

THE FOUNDATIONS OF ENVIRONMENTAL LAW

GOALS, OBJECTS, PRINCIPLES AND NORMS

TECHNICAL PAPER 1

APEEL



The Australian Panel of Experts
on Environmental Law

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About APEEL

The Australian Panel of Experts on Environmental Law (APEEL) is comprised of experts with extensive knowledge of, and experience in, environmental law. Its membership includes environmental law practitioners, academics with international standing and a retired judge of the Federal Court. APEEL has developed a blueprint for the next generation of Australian environmental laws with the aim of ensuring a healthy, functioning and resilient environment for generations to come. APEEL's proposals are for environmental laws that are as transparent, efficient, effective and participatory as possible. A series of technical discussion papers focus on the following themes:

1. The foundations of environmental law
2. Environmental governance
3. Terrestrial biodiversity conservation and natural resources management
4. Marine and coastal issues
5. Climate law
6. Energy regulation
7. The private sector, business law and environmental performance
8. Democracy and the environment

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Summary and Recommendations

Executive Summary

A new generation of environmental laws is needed to address the urgent and complex environmental challenges that Australia presently faces. APEEL believes that environmental law has evolved to the point where it is possible to build these new laws on a solid legal foundation that is largely lacking in the present system. APEEL suggests that the core components of this foundation are *goals, objectives, principles and norms*. These basic components must be clearly reflected in the design of the next generation of environmental legislation.

Specific recommendations include:

Part Two of this paper considers what should be the fundamental **goal** of environmental law, and suggests this should be derived from a broader societal goal. As well as analysing the evolution of Ecologically Sustainable Development (ESD) as such a goal and considering whether this concept has proved sufficiently effective in practice, this section of the paper identifies emerging trends and new approaches to the framing of such a goal.

RECOMMENDATION 1.1

The Commonwealth government initiate a wide-ranging, national consultative process for the purpose of building a substantial agreement on a new societal goal for Australia that would enhance or replace the current Ecologically Sustainable Development (ESD) goal contained in the National Strategy for Ecologically Sustainable Development (1992) (NSESD), especially in light of the adoption by the United Nations in 2015 of the new Sustainable Development Goals (SDGs); and that it consider providing for the undertaking of this consultative process in its legislation.

Part Three of this paper examines the role of **objects** clauses in environmental legislation and concludes that many existing objects clauses are overly lengthy, ambiguous with respect to the significance to be attached to environmental matters and, at times, internally conflicting or inconsistent. APEEL recommends a more disciplined approach to the drafting of such clauses in the next generation of environmental laws.

RECOMMENDATION 1.2

Law-makers should adopt a more disciplined approach to the drafting of objects clauses in the next generation of Australian environmental legislation to ensure that they: (1) specify only the agreed societal goal for environmental law and some more specific objects applicable to the context of the particular legislation; (2) closely align these goal-related and context-specific objects statements; and (3) avoid the inclusion of principles of a 'directing' nature in such clauses.

Part Four of this paper identifies key **principles** of environmental law which can provide the appropriate guidance and direction with respect to both the design and implementation of the next generation of environmental laws. APEEL identifies two broad categories of principles: **design principles**, which law-makers should use when drafting future Australian environmental laws; and **directing principles**, which spell out matters that decision-makers are obliged to apply when exercising their statutory functions.

RECOMMENDATION 1.3

When designing the next generation of Australian environmental laws, law-makers should draft legislation that is consistent with, and gives effect to, the following ‘design-based’ principles:

- *Principles of smart regulation;*
- *Principles supporting the use of economic measures;*
- *Principles that endorse specific, widely-recognised regulatory tools and mechanisms; and*
- *Principles in support of environmental democracy;*

together with the following new principles which have not yet been widely recognised or adopted in Australia:

- *A principle of flexible and responsive environmental governance;*
- *A principle of environmental restoration; and*
- *A principle of non-regression.*

RECOMMENDATION 1.4

The precautionary principle and the prevention principle should be essential prescriptions in the next generation of Australian environmental laws, accompanied by provision for the engagement of the public in decision-making with respect to the level of risk and potential harm that is deemed acceptable.

RECOMMENDATION 1.5

The next generation of environmental laws should also prescribe the following, new directing principles concerning environmentally sustainable innovation (ESI):

- *A principle of achieving a high level of environment protection; and*
 - *A principle of applying the best available techniques (BAT).*
-

Part Five of this paper identifies the **norms** of environmental law, in the form of general environmental rights and duties, which APEEL suggests have evolved sufficiently to constitute an additional component of the foundations of environmental law. This paper refrains from a detailed examination of rights-based norms, given this topic is covered extensively in Australian Panel of Experts in Environmental Law, *Democracy and the Environment* (Technical Paper 8, 2017), but two specific types of general environmental duty are proposed: a duty of care to avoid causing environmental harm and a duty to repair and restore where environmental harm has been caused.

RECOMMENDATION 1.6

The next generation of environmental laws should routinely provide for a general environmental duty to be imposed on all persons (including those undertaking mining activities) to: (1) prevent or minimise environmental harm likely to arise from their activities; and (2) to repair environmental harm they have caused and to restore ecological functions that they have impaired, to the greatest extent practicable.

Table 1: SUMMARY OF THE FOUNDATIONS OF ENVIRONMENTAL LAW

<p>Fundamental goal for environmental law</p> <p>This must be derived from an overarching societal goal in relation to our environmental values and management of the environment. It needs to be developed through consultation and consensus building, involving reflection on the existing goal of ecologically sustainable development (ESD) and emerging, broader sustainability-based approaches.</p>	
<p>Objectives of environmental law</p> <p>Next generation laws should include concise and specific objectives that are designed to elaborate the broader societal goal/s, and the inclusion of a limited number of additional objectives that are fundamental to the specific subject-matter of the legislation involved.</p>	
<p>Design principles</p> <p>When designing future Australian environmental laws, law makers should design laws consistent with:</p> <ul style="list-style-type: none"> • ‘smart regulation’ principles (such as the <i>policy mix principle</i>, the <i>parsimony principle</i> and the <i>escalation principle</i>); • principles that promote particular economic measures, for example, that polluters pay for their environmental impacts; • principles that endorse particular tools or mechanisms for environmental management (for example, environmental impact assessment (EIA) - both project and strategic); • principles related to environmental democracy such as access to environmental information, public participation and access to justice; • a principle of responsive and flexible environmental governance; • a principle of environmental restoration; and • a principle of non-regression. 	<p>Directing principles</p> <p>Directing or <i>rules-based</i> principles that will be important to the next generation of environmental laws, include:</p> <ul style="list-style-type: none"> • the precautionary principle; • the prevention principle; and • principles for environmentally sustainable innovation (ESI): <ul style="list-style-type: none"> - a high level of environmental protection principle; and - a best available techniques principle (BAT).
<p>Rights-based norms</p> <p>(See Australian Panel of Experts in Environmental Law, <i>Democracy and the Environment</i> (Technical Paper 8, 2017).</p>	<p>Duties-based norms</p> <ul style="list-style-type: none"> • duty of care to avoid causing environmental harm and • duty to restore or rehabilitate.

Key questions for consideration when commenting on this *Technical Paper*:

- Should ESD remain the principal goal of Australian environmental law or is there a need to identify a revised or new societal goal for environmental management in Australia?
- Must this goal be determined by society in advance of its legal recognition (and if so, how) and/or does law have a role in shaping and advancing the recognition of such a goal and its related social values?
- Can the objects of Australia's environmental laws be improved in the next generation of environmental laws by the means suggested in this paper?
- Is the classification of principles advanced in this paper – into design and directing principles – a meaningful and useful method for identifying the purpose of specific environmental law principles?
- Are the principles identified in this paper those that are needed to underpin the next generation of environmental law? Are there other principles not mentioned in this paper that also should be recognised?
- Is the idea of prescribing general environmental duties worth pursuing?
- Do you believe that the goals, objects, principles and norms discussed in this paper could assist in resolving a current important environmental issue?

HOW TO CONTRIBUTE TO THE APEEL PROJECT

APEEL invites you to provide your responses to the ideas and recommendations presented in this paper. This will assist the development of our final proposals for the next generation of Australian environmental laws.

We look forward to your engagement on specific reform options as the APEEL journey progresses.

Please send your responses to: admin@apeel.org.au or go to www.apeel.org.au where you can do so online.

