biodiversity, usually native vegetation, will be destroyed on the development site; second, although the offset site must generally be maintained ‘in perpetuity’ for offset management,¹⁷⁵ this may be inherently insecure; third, where there is no current proposal to develop, or threat to, the offset site, it may in any case never be affected, with or without being designated as an offset site, in which case there will effectively be loss without real gain; fourth, it is virtually impossible to offset both qualitative and quantitative proportional values from one site to another, even if ratios of say 6:1, 10:1 or whatever are applied to the offset; that is, that for every hectare of land cleared, six or ten hectares of offsets must be provided.

The oft-held suspicion is that offsets are really a device for permitting development that should not be allowed (particularly where endangered ecological communities are involved); and this legitimate concern must be allayed by the rules applied to offsetting.

In *Bulga Milbrodale Progress Association Inc v Minister for Planning and Infrastructure and Warkworth Mining Limited* [2013] NSWLEC 48 at [147-152] Preston CJ laid down a legitimate approach to offsetting:

¹⁶⁹ See for example *Bulga Milbrodale Progress Association Inc v Minister for Planning and Infrastructure and Warkworth Mining Limited* [2013] NSWLEC 48; upheld by the NSW Court of Appeal [2014] NSWCA 105

¹⁷⁰ For example, see the offsets policy developed for decision-making under the Environment Protection and Biodiversity Conservation Act 1999 (Cth) available at <http://environment.gov.au/epbc/publications/environmental-offsets-policy.html>. See also Qld <http://www.ehp.qld.gov.au/management/environmental-offsets/biodiversity-offsets.html>.

¹⁷¹ Planning and Development Regulation 2008 (ACT) reg 50(2)(f)(v)

¹⁷² Planning and Development Regulation 2008 (ACT) reg 14(b).

¹⁷³ Gibbons P (2011) Potential biodiversity offset actions and sites for the Australian Capital Territory, unpublished report for the ACT Office of the Commissioner for Sustainability and the Environment, Dr Philip Gibbons, The Fenner School of Environment and Society, The Australian National University, Canberra (March 2011)

¹⁷⁴ http://www.economicdevelopment.act.gov.au/_data/assets/pdf_file/0005/480182/8024_R04_V3-Supplementary-Report.pdf at page 3

¹⁷⁵ For example, Vegetation Management Act 1999 (Qld) s 22DK (offset remains in effect until the offset ends under its terms); *Villawood Properties v Greater Bendigo CC* (Red Dot) [2005] VCAT 2703 (offsets need to be secure and ongoing); *Gerroa Environment Protection Society Inc v Minister for Planning and Cleary Bros (Bombo) Pty Ltd (No 2)* [2008] NSWLEC 254

1. The strategies for managing the adverse impacts of a project on biological diversity are, in order of priority of action, avoidance, mitigation and offsets. Avoidance and mitigation measures should be the primary strategies for managing the potential adverse impacts of a project. Avoidance and mitigation measures directly reduce the scale and intensity of the potential impacts of a project. Offsets are then used to address the impacts that remain after avoidance and mitigation measures have been put in place (see "Principles for the Use of Biodiversity Offsets in NSW", Office of Environment and Heritage (TB vol 7, p 4117)).

2. The first strategy is to endeavour to avoid the potential impacts of a project. Avoidance of impacts may be achieved through planning and assessment of the project including suitable site selection and project design. An example would be modifying the project to avoid an area of biodiversity value, such as an endangered ecological community or habitats of threatened species or populations.

3. If after implementing all reasonable avoidance measures, there are remaining impacts, the next strategy is to undertake mitigation of the remaining impacts. Examples are implementing measures to prevent or reduce offsite impacts on areas of biodiversity value, such as edge effects, weed invasion, altered fire frequency or altered hydrological regimes.

4. If after all reasonable avoidance and mitigation measures have been implemented, there are still residual impacts, offsets can then be considered. Offsets do not reduce the likely impacts of a project, but rather compensate for the residual impacts.

An offsets package can involve direct offsets or other compensatory measures. Direct offsets are actions which provide a measurable conservation gain for the affected components of biological diversity, such as endangered species, populations or ecological communities. Conservation gain is the benefit that a direct offset delivers to the affected component, which maintains or increases its viability or reduces any threats of damage, destruction or extinction.

5. Other compensatory measures are actions that do not directly offset the impacts on the components of biological diversity but are expected to lead to benefits for the affected components. An example would be undertaking or funding the undertaking of research programs relating to the affected components of biological diversity.