Table of Contents

Preamble	9
APEEL's mission: a blueprint for the next generation of environmental laws	9
The need for a new generation of environmental laws for Australia	9
Some preliminary observations on the definition and role of environmental law	11
How is environmental law to be defined?	11
What is the role of environmental law?	12
How APEEL is approaching its task	13
1. Introduction	14
1.1 How is the first Stream approaching its task?	14
1.2 Definitions	15
2. Goals for environmental law	16
2.1 Overview	16
2.2 Analysis	24
2.3 Proposals for reform	26
3. Objects of environmental law	30
3.1 Overview	30
3.2 Analysis	30
3.3 Proposals for reform	33
4. Principles of environmental law	35
4.1 Overview: differentiating environmental law principles	35
4.2 Design-based principles	36
4.2.1 Description and analysis	36
4.2.2 Proposals for reform	39
4.3 Directing principles	40
4.3.1 Description and analysis	40
4.3.2 Proposals for reform	45
4.3.3 Possible, deeper 'sustainability' principles	47
5. Norms of environmental law: general rights and duties	48
5.1 Overview	48
5.2 Analysis	49
5.3 Proposals for reform	49
6. Conclusion	52

Preamble

As this is the first in a series of eight APEEL *Technical Papers*, the opportunity is taken to present a brief introduction to the APEEL project in this preamble; how APEEL came to be established; and its broad mission - to develop a blueprint for the next generation of Australian environmental law. This preamble also outlines the approach APEEL has adopted to perform its mission.

APEEL's mission: a blueprint for the next generation of environmental laws¹

Environmental laws in Australia are the subject of regular scrutiny and debate. On the one hand, concerns to ensure efficiency and simplification of regulatory processes have given rise to proposals for streamlining and avoidance of duplication, reflected, for example, in the 'One Stop Shop' initiative of the Abbott Coalition government. On the other hand, there are frequent community calls for improvements to existing environmental laws and policies to more effectively address pressing challenges such as loss of biodiversity and climate change. The push and pull of these competing efficiency and reform objectives means that governments and stakeholders are constantly expending substantial energy on debate and deliberations concerning environmental law reform.

The Places You Love Alliance (PYL) is a network of over 40 leading environmental non-government organisations across Australia. It was established in 2013 to enable a broad cross-section of the environmental movement in this country to speak with one voice on environmental issues of critical importance. Its initial efforts were focused upon resisting the proposed delegation to the states of Commonwealth approvals powers under the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (*EPBC Act*). However, PYL also identified at an early stage of its existence the need to progress from this essentially reactive agenda to develop a longer-term vision for Australia with respect to its future system of environmental laws. As a result, it decided to establish a project to develop a blueprint for the next generation of environmental laws, leading to the launch in November 2014 of the Australian Panel of Experts in Environmental Law (APEEL).

APEEL is comprised of 15 experts in environmental law, including academics, practising lawyers and a former Federal Court judge. Collectively it constitutes almost 400 years of knowledge and experience in this field. It is supported by a number of expert advisors who serve as reviewers of papers and provide general advice to APEEL. Whilst APEEL is provided logistical support by PYL to assist it in its deliberations, it is entirely independent of PYL in terms of the analysis and recommendations that it has developed in its *Technical Papers*. These papers have been developed by one or more APEEL member working together in various streams (see further below), then reviewed by the full Panel and one or more of its expert advisors, before finally being adopted by the full Panel as suitable for public release. Following a period of community consultation and engagement with key stakeholders concerning the ideas advanced in these *Technical Papers*, APEEL intends to release its final blueprint for the next generation of environmental laws by mid-2017.

The need for a new generation of environmental laws for Australia

Australia is one of the most ancient, naturally beautiful, and biodiverse places on Earth. It has 19 World Heritage properties, 65 Ramsar wetlands and more than one million species of plants and animals, many of which are found nowhere else on earth.² It is rich in some natural resources, whilst others such as water are scarce. It has unique natural and cultural heritage that underpins a sense of place and national identity and makes a positive contribution to the nation's wellbeing.³ Its current inhabitants are also the beneficiaries of over 50,000 years of caring for country by Aboriginal and Torres Strait Islander peoples.

¹ APEEL has taken up the task of presenting 'proposals for the next generation of environmental laws in Australia, focusing particularly at the federal level': see APEEL's Terms of Reference, available at www.apeel.org.au.

² See State of the Environment 2011 Committee, *Australia State of the Environment 2011 – Independent report to the Australian Government Minister for Sustainability, Environment, Water, Population and Communities* (2011).

³ Commonwealth of Australia, *Australian Heritage Strategy* (2015).

A robust and world-leading system of environmental management is therefore vital to Australia's future. At the heart of that system, there is a need for laws enabling the preservation, management and restoration of our common heritage. There is a limit to what laws alone can achieve, but clear and effective laws are a crucial component for ensuring Australia sustains a healthy, resilient and productive environment.

For over 40 years, national environmental law has steadily evolved in Australia. The current legal framework has in part emerged incrementally in response to particular issues and developments, for instance, the mining of Fraser Island and the proposed damming of the Franklin River. It has also emerged in response to the development of international environmental laws and principles. Development of the existing framework has often involved a cooperative approach between federal, state, territory and local governments. There is no single source of environmental law, instead, a body of legislation, regulations, codes and policies (overlaid by international measures in the form of both 'soft' and 'hard' law) has evolved in an effort to address complex societal, conservation and resource use issues. At the Commonwealth level, there are over 70 different laws dealing with environmental issues,⁴ and there are countless more in each state and territory. An array of institutions, agencies and departments exist across federal, state, regional and local levels to administer and implement these various laws. And a diverse range of stakeholders and third parties interact with the current laws and institutions with varying degrees of influence.

Despite the number of laws, policies, agencies and engaged stakeholders, Australia's key environmental indicators continue to decline.⁵ There is also overwhelming evidence of environmental deterioration on a global scale that has prompted reference to the current circumstances as the 'Anthropocene' (or human-induced) period of mass extinctions and rapid ecological changes.⁶ Recent scientific research on global ecological trends appears to vindicate many of the dire predictions of the Club of Rome and other commentators made decades ago.⁷ Australia's environment has many, and generally worsening, problems as documented in successive *State of the Environment* reports commissioned at both the Commonwealth and state levels.⁸ Some of the persistent problems include major declines in biodiversity, degradation of productive rural land, the intensification of development along coastlines and in sprawling cities, and the emerging impacts of climate change. These problems are in addition to grave past damage that needs to be repaired, however possible. Australia has the worst rate of mammal extinctions of any country (30 species have perished in two centuries), and it has suffered severe deforestation.⁹ Scientists have ranked Australia ninth worst in the world for absolute environmental degradation.¹⁰

As a result, Australia now faces unprecedented environmental challenges. The sheer complexities of many ecological problems, especially those of a cumulative and incremental nature that gestate over long periods, are very difficult targets of legal regulation. Many environmental issues are transboundary and must be considered in the context of broader resilience, functionality and global tipping points.¹¹ Modern environmental law has enjoyed considerable early success in tackling the 'low hanging fruit', such as reducing point source emissions from large factories, but there are few such easy targets left. The subsequent generation of ecological problems that defy these early legal solutions include invasive species, marine plastic debris, looming resource scarcities, greenhouse gas emissions and climate change impacts more broadly.

Furthermore, whilst Australia's environmental laws may appear to look good on paper, they are not being effectively implemented to meet current goals and objectives. For example, environmental legal principles have been recognised in Commonwealth and state environmental legislation (see further below), but they have been under-utilised, are malleable in their interpretation due to their imprecise definition, and often are overridden by other considerations.

4 For a list of the relevant Commonwealth environmental legislation, see Australian Panel of Experts on Environmental Law, *Environmental Governance* (Technical Paper 2, 2017).

5 Ibid, and see also Places You Love Alliance, *The Australia We Love: A Report on Key Issues Affecting Nature and Society in Australia* (2014).

6 Will Steffen, Paul J Crutzen and John R McNeill, 'The Anthropocene: Are Humans Now Overwhelming the Great Forces of Nature' (2007) 36(8) *AMBIO* 614.

7 For example, Nafeez Ahmed, 'Scientists Vindicate "Limits to Growth" – Urge Investment in "Circular Economy"', *The Guardian* (online), 4 June 2014, <<http://www.theguardian.com/environment/earth-insight/2014/jun/04>>; and T Jackson and R Webster *Limits Revisited: A Review of the Limits to Growth Debate*, Report to the UK All-Party Parliamentary Group on Limits to Growth, April 2016 <<http://limits2growth.org.uk/revisited>>.