This approach precludes applicants for development consent simply building in an offset as part of project design; an offset really should be a 'last resort' after all other avoidance and preventative measures have been applied.

I. Improved valuation, pricing and incentive mechanisms

This principle means that environmental factors should be included in the valuation of assets and services such as:

- polluter pays, that is, those who generate pollution and waste should bear the cost of containment, avoidance or abatement;
- the users of goods and services should pay prices based on the full life-cycle costs of providing goods and services, including the use of natural resources and assets and the ultimate disposal of any wastes; and
- environmental goals, having been established, should be pursued in the most cost-effective way, by establishing incentive structures, including market mechanisms, which enable those best placed to maximise benefits and/or minimise costs to develop their own solutions and responses to environmental problems.¹⁷⁶

This principle is based on the policy that if the real value of natural resources is reflected in the costs of using those resources, then resources will be sustainably used and managed and not wasted. This, of course, begs the question whether we can value environmental assets, and on what basis we should do so. This will be a difficult task, given that different people will assess assets according to different value judgments which reflect economic, social, aesthetic, and cultural as well as environmental values.

Such an approach is advanced, for example, by requiring internalisation of costs for containment of pollution and dealing with waste,¹⁷⁷ that is, the 'polluter pays',¹⁷⁸ and particularly by principles of product stewardship

¹⁷⁶ Inter-Governmental Agreement on the Environment 1992 s 3.5.4.

¹⁷⁷ For example the Industry Waste Reduction Plan under the Waste Minimisation Act 2001 (ACT) implementing the Australian Packaging Covenant. See also *Environment Protection Authority v Waste Recycling and Processing Corporation* (2006) NSWLEC 419 at [230]; *Director-General, Department of Environment, Climate Change and Water v Venn* [2011] NSWLEC 118

or extended producer responsibility.¹⁷⁹ Re-evaluation of the functions and availability of water resources can result in new approaches and attitudes to decision-making that promote the more sustainable use of those resources.¹⁸⁰

Incorporation of this principle in environmental legislation may be seen, for example, through the introduction of load-based licensing for emissions of pollution, which sets fees by reference to the actual or potential impact on the environment of the effluent discharged, rather than by simple reference to volumes discharged;¹⁸¹ by provisions that allow planning authorities to seek to restrain the burden on public facilities of approving private development by requiring the proponent to provide works, services or facilities;¹⁸² by the establishment of incentive-based schemes for voluntary land management or conservation agreements with private landholders;¹⁸³ and by market-based approaches to pollution reduction.¹⁸⁴

In the ACT, the Waste Strategy 2011-2025¹⁸⁵ states (at page 28) that:

Price signals are an important mechanism to influence people's behaviour. Landfill charges create a disincentive to send waste to landfill while drop-off facilities that are free or charge nominal fees for specific types of recyclable waste (for example, garden waste, paper cardboard and other recyclables, oil, batteries, and in the future, e-waste) will encourage people to sort and deliver waste to these facilities.

The aim of future landfill and facility charging will be to encourage resource recovery and discourage waste being dumped or going to landfill. Regulation can also complement price signals, for example the banning of televisions, computers and other recyclable wastes from going to landfill.

J. Conclusion: Where does the ACT sit in relation to other jurisdictions?

The approach of the ACT may be compared favourably with the approach adopted in other jurisdictions by reason of:

- (1) The adoption of strategies and policies that underline the importance of a 'triple bottom line' approach to embed principles of sustainability in decision-making;
- (2) Adoption of a legal definition of ESD that contemplates 'achievement', thereby suggesting that ESD in the ACT is not just viewed as a process for decision-making but seeks an underlying outcome.

¹⁷⁸ See Preston, 'Sustainable Development in the Courts: The Polluter Pays Principle', NSWLEC website www.lawlink.nsw.gov.au/lec, 7 April 2009.

¹⁷⁹ For example the Product Stewardship Act 2011 (Cth). The Product Stewardship (Televisions And Computers) Amendment Regulations 2011 (No. 1) (Cth) subjects these products to a co-regulatory arrangement under the National Television and Computer Recycling Scheme commencing from 2014-15.

¹⁸⁰ See the examples given by Preston in 'Water and Ecologically Sustainable Development in the Courts', LEC website www.lawlink.nsw.gov.au/lawlink/lec, 17 October 2008.