8 For the federal reports, see <<http://www.environment.gov.au/topics/science-and-research/state-environment-reporting>>.

9 See *State of the Environment Reports*, the most recent being 2011, available at <<http://www.environment.gov.au/topics/science-and-research/state-environment-reporting>>; See also Stephen Dovers (ed), *Australian Environmental History: Essays and Cases* (Oxford University Press, 1994).

10 Corey Bradshaw, Xingli Giam and Navjot Sodhi, 'Evaluating the Relative Environmental Impact of Countries' (2010) 5(5) *PLoS One* e10440.

11 Steffen et al, 'Planetary boundaries: Guiding human development on a changing planet' (2015) 347(6223) *Science* 736.

In addition, the value of environmental laws has been questioned in recent times, for example, as to whether they unduly infringe upon individual property rights,¹² unnecessarily delay economic development or represent an unreasonable regulatory burden.¹³ Although it is important to ensure environmental laws are efficient and not unduly cumbersome, the foregoing criticisms are frequently not evidence-based¹⁴ and fail to recognise the inherent *public purpose* benefits of environmental laws.

Given the increasingly urgent need to systematically, effectively and creatively address the current ecological challenges, now is the time to consider the direction of, and vision for, *strengthened* national environmental laws for the decades ahead. The APEEL project is developing a vision for a new generation of Australian environmental laws to ensure that Australia has a healthy, functioning and resilient environment which is of benefit to all Australians and, in doing so, it explores what those laws might look like.

Some preliminary observations on the definition and role of environmental law

In its initial discussions concerning how best to approach this challenging task, APEEL recognised that it would be necessary not only to build on existing legal approaches, but also to think beyond them in order to develop a visionary blueprint for the future. As a starting point, APEEL offers some preliminary observations concerning the definition of environmental law and its fundamental role and purpose.

How is environmental law to be defined?

The subject of ‘environmental law’ defies any simple definition, for several reasons.¹⁵ Environmental issues are both physically and socially complex, and therefore it may sometimes be unclear when an ‘environmental issue’ comes within the purview of this area of law. Also, there is a diverse assortment of laws that can have an influence concerning environmental problems, both domestically and internationally, much of which ostensibly may not seem to have anything to do with the environment, such as taxation law or corporate law. These areas are discussed in detail in Australian Panel of Experts on Environmental Law, *The Private Sector, Business Law and Environmental Performance* (Technical Paper 7, 2017).

APEEL also recognises that environmental law in Australia has been built on legal traditions and precedents that were, and perhaps remain, much less sympathetic to environmental stewardship. For instance, the common law rules relating to property law and tort law tend to privilege the rights of landholders to use and exploit their property as they wish, and to limit access to remedies for damage to land to land-holders.¹⁶ Whilst there is continuing debate concerning the extent to which it is appropriate for these traditional common law privileges to be overridden by the extensive range of legislation designed to address environmental issues,¹⁷ there is no serious dispute concerning the need for environmental legislation to place constraints on how landholders make use of their land for the greater public benefit.¹⁸

12 See Australian Law Reform Commission, *Traditional Rights and Freedoms—Encroachments by Commonwealth Laws*, Interim Report No 127 (2015).

13 For example, see the Commonwealth Government’s ‘one stop shop’ proposal to streamline environmental approvals by using bilateral agreements: Department of the Environment and Energy (Cth), *One Stop Shop for environmental approvals* <<http://www.environment.gov.au/epbc/one-stop-shop>>.

14 For example, tightened environmental policies have been found to have little effect on aggregate productivity: see S Albrizio et al, ‘Do Environmental Policies Matter for Productivity Growth? Insights from New Cross-Country Measures of Environmental Policies’ (OECD Economics Department Working Papers No 1176, OECD, 2014) <<http://dx.doi.org/10.1787/5jxjncjrcxp-en>>.

15 Elizabeth Fisher, Bettina Lange and Eloise Scotford, *Environmental Law: Text, Cases and Materials* (Oxford University Press, 2013) 5-20.

16 John Lowry and Rod Edmunds (eds), *Environmental Protection and the Common Law* (Hart Publishing, 2000).

17 See for example, Australian Law Reform Commission, *Traditional Rights and Freedoms—Encroachments by Commonwealth Laws*, Issues Paper No 46 (2014), ch 6 – Property Rights; Australian Law Reform Commission, *Traditional Rights and Freedoms—Encroachments by Commonwealth Laws*, Final Report 129 (2015) <<http://www.alrc.gov.au/inquiries/freedoms>>.

18 The relationship between public interest and private property is discussed further in Australian Panel of Experts on Environmental Law, *Terrestrial Biodiversity Conservation and Natural Resources Management Governance* (Technical Paper 3, 2017).

APEEL does not seek to offer a simple, all-embracing definition of environmental law, but recognises that there are clearly discernible ‘branches’ of this field of law that enjoy widespread recognition amongst lawyers and others alike. These include laws that provide for:

- the planning of future land-use and the assessment and approval of proposed specific uses of land and water;
- the protection of environmental quality (air, water, land and noise) and the management of solid and hazardous (including nuclear) wastes;
- the management of health and ecological risks associated with a vast array of chemical substances and technologies (including biotechnologies);
- the protection of natural systems (biodiversity) and built and cultural (including indigenous) heritage;
- the management of natural resources (land, water, fisheries forests, minerals, and oil and gas (including ‘unconventional’ gas)); and more recently
- mitigation and adaptation measures in relation to climate change, including laws that promote energy conservation and renewable energy.

APEEL recognises also that there will often be different versions of some of the abovementioned types of laws for the terrestrial and marine contexts respectively.¹⁹

What is the role of environmental law?

Law is indispensable to the protection and management of the natural environment. APEEL sees environmental law as serving the following main purposes:

- it establishes the rights and responsibilities of governments and other key stakeholders in respect of the environment;
- it contributes to **human** well-being by ensuring that natural resources such as forests, biodiversity, soil, water and wildlife are used sustainably and thereby can continue to support economic development and meet social needs indefinitely (all Australians depend upon, and benefit from, clean air, clean water, healthy functioning ecosystems and resilient landscapes);
- it safeguards nature’s intrinsic values, independent of their utility to humankind, by protecting biodiversity and maintaining nature’s life cycles and evolutionary processes;
- it protects important attributes of Australia’s cultural heritage, history and national character;²⁰ and
- it allows individuals and communities to be involved in decisions that affect their environment, thereby contributing to the wider goal of democratising environmental management.

¹⁹ Australian Panel of Experts on Environmental Law, *Terrestrial Biodiversity Conservation and Natural Resources Management Governance* (Technical Paper 3, 2017) and *Marine and Coastal Issues* (Technical Paper 4, 2017), critique current laws relating to biodiversity conservation and natural resource management in both the terrestrial and marine/coastal contexts respectively and make recommendations for reform in each context.

²⁰ Australia’s identity is intimately connected to the country’s natural environment, as symbolised by the fauna depicted on the Commonwealth coat of arms and its currency. For indigenous Australians, the natural environment is integral to their cultural identity. Environmental law plays a crucial role in protecting the wildlife and iconic landscapes that shape Australia’s cultural heritage.

How APEEL is approaching its task

Contemporary analyses of environmental law generally focus on the examination of administrative authorities and tools, that is, the structural arrangements for administration and enforcement of environmental legislation and the mechanisms (regulatory, market-based and voluntary) created by such legislation to deliver environmental outcomes. APEEL concluded that this type of analysis frequently fails to recognise deeper problems with the current nature of environmental law, in particular, that it is generally fragmented and uncoordinated and that its implementation is often far from effective. As a result, APEEL decided to approach its task by establishing six work streams that enable a more holistic approach to be adopted.

This project cannot hope to comprehensively examine in detail all of the various branches of environmental laws across the Commonwealth, states and territories that are described above. Instead, APEEL has focused its efforts on some broader, conceptual aspects of environmental law and then examines selected branches of environmental law in more detail. From the **conceptual** perspective, APEEL has identified three areas for attention:

- **Stream 1** (which is responsible for this *Technical Paper*), examines the *foundations of environmental law*, which may be categorised as comprising goals, objects, principles and norms;
- **Stream 2** examines the subject of *environmental governance*, looking particularly at how roles and responsibilities should be allocated across multiple layers of government within the Australian federal constitutional system; and
- **Stream 6** examines the subject of *environmental democracy* considering, in particular, the possible substantive and procedural rights that can contribute to better environmental outcomes and reinforce the operation of environmental law.