¹⁸¹ For example, Protection of the Environment Operations (General) Regulation 1998 (NSW)

¹⁸² Planning and Development Act 2007 (ACT) s 165(3)(n)

¹⁸³ For example, Planning and Development Act 2007 (ACT) s 283; Nature Conservation Act 1980 (ACT) s 99; Tree Protection Act 2005 (ACT) Pt 4; Heritage Act 2004 (ACT) Pt 15.

¹⁸⁴ For example, Environment Protection Act 1997 (ACT) Pt 6

¹⁸⁵ Available at <http://www.environment.act.gov.au>

The ACT may be said to compare unfavourably with some other jurisdictions in that:

- (1) ESD is used in a limited number of statutes;
- (2) The precise legal obligations on decision-makers are difficult to decipher (in common often with other jurisdictions)
- (3) ESD is not used in legislation where one might expect to find it; for example the Nature Conservation Act 1980 (ACT)
- (4) There is no consistent use of terminology between legislation (ESD) and strategies and policies (sustainability and triple bottom line) thus suggesting a slight disconnect between policy and law that confuses the vision about the values and outcomes being pursued by means of these instruments, and how they are related.

In common with other jurisdictions, the ACT appears to have no particular organizational structure for delivering sustainability.

K. Where to from here?

- That the **Office of the Commissioner for Sustainability and the Environment** be entrusted with the following major functions, according to the tenor of this report:
 - to develop key indicators of sustainability performance. These indicators should be set by consultation with relevant government agencies, and informed by government policies.
 - recognising that Directorates have a legal duty to report on ESD within their annual reports, to review whether these key indicators are being used by government agencies in decision-making.
 - Broaden the language to include Intergenerational Equity and develop Intergenerational Equity reporting.
 - to encourage the preparation of an annual Whole of Government Sustainability Report to determine to what extent Directorates are adopting a ‘whole of government’ approach to delivering the intent of policy and legislated objectives.
 - to act as a focal point for developing ‘whole of government’ approaches to sustainability when agencies are developing or modifying standards, policies and plans.

- A ‘**whole of government approach**’ should:

- (a) be informed by the key indicators of sustainability performance;
- (b) recognize that criteria for sustainability cannot always be reduced to monetary values and that ‘quality of life’ objectives are also vital for the sustainable well-being of both individuals and society as a whole
- (c) recognize that decisions made to-day will impact on the well-being of both present and future generations;
- (d) consider the global implications of decision-making;
- (e) involve consultation with other relevant government agencies to promote an optimal approach to delivering beneficial environmental, economic and social outcomes.

➤ **Government assessment of proposals for development** should:

- (a) set requirements for environmental assessment that are based on the key indicators of sustainability performance;
- (b) be informed by these key indicators when setting conditions of consent;
- (c) strive to achieve ESD as an outcome of decision-making;
- (d) where appropriate, incorporate, as a standard condition of consent, requirements for monitoring, auditing and reporting of performance against the key indicators of sustainability performance;
- (e) where appropriate, incorporate, as a standard condition of consent, an ‘adaptive management’ approach to licensing that empowers the decision-maker to review performance, as assessed against the key indicators of sustainability performance and licence conditions, and require, if necessary, adaptation of the operating conditions of a project so as to better promote sustainability performance.

➤ **Legislation** should:

- (a) make it clear that all government decision-making should be based on key indicators of sustainability performance;
- (b) make it clear that all government decision-making should adopt an approach that promotes measures aimed at achieving sustainable outcomes;
- (c) be reviewed so as to remove inconsistencies between legislation that currently adopts sustainability as a concept in decision-making in favour of (a) and (b) above.

Appendix: Meaning of Citations

AAT – Administrative Appeals Tribunal (Commonwealth)

ACAT - ACT Civil and Administrative Tribunal

ACTSC – ACT Supreme Court

FCA – Federal Court of Australia

FCAFC – Federal Court of Australia Full Court

NSWLEC – New South Wales Land and Environment Court

NSWCA – New South Wales Court of Appeal

QLC – Queensland Land Court

QPEC – Queensland Planning and Environment Court

QSC – Queensland Supreme Court

SAERDC – South Australian Environment, Resources and Development Court

SASC – South Australian Supreme Court

TASSC – Tasmanian Supreme Court

TRMPAT – Tasmanian Resource Management and Planning Appeal Tribunal

VCAT – Victorian Civil and Administrative Tribunal

VSC – Victorian Supreme Court

WASAT – Western Australian State Administrative Tribunal

WASC – Western Australian Supreme Court

Legislation and case-law may be viewed at www.austlii.edu.au