APEEL have also addressed **particular branches of environmental law** that warrant more detailed attention due to their significance and the potential to draw wider conclusions concerning the need for reform from their examination:

- **Stream 3** examines laws related to the *protection of biodiversity and natural resources management*, with *Technical Papers* covering respectively the terrestrial and marine contexts; and
- **Stream 4** examines, via separate *Technical Papers*, the laws related to *climate change and energy regulation*.

Stream 5 examines *'other' laws relating to business regulation*, as well as voluntary private sector initiatives, that fall outside the abovementioned 'branches' of environmental law, but which the Panel believes can indirectly exert a profound impact on environmental outcomes. This aspect of APEEL's work adds a significant dimension that has been largely overlooked in most discussions concerning environmental law reform.

Whilst APEEL has made some minor adjustments within these Streams during the course of the project, they have served as suitable parameters in terms of providing the right framework for the Panel's endeavours. As the eight *Technical Papers* emanating from these Streams have been produced largely in parallel, it is inevitable that there may be some inconsistencies or gaps resulting, and also that cross-referencing between the papers is somewhat limited. Shortcomings such as this will be addressed after undertaking a period of consultation and engagement and before the papers are finalised. It is APEEL's intention to release the final proposals for the next generation of Australian environmental laws by mid-2017.

1. Introduction

1.1 How is the first Stream approaching its task?

The first Stream established by APEEL was tasked to identify and describe the core principles that underpin environmental law, an exercise that has rarely been attempted in the literature of environmental law.²¹ This assignment was the result of the recognition by APEEL that there might be a number of ‘core’ principles that are pertinent to environmental law and which could provide a sound basis or ‘foundation’ for the design of the next generation of environmental laws.

In undertaking this task, this Stream recognised at an early stage of its deliberations that it was not sufficient to describe the foundations of environmental law simply in terms of ‘principles’. Instead, it has developed a more nuanced analysis of the foundations of environmental law that distinguishes between goals, objectives, principles and norms. It finds that these several elements, when combined together, provide a sound, underlying basis or ‘foundation’ for environmental law, upon which can then be constructed the usual measures concerning the creation of administrative authorities and appropriate mechanisms and tools for environmental management.

Whilst this conceptual analysis may initially appear abstract and complex, APEEL has found it serves to separate out and distinguish between several critical foundational elements of environmental law that each have a distinct purpose, thereby enabling them to be more effectively provided for in the next generation of environmental law. Indeed, APEEL has found that the approach as proposed for the identification and analysis of the foundations of environmental law, is applicable to the envisioning of a future generation of environmental laws anywhere in the world. Whilst the design details may vary to accommodate particular legal, cultural, social and environmental considerations, the broad anatomy presented in this paper is essentially universal in character and applicable within any jurisdiction.

To introduce these distinct, foundational elements of environmental law, a set of definitions describing their respective purpose and function is offered below.

²¹ However, APEEL notes the important work by Douglas Fisher, *Australian Environmental Law: Norms, Principles and Rules* (Law Book Company, 2014).

1.2 Definitions

In this paper, the term '**societal goal**' is used to describe an aim or end result that has been agreed (or proposed) through a widely consultative process as desirable, in order to overcome the joint challenges of poverty and environmental degradation (including their social and economic contexts). This could be framed around sustainable development or another concept such as a broader notion of sustainability. This goal is not a legal concept of itself, but it may be recognised and endorsed through law.²²

The term '**object**' is used in this paper to describe an aim or outcome that is attributed to specific environmental legislation, normally by way of the inclusion in an 'objects' clause in such legislation. In Australian environmental legislation, objects clauses are quite common and often explicitly identify the societal goal of ESD as a core objective (although it may be framed in different ways).

There are many different definitions of the term '**principle**', but most have in common the idea of a fundamental truth, belief or proposition that explains or directs how something happens or works. A more specific definition refers to a legal rule that should be followed as a matter of good behaviour. Both forms of definition have relevance to the identification of the core principles of environmental law; the former encompassing principles that are external to legislation, but serve to guide its design (for example, the principles of smart regulation); the latter involving 'directing' (rules-based) principles embodied within environmental legislation that are to be applied in its implementation (for example, the precautionary principle).

Whilst the term '**legal norm**', similar to legal 'principle', is widely used to describe various forms of legal rules (and both terms may be used interchangeably), the term is used in this paper to describe a default rule of behaviour with respect to the environment that is cast in the form of either a general right or duty. Such normative rules may be prescribed in environmental legislation, but are now commonly found also in national constitutions.

²² See discussion of this question, below n 29.

2. Goals for environmental law²³

2.1 Overview

Over the past half century, environmental legislation in Australia has undoubtedly improved the quality of environmental decision-making and reduced what would otherwise have been a much direr situation if left unregulated. However, the continuing negative trajectory of key ecological indicators suggests that whilst current legal approaches are occasionally winning important battles, these efforts are still losing the war. Important successes such as phasing out ozone depleting chemicals and lead in petrol may deflect attention away from the cumulative decline in ecological services and biodiversity. The underlying drivers of environmental decline - primarily population growth, economic growth, consumption patterns and technological change - remain largely unconstrained. These circumstances require Australia, alongside other countries, to re-evaluate its goals with respect to its economy, society and the environment.

There have been attempts to stem this decline in recent years on a global basis, in particular through the adoption of the concept of sustainable development. These efforts have been reinforced by the adoption, in late 2015, of the United Nations *Sustainable Development Goals (SDGs)* as a successor to the *Millennium Development Goals (MDGs)*.²⁴ In Australia, there has been a long-standing acknowledgement of the goal of ESD, dating back to the *National Strategy for Ecologically Sustainable Development (1992) (NSES)*.²⁵

23 It is better to speak of goals 'for' environmental law or, in other words, goals that environmental law may be used to help achieve, rather than the goals 'of' environmental law. What is involved here is a broader concept that reflects a commonly shared aspiration within human society, or particular sections thereof, which in turn may be reflected in environmental law.

24 See United Nations, *Sustainable Development Goals* <<https://sustainabledevelopment.un.org/topics/sustainabledevelopmentgoals>>.

25 See Department of Environment and Energy (Cth), *National Strategy for Ecologically Sustainable Development* <<http://www.environment.gov.au/about-us/esd/publications/national-esd-strategy>>.

BOX 1: EXTRACT FROM THE NSESD

Australia's goal, core objectives and guiding principles for the National ESD Strategy

The Goal is:

Development that improves the total quality of life, both now and in the future, in a way that maintains the ecological processes on which life depends.

The Core Objectives are:

- *to enhance individual and community well-being and welfare by following a path of economic development that safeguards the welfare of future generations;*
- *to provide for equity within and between generations;*
- *to protect biological diversity and maintain essential ecological processes and life-support systems.*

The Guiding Principles are:²⁶

- *decision making processes should effectively integrate both long and short-term economic, environmental, social and equity considerations;*
- *where there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation;*
- *the global dimension of environmental impacts of actions and policies should be recognised and considered;*
- *the need to develop a strong, growing and diversified economy which can enhance the capacity for environmental protection should be recognised;*
- *the need to maintain and enhance international competitiveness in an environmentally sound manner should be recognised;*
- *cost effective and flexible policy instruments should be adopted, such as improved valuation, pricing and incentive mechanisms; and*
- *decisions and actions should provide for broad community involvement on issues which affect them.*

*These guiding principles and core objectives need to be considered as a package. 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. (emphasis added)*

²⁶ APEEL notes that the EPBC Act s 3A also sets out five 'principles of ecologically sustainable development', of which only three correspond to those presented in NSESD Guiding Principles (integration, precaution and economic mechanisms); the other two principles concern inter-generational equity and conservation of biological diversity and ecological integrity. The differences between these respective prescriptions of ESD principles reflect the fact that the latter are intended specifically to guide decision-making under the EPBC Act, whereas the former have a broader, governmental strategy and policy focus. See further below, Part 4, for a detailed discussion of environmental law principles.

APEEL is firmly of the view that any attempt to develop a blueprint for the next generation of environmental laws should have as part of its foundation the endorsement of an appropriate societal goal that informs and drives the design of such laws. Such a goal provides a solid basis for environmental law at the foundational level. It is to be distinguished from legal principles, which may elaborate or assist to give effect to the societal goal, but which cannot by themselves fully articulate that goal.²⁷

Implementation of this societal goal will also require multiple strategies and approaches, of which law (including legislation) is just one. Recognition of both the capacities and the limitations of law in this context is critical to achieving successful outcomes and to avoiding misplaced and excessive faith in the role of law. Laws may look good on paper, but will not achieve the goals or objectives that they endorse if they are not implemented effectively.²⁸ This requires, amongst other things, administering agencies to be fully resourced to implement laws on the ground and for the general public to have access to the courts to uphold environmental law if governments fail to act. These matters are addressed more fully in Australian Panel of Experts on Environmental Law, *Environmental Governance* (Technical Paper 2, 2017) and Australian Panel of Experts in Environmental Law, *Democracy and the Environment* (Technical Paper 8, 2017).

Given the diversity of perspectives on the nature of a fundamental societal goal for the future of human civilisation, APEEL believes it is unwise for it to assume a definitive position on this matter. APEEL acknowledges that societal goals for environmental law are a reflection of the underlying values of society, and that, because we inhabit morally pluralistic societies, there may never be full agreement on such goals. The chosen goal(s) may simply reflect the political influence of those groups in society whose values prevail over rival values. However, an important role for law is to try to create a level playing field (for example, through democratic institutions and the operation of the rule of law) for the choice and expression of these societal goals.

The assertion by some environmental law scholars about the need for a new 'ethical' approach to environmental law²⁹ (for example, based on recognition of the intrinsic rights of nature) is a response to other societal perspectives on environmental goals that involve different underlying values or norms about desirable behaviour or outcomes. For instance, the preference some give to economic growth or poverty alleviation reflects different values and imperatives related to the perceived contribution that economic development can make to the lifting of living standards. Such diversity in our ethical values does not mean that all perspectives should be treated equally and given effect simultaneously. But acknowledging the existence of different ethical perspectives is essential for informed public debate and the democratic development of societal goals for environmental law. Besides these differing perspectives, there is also a fundamental question about the relationship between law and society and whether and how the legal system can shape social values or whether society itself must first change to some degree before the law can give effect to its evolving values.

In order to assess how a societal goal might be developed for the next generation of environmental laws, it is useful to briefly map the evolution in the dominant ideas that have shaped environmental policy and governance in Australia and the western world in the post-War era. In general, APEEL suggests that the goals and values that address the interplay of environmental protection and economic development have evolved in four discernible stages.

27 There is a body of opinion amongst some environmental law commentators that sustainable development is, of itself, a rule-based, legal principle. This idea is particularly prominent in international environmental law, where some support is provided by decisions of the International Court of Justice and through a growing legal recognition of sustainable development by states. For a convincing rejection of this perspective, see M Cordonnier Segger, 'Sustainable Development in International Law' in H C Bugge and C Voigt (eds), *Sustainable Development in International and National Environmental Law* (Europa Law Publishing, 2008) 87, at 142, where, after an extensive survey of the normative character of sustainable development in international law, the following conclusion is offered: 'A search for one agreed customary norm of sustainable development might actually be a search in the wrong direction. One further possibility is that sustainable development could be characterised as an objective of states, and even as an internationally recognised policy objective of the world...It does not preclude the existence of further (more specific or normative) international principles of law related to sustainable development'. APEEL strongly shares this view, particularly in relation to domestic, as distinct from, international law, and accordingly has adopted the position outlined in this section of this report that sustainable development should be regarded as a goal that is external to environmental law, rather than an internal principle of a rule-based nature. APEEL is reinforced in adopting this position by the view that the term 'sustainable development' has insufficient legal certainty to guarantee appropriate standards and procedures for environmental protection (see further in discussion below).

28 See for example, *Assessment of the adequacy of threatened species and planning laws*, (September 2014) <<http://www.placesyoulove.org/>>. **A key finding of this report, that was commissioned by the PYL Alliance and prepared by the Environmental Defenders Offices of Australia, was that existing threatened species and planning laws contained useful provisions and mechanisms, but were not being effectively implemented, resourced or administered.**

29 See for example, Klaus Bosselmann, 'A Legal Framework for Sustainable Development' in K Bosselmann and D Grinlinton (eds), *Environmental Law for a Sustainable Society* (New Zealand Centre for Environmental Law, 2002) 145, 149.

Phase 1 – The goal of enclave conservation

Before the 1970s, an ‘enclave’ view of environmental management prevailed and was guided by the philosophy of ‘conservation’ which arose in the late 19th century. Here, the main goal was to create environmental sanctuaries and parks, to be set aside in designated spaces within which all conservation goals could be met while freeing the remaining, and much larger, areas for economic development and human settlement.³⁰ This conservation ideal remains an important theme of contemporary environmental governance, but it remains largely confined to biodiversity protection rather than informing the overarching framework for environmental management. From the mid to late 1960’s, it became apparent that ‘enclaves’ would be insufficient not only to achieve biodiversity conservation, but also to attain many other environmental objectives such as pollution control and managing the ecological impacts of industrial chemicals, thanks to an increased recognition of the dynamic and interconnected nature of ecosystems and the impacts of human activity upon them.

Phase 2- the emergence of environmental protection laws

During the 1970s, a new wave of environmental protection laws swept across the western world in particular, which pitched the protection of environmental quality (air, land and water) in a direct contest with economic development. These laws addressed problems such as air, land and water quality, waste management and hazardous substances and also established new processes of environmental impact assessment (EIA) and environmental permitting.

This new wave of serious concern about environmental issues was captured eloquently in the 1972 *Stockholm Declaration on the Human Environment*. However, a tension had emerged by the 1980’s between economic growth/development and environmental protection. At the same time, the international community was continuing to explore the parallel challenge of addressing poverty and economic inequality on a global scale.³¹

Phase 3 – The goal of ecologically sustainable development

In an effort to reconcile these seemingly competitive objectives, the World Commission on Environment and Development (the ‘Brundtland Commission’) was established by the United Nations (UN). The Brundtland Commission, after a lengthy global enquiry, espoused the concept of **sustainable development** in its 1987 report, *Our Common Future*.³² This concept has been widely promoted as a means of reconciling economic, environmental and social objectives, and it has found clear recognition in Australia - as *ecologically* sustainable development - in the *NESD* and the *Intergovernmental Agreement on the Environment 1992 (IGAE)*. This in turn has led to a widespread practice on the part of both federal and state/territory governments of endorsing the concept of ESD as a fundamental objective of particular environmental legislation.³³

This trend has been reinforced by international treaties and other international instruments which have also directly influenced many Australian environmental laws and thereby informed their goals. Australia is a party to scores of multilateral and bilateral environmental treaties that not only prescribe specific obligations for implementation through its domestic laws, but also help articulate the overarching goals of the environmental law system, in particular, with respect to sustainable development and nature conservation.³⁴ In addition, so-called ‘soft law’ international measures such as the 1992 United Nations *Rio Declaration on Environment and Development* have specifically endorsed the goal of sustainable development and elaborated its content in the form of specific principles such as

30 Discussed in Joseph Sax, ‘The New Age of Environmental Restoration’ (2001) 41 *Washburn Law Journal* 1.

31 See Johanna Sutherland, ‘An Endangered Planet?’ in G Fry and J O’Hagan (eds), *Contending Images of World Politics* (MacMillan, 2000) 181.

32 World Commission on Environment and Development, *Our Common Future: Report of the World Commission on Environment and Development* (Oxford University Press, 1987).

33 Gerry Bates, *Environmental Law in Australia* (LexisNexis, 8th ed, 2013). See for example, the *EPBC Act* s 1(b), which provides that the objective of the *EPBC Act* is ‘to promote ecologically sustainable development through the conservation and ecologically sustainable use of natural resources’.

34 Among the most significant treaties which the Australian Government has the responsibility and power to implement via the external affairs power of the *Constitution* (s 51(xxix)) are: the *Convention Concerning the Protection of the World Natural and Cultural Heritage* (1972); *Convention on International Trade in Endangered Species of Wild Fauna and Flora* (1973); *UN Law of the Sea Convention* (1982); the *UN Framework Convention on Climate Change* (1992); *Convention on Biological Diversity* (1992); and the *Stockholm Convention on Persistent Organic Pollutants* (2001). Sustainable development and nature conservation are frequently stated goals of these treaties; for example, the *Convention on Biological Diversity* obliges its parties to promote ‘the conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources’ (see *Convention on Biological Diversity*, opened for signature 5 June 1992, 1760 UNTS 79 (entered into force 29 December 1993, art 1)).

the precautionary principle. It is suggested therefore that, at both the international level and in Australia, the goal of sustainable development and related ideals have been consistently identified as a basis or foundation for the operation of environmental law.

Phase 4 – Beyond Sustainable Development - Emerging Alternatives

In the past two decades since the 1992 Rio Conference, which was the pinnacle of the movement to adopt sustainable development as a foundational goal for environmental law, there has been growing scepticism about the adequacy of the sustainable development agenda. A variety of reasons have been offered, including that: vested interests have been unwilling to forego economic development opportunities; the difficulty of translating the *SDGs* into workable environmental laws; and, crucially, its lack of success, given scientific evidence of worsening environmental conditions. At its core, sustainable development has struggled to deal with two particular issues: how to manage the trade-offs that must inevitably arise in the course of reconciling economic, environmental and social values; and how to deal with both policy and decision-making in situations where there is significant scientific uncertainty about possible outcomes. There have been two broad forms of response to these and other criticisms of the original *SDG*: first, efforts to expand and further refine this concept in order to strive for its more effective implementation; and second, the development of an alternative paradigm based on the concept of ‘sustainability’.

The UN has led the international effort to further develop the sustainable development concept, whilst simultaneously addressing the need for poverty alleviation, through the adoption in 2015 of the *SDGs* and the *2030 Agenda for Sustainable Development*,³⁵ which incorporates new financing mechanisms that may encompass other axiomatic considerations concerning global financial systems and economic inequality/poverty.³⁶ A key feature of the *SDGs* and the accompanying *2030 Agenda for Sustainable Development* is their reliance on ‘bottom up’ implementation through the adoption by countries of their own targets, strategies and reporting mechanisms. This will require countries, including Australia, to put in place the required laws, policies and institutional arrangements to ensure attainment of their declared targets.

35 *Transforming Our World: the 2030 Agenda for Sustainable Development* GA Res 70/1, UN GAOR, 70th session, Agenda Items 15 and 16, UN Doc A/Res/70/1 (21 October 2015).

36 See United Nations, *Sustainable Development Goals* <<https://sustainabledevelopment.un.org/topics/sustainabledevelopmentgoals>>.

BOX 2: THE UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS

(Extract from the United Nations General Assembly Resolution 70/1. *Transforming our World: the 2030 Agenda for Sustainable Development*)

Sustainable Development Goals

- Goal 1 End poverty in all its forms everywhere
- Goal 2 End hunger, achieve food security and improved nutrition and promote sustainable agriculture
- Goal 3 Ensure healthy lives and promote well-being for all at all ages
- Goal 4 Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all
- Goal 5 Achieve gender equality and empower all women and girls
- Goal 6 Ensure availability and sustainable management of water and sanitation for all
- Goal 7 Ensure access to affordable, reliable, sustainable and modern energy for all
- Goal 8 Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all
- Goal 9 Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation
- Goal 10 Reduce inequality within and among countries
- Goal 11 Make cities and human settlements inclusive, safe, resilient and sustainable
- Goal 12 Ensure sustainable consumption and production patterns
- Goal 13 Take urgent action to combat climate change and its impacts
- Goal 14 Conserve and sustainably use the oceans, seas and marine resources for sustainable development
- Goal 15 Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss
- Goal 16 Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels
- Goal 17 Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development

However, APEEL believes a substantial gulf is likely to remain between this contemporary redesign of the sustainable development concept and the expression of a deeper sustainability goal. These different perceptions will continue to generate conjecture and debate concerning the appropriate societal goal that should underpin the operation of environmental law.

An interesting alternative expression of the *SDG* is to be found in the concept of ‘**environmentally sustainable innovation**’ (ESI)³⁷, which has enjoyed legal recognition in Europe in recent years through the articulation of environmental law principles that give force and effect to this concept (see further below in Part 4 of this paper). Such a goal recognises that ideas and movements around ‘mass innovation’, ‘democratic innovation’ or ‘user innovation’ significantly extend, and may eventually replace, conventional societal processes and structures (for example, in research departments in large transnational firms and large government civil service structures) for developing inventive products and services.³⁸ These ideas concerning ESI are given added force as the digital revolution and the internet enhance information and communication capabilities to a point where local, national and global innovation opportunities abound at the touch of a computer keyboard. In such circumstances, the innovative capabilities of individuals may one day achieve gradual acceptance as the single most valuable attribute of our economic lives. The proponents of ESI argue that this concept is not merely a rationale for technological determinism, because of the fundamental principles of environmental sustainability that underpin it, but, as with the recently adopted *SDGs*, there will still be critics for whom an entirely alternative paradigm is the only possible option for the future.

One such alternative paradigm that is now frequently advanced is based on the concept of ‘**sustainability**’. This has been urged as a more appropriate societal goal than sustainable development in its various evolving forms, in part because some actors, especially the business community and regulators, have tended to focus on sustaining *development* rather than sustaining the underlying ecological systems and processes.³⁹ Whilst the notion of sustainability is now enjoying increasing support, including in Australia,⁴⁰ its genesis rests in the literature and public debates of the 1960s and 1970’s, for example, the writings of Paul Ehrlich and the 1972 report of the Club of Rome, ‘*Limits to Growth*’.⁴¹ Their dire predictions regarding economic and environmental collapse due to ongoing and unlimited growth are argued to remain still relevant today.⁴²

In recent years, ecological economists have also been promoting the sustainability agenda, for example, around the concept of a ‘steady state economy’.⁴³ Consistent with this approach, the author and sustainability commentator, Richard Heinberg, has described five axioms of ‘societal and ecological sustainability’, as follows:⁴⁴

1. any society that continues to use critical resources unsustainably will collapse;
2. population growth and/or growth in the rates of consumption of resources cannot be sustained;
3. to be sustainable, the use of *renewable* resources must proceed at a rate that is less than or equal to the rate of natural replenishment;

37 T Foxon et al, *Policy Drivers and Barriers for Sustainable Innovation* (UK ESRC Sustainable Technologies Programme Monograph, 2006).

38 See for example, Erich von Hippel, *Democratising Innovation* (MIT Press, 2005) <<http://web.mit.edu/evhippel/www/democr1.htm>>. For a contemporary environmental context, see Carlos Moeda, ‘The democratisation of innovation’ (Speech delivered at X Symposium Cotec Europa, Rome, 28 October 2015) <https://ec.europa.eu/commission/commissioners/2014-2019/moedas/announcements/democratisation-innovation_en>. Closer to home, these trends are beginning to be noticed in such publications as *The Australia Innovation System Report 2015*; Office of the Chief Economist, *The Australia Innovation System Report 2015*, Report (2015).

39 For analysis of the differences between sustainability and sustainable development, see Klaus Bosselmann, *The Sustainability Principle: Transforming Law and Governance* (Ashgate, 2008).

40 For example, the Strategic Plan of the Australian Conservation Foundation (2011-2020), calls for a ‘rapid transformational change to provide lasting solutions to Australia’s environmental problems and to create a sustainable future and better quality of life’: Australian Conservation Foundation, *Strategic Plan of the Australian Conservation Foundation (2011-2020)* (2010) <<https://www.acfonline.org.au/sites/default/files/resources/ACF%20Strategic%20Plan%202012%20-%20Transforming%20Australia.pdf>>.

41 See Paul Ehrlich and Anne Ehrlich, *The Population Bomb* (Ballantine Books, 1968); Barry Commoner, *The Closing Circle: Nature, Man, and Technology* (Knopf, 1971); Donella H Meadows, *The Limits to Growth: A Report for the Club of Rome’s Project on the Predicament of Mankind* (New American Library, 1972).

42 See G Turner, ‘Is Global Collapse Imminent?’ (MSSI Research Paper No. 4, Melbourne Sustainable Society Institute - The University of Melbourne, 2014); and G Turner ‘On the cusp of global collapse? Updated comparison of the Limits to Growth with historical data’ (2012) 21 *GAIA* 116. See also Paul R Ehrlich and Anne H Ehrlich, ‘Can a collapse of global civilisation be avoided?’ (2013) 280(1754) *Proceedings of the Royal Society B: Biological Sciences* <<http://rspb.royalsocietypublishing.org/content/280/1754/20122845>>.

43 See H E Daly and J B Cobb, *For the Common Good* (Beacon Press, 1989); and R Costanza et al, *An Introduction to Ecological Economics* (CRC Press, 2015).

44 Richard Heinberg, *Sustainability Metrics, Growth Limits and Philanthropy*, (25 June 2015) Post Carbon Institute <<http://www.postcarbon.org/sustainability-metrics-growth-limits-and-philanthropy>>.

4. to be sustainable, the use of *non-renewable* resources must proceed at a rate that is declining, and the rate of *decline must be greater than or equal to the rate of depletion*; and
5. sustainability requires that substances introduced into the environment from human activities must be minimized and rendered harmless to biosphere functions.

Underlying these various axioms is a broader belief that sustainability requires the maintenance of the Earth's remaining natural capital and the ecosystem services it provides, which in turn involves the proposition that the exploitation of natural capital should be confined to areas already strongly modified by human activities. This conception of sustainability finds strong support and reinforcement in the views of some leading scientists such as Harvard biologist, E.O. Wilson, who advocates the setting aside of 50% of the world's remaining biodiversity in order to address the mass extinction trend of the Anthropocene.⁴⁵

These biodiversity-focussed views have coalesced for some commentators around the concept of 'rewilding', which has emerged in recent decades as a new philosophy to realign human relationships with the natural world.⁴⁶ In practical terms, it focuses on ecological restoration of past damage and the protection and enhancement of natural systems, especially wilderness values. It thus differs from the goal of sustainable development, which has served as a prospective, defensive stance to prevent further degradation, rather than as a means of improving natural capital. Rewilding recognises that a strategy to *maintain* (as opposed to *enhance*) ecosystems may leave ecosystems and biodiversity vulnerable to further decline. Unless human population and consumption dramatically fall in the near future, proponents of rewilding see no alternative but to invest in the restoration and enhancement of ecosystems.

The rewilding movement has begun to influence some legal scholars through the emergence of the field of 'wild law'.⁴⁷ Whether rewilding and its legal articulation can be a serious alternative to existing or other proposed environmental goals of society is highly debatable, but APEEL believes that at the very least these ideas are relevant to some aspects of the redesign of environmental law, such as the inclusion of a new design principle of environmental restoration (as discussed later in this paper) and the introduction of a norm-based legal duty to restore and repair.

Another recent effort to move beyond the concepts of sustainable development and sustainability in the face of the realities of the 'Anthropocene' has focused on '**resilience thinking**' as a possible new orientation.⁴⁸ Such an approach has some resonance with the proponents of the need to reconnect people with nature as, for example, has been advocated by the PYL Alliance. However, as Panel member Professor Jan McDonald argued in her 2015 Mahla Pearlman Oration, whilst resilience thinking may add nuance and important supplementary concepts to the ESD goal, especially in relation to the need for adaptive management and transformation, it is unlikely to unseat ESD as the foundational goal of Australian environmental legislation.⁴⁹

Finally, some commentators, such as the international environmental lawyer Klaus Bosselmann, have called for more attention to be devoted to environmental ethics to underpin the sustainable development/sustainability agenda.⁵⁰ One example is the *Earth Charter*, which its promoters describe as 'a universal expression of ethical principles to foster sustainable development'.⁵¹ Many of the *Charter's* core principles are clustered around the theme of 'ecological integrity', whose elements are defined by the *Charter* to include: 'protect and restore the integrity of Earth's ecological systems, with special concern for biological diversity and the natural processes that sustain life'; and 'prevent harm as the best method of environmental protection and, when knowledge is limited, apply a precautionary approach'. These and other principles that may give force to the societal goal of sustainable development/sustainability are examined more fully in Part 3 of this paper.

45 For a discussion of this idea, see Tony Hiss, 'Can the World Really Set Aside Half of the Planet for Wildlife?' *Smithsonian Magazine* (September 2014).

46 See George Monbiot, *Feral Searching for Enchantment on the Frontiers of Rewilding* (Penguin, 2013); Dave Foreman, 'The Wildlands Project and the Rewilding of North America' (1998) 76 *Denver University Law Review* 535; and Caroline Fraser, *Rewilding the World: Dispatches from the Conservation Revolution* (Picador, 2009).

47 Wild Law UK, <<http://www.wildlawuk.org/wild-law.html>>. For an Australian perspective, see Peter Burdon (ed), *Exploring Wild Law* (Wakefield Press, 2011).

48 See for example, Melinda Benson and Robin Craig, 'The End of Sustainability' (2014) *Society and Natural Resources*, 1.

49 Jan McDonald, 'Is Resilience the New ESD?' (unpublished speech delivered at the Future of Environmental Law Symposium, Sydney, 5 March 2015). The viewpoint is similarly expressed at J McDonald, 'Using law to build resilience to climate change impacts' in B Hutter (ed), *Risk, Resilience and Environmental Regulation* (Edward Elgar, 2016).

50 K Bosselmann and R Engels, *The Earth Charter*, (KIT Publishers, 2010).

51 See Earth Charter Initiative, *The Earth Charter* <<http://earthcharter.org/discover/the-earth-charter>>.

Given the rich diversity of viewpoints that exist in this most recent stage of global environmental thinking, APEEL does not seek to present a firm conclusion with respect to the question of what should be the appropriate societal goal to underpin the operation of the next generation of environmental laws in Australia. However, APEEL recognises the importance of establishing such a goal and, in doing so, of questioning the effectiveness of the current ESD goal. Therefore, the questions that arise in this context, and which will be examined in the following sub-sections are:

- how effective has the current ESD goal been in Australia?
- should a revised or new societal goal be developed for Australia, and if so, by what process?
- once identified, how can this goal best be reflected in the next generation of Australian environmental law? and finally,
- to what extent can such laws be expected to contribute to the delivery of this goal?

2.2 Analysis

APEEL is strongly of the view that the identification and reflection in law of a fundamental societal goal is an essential prerequisite for the effective operation of the next generation of environmental laws in Australia. The Panel also believes that the current reliance in Australia upon ESD as the relevant goal needs to be rigorously reviewed, particularly in light of concerns that its operation has not been entirely successful.

As observed by Dr Gerry Bates, a leading Australian scholar in this field, the legal enunciation of ESD has been challenging for several reasons: legal definitions of ESD fail to guide decision-makers about its implementation; the concept's language is vague and ambiguous; there is a tendency 'to treat sustainability as part of a procedure for, rather than as a focus or outcome of, decision-making'; there is a lack of accountability 'for pursuing or achieving sustainable outcomes'; and there is a paucity of 'requirements in legislation for actually monitoring the sustainability of outcomes'.⁵²

Despite its extensive endorsement in both Commonwealth and state environmental legislation,⁵³ the concept of ESD has exerted variable influence in practice. APEEL notes that a substantial body of Australian ESD case law reflects a valiant effort by the judiciary to decipher when and how ESD might be applied or considered under existing laws.⁵⁴ There also are members of the judiciary who have endeavoured to promote a broader application of the concept.⁵⁵ However, some, such as former Judge Christine Trenorden, have noted that there is a widespread view that 'Australia has done little more than pay lip service to the goal and the implementation of the [ESD] strategy'.⁵⁶

It is APEEL's view that the limitations of ESD as a societal goal arise directly from its heavy reliance upon the *integration* of environmental, economic and social factors as the means of its accomplishment without addressing how this might be accomplished. The addition of 'ecological' to 'sustainable development' in Australia has not, in practice, resulted in a proper emphasis on environmental considerations, despite an objective that the conservation of biodiversity and ecological integrity should be a fundamental

52 Gerry Bates, *An Expert Paper on ESD Prepared by Dr Gerry Bates for the Commissioner for Sustainability and the Environment* (2013) 12 <http://www.environmentcommissioner.act.gov.au/_data/assets/pdf_file/0004/661720/An-Expert-Paper-on-ESD-by-Gerry-Bates-for-Commissioner-May-2014.pdf>.

53 For example, in NSW alone, it is estimated that over 60 pieces of legislation refer to ESD. See: Office of Environment and Heritage (NSW), *Biodiversity Legislation Review – Office of Environment and Heritage Paper 1: Objects NSW* (December 2014) 21.

54 Some interesting commentary on the application of ESD can be found in the following cases: *Leatch v Director-General of National Parks and Wildlife Service* (1993) 81 LGERA 270; *Conservation Council of South Australia v Development Assessment Committee and Tuna Boat Owners Assoc. (No 2)* [1999] SAERDC 86; *Tuna Boat Owners Assoc. of SA Inc. v Development Assessment Commission* (2000) 110 LGERA 1; *Telstra Corporation Ltd v Hornsby Shire Council* (2006) 146 LGERA 10 (*Telstra Corporations Case*); *Mount Lawley Pty Ltd and Western Australian Planning Commission* [2007] WASAT 59; *Moore River Company Pty Ltd and Western Australian Planning Commission* [2007] WASAT 98; and *WA Developments Pty Ltd and Western Australian Planning Commission* [2008] WASAT 260; *Bulga Milbrodale Progress Association Inc v Minister for Planning and Infrastructure and Warkworth Mining Limited* [2013] NSWLEC 48. Note that this is just a small selection of a much larger range of cases, particularly in the NSW Land and Environment Court, where such commentary can be found.

55 For example, see Brian J Preston, 'The Role of the Judiciary in Promoting Sustainable Development: The Experience of Asia and the Pacific' (2005) 9 *Asia Pacific Journal of Environmental Law* 109, 211: 'It is clear that the time for sustainable development has come, and it is essential that individual judges and national judiciaries seize the opportunity'.

56 Christine Trenorden, 'Ecologically Sustainable Development: Where Are We Going?' (Paper presented at the NELA Conference, 2014) <<http://www.nela.org.au/NELA/Documents/Christine-Trenorden.pdf>>.

consideration for decision-making under national environmental law.⁵⁷ The 'integrative approach' lies at the heart of *Our Common Future* and is clearly articulated in the *NSESD*, which provides that:

'We need to consider, in an integrated way, the wider economic, social and environmental implications of our decisions and actions for Australia, the international community and the biosphere; and we need to take a long-term rather than short-term view when taking those decisions and actions'.⁵⁸

The difficulties with the integrative approach that underpins the ESD goal have been widely discussed and fall into four broad areas:

- first, its effective implementation requires a balancing by decision-makers of environmental, economic and social goals that involves the making of subjective judgments, often in the face of scientific uncertainty, about trade-offs and which, in practice, often results in economic considerations being allowed to outweigh environmental and social concerns;
- second, it is implicitly based upon an underlying 'growth paradigm' which fails to address the ecological need for limits to global growth in economies, population and the consumption of natural resources;
- third, it lacks an underlying ethical foundation involving respect for nature upon which the implementation of the ESD concept through law and other means can be based; and
- fourth, some decisions or actions involve environmental risks that are very significant (for example, the extinction of a species or destruction of the ozone layer), such that restrictions or prohibitions on development, rather than the 'balancing' of environmental, economic and social considerations, are necessary.

Klaus Bosselmann suggests that the second and third issues are directly linked and concludes that:

'...no law will lead to changes if the underlying ethical foundations remain unchanged. Fundamentally, sustainable development is an ethical concept. It is here, at the level of environmental ethics and justice, that any reasoning about a law of sustainable development must begin'.⁵⁹

Apart from recognising these deficiencies in the current formulation and implementation of the ESD goal, APEEL also acknowledges the limits to which environmental legislation can by itself ensure the achievement of such a broad societal goal, especially one that is not shared by all members of society. The limitations of environmental law in this regard also stem from potentially countervailing laws, and policies in other domains. This has caused APEEL to consider the role of other areas of legislation that are not principally focused on the environment (see Australian Panel of Experts on Environmental Law, *Energy Regulation* (Technical Paper 6, 2017) and Australian Panel of Experts on Environmental Law, *The Private Sector, Business Law and Environmental Performance* (Technical Paper 7, 2017)) and also to examine the concept of environmental democracy as a means of reinforcing the effective implementation of environmental law (see Australian Panel of Experts in Environmental Law, *Democracy and the Environment* (Technical Paper 8, 2017)).

APEEL also understands that law is only one of a number of necessary means for delivering such a goal and that other mechanisms will be necessary. These may involve different institutional and procedural approaches to governance in the future, including the concept of shared governance (see Australian Panel of Experts on Environmental Law, *Environmental Governance* (Technical Paper 2, 2017)); the reform of financial and investment systems (see Australian Panel of Experts on Environmental Law, *The Private Sector, Business Law and Environmental Performance* (Technical Paper 7, 2017)); and new types of business or commercial initiatives such as social entrepreneurship (also *Technical Paper 7*). Hence, whilst law provides an important vehicle for the recognition and endorsement of the relevant societal goal, APEEL accepts that the law cannot provide the full means to ensure that this goal will be achieved.

⁵⁷ See for example, *EPBC Act* section 3A (d) for a statement of this objective.

⁵⁸ Council of Australian Governments, *National Strategy for Ecologically Sustainable Development* (1992) <<http://www.environment.gov.au/about-us/esd/publications/national-esd-strategy-part1>>; World Commission on Environment and Development, above n 32.

⁵⁹ Bosselmann, above n 29.

There is also an interesting question of whether it is possible for there to be a point in time at which such a goal could be determined to have been achieved. The *NSESD* carried the following significant caveat: ‘Governments recognise that there is no identifiable point where we can say we have achieved ESD’. Rather, achievement of a goal may need to be measured against meeting ongoing performance indicators, which in turn may often require continual monitoring and adjustment, as the philosophy of ‘adaptive management’ espouses.⁶⁰ The enunciation of ‘sustainable development indicators’ has been advanced by the European Community, the UN and other entities to help track progress towards ESD goals, and presently this mechanism appears to offer the best means of monitoring achievements and progress.⁶¹ As noted below, it is also necessary from time to time to re-evaluate and redefine the relevant goal and not to see it as a static, permanent concept (both in terms of its prescription and its means of implementation).

With respect to the appropriate societal goal for environmental law, APEEL concludes that ESD has had some influence on decision-making and regulation in Australia, but, as in other jurisdictions such as New Zealand,⁶² Canada⁶³ and the United Kingdom,⁶⁴ it does not yet appear to have been truly transformative.⁶⁵ Whether this is largely a consequence of difficulties in its implementation, or is due to more fundamental limitations with respect to the nature of the concept itself, remains the subject of considerable debate, including amongst the members of APEEL.

2.3 Proposals for reform

The mixed record of implementation of ESD in Australia suggests several possible conclusions, which each imply different scenarios for law reform, as follows:

- ESD is a useful goal for environmental law, but it needs to be implemented properly;
- ESD has not served to adequately achieve environmental objectives, thereby necessitating the development of a reformed version that involves a substantially revised approach; or
- the essence of the ESD goal is important, but Australia now needs to go beyond it and adopt a more expansive goal to complement or even replace it.

⁶⁰ See Craig R Allen and Ahjond Garmestani (eds), *Adaptive Management of Socio-Ecological Systems* (Springer, 2015).

⁶¹ United Nations, *Indicators of Sustainable Development: Guidelines and Methodologies* (UN, 2007).

⁶² New Zealand was probably the first country to enshrine a variation of ESD in its legislation as a national goal, nearly a decade before Australia. The *Resource Management Act 1991* (NZ), which consolidated and modernised many of New Zealand’s disparate environmental laws into one super statute, obliges decision-makers to promote the goal of ‘sustainable management’ of the country’s natural resources, along with obligations to consider cognate ‘matters of national importance’ (for example, the relationship of Maori with their ancestral environments), and the need to ‘have particular regard’ to many enumerated values, including an ‘ethic of stewardship’ and the ‘intrinsic value of ecosystems’. The New Zealand legislation has been widely acclaimed for its visionary path, and in some respects is well ahead of Australian federal laws. On the other hand, the *Resource Management Act* has attracted significant criticism for being overly time-consuming and expensive to administer and is perceived by some as a major impediment to economic activity – with these concerns leading to some amendments to the legislation to soften its effects. It has also been difficult to translate the ambitious provisions into practical, day-to-day rules and standards. See Owen Furuseeth and Chris Cocklin, ‘Institutional Framework for Sustainable Resource Management: The New Zealand Model’ *Natural Resources Journal* (1995) 35, 243; and Owen McShane A ‘Think Piece’ on *Land Use Control under the RMA* (Ministry for the Environment, 1998). For recent developments, see David Grinlinton and Peter Salmon (eds), *Environmental Law in New Zealand* (Thomson Reuters, 2015).

⁶³ During the 1970s and 1980s, Canada was acclaimed globally for its progressive approach to environmental law reform. A number of Canadian environmental laws ostensibly still embody the norms of ESD, including the *Canada Environmental Assessment Act*, SC 2012, c 19 and the federal *Sustainable Development Act*, SC 2008, c 33. The *Canada National Parks Act*, SC 2000, c 32 introduced a novel goal based on ‘ecological integrity’ as the ‘first priority’ for the management of the federal parks system. Even more ambitious laws are found in some provinces, such as Nova Scotia’s *Environmental Goals and Sustainable Prosperity Act*, SNS 2007, c 7. But Canada’s reputation has waned in recent years and, under the previous Harper administration, there was extensive rewriting and even abolition of many environmental regulations. Commentators have observed that there is sometimes a significant disparity between the letter of the law and its administration owing to several factors, including judicial deference to deviating government practices, the powerful influence of the extractive industries sector, the country’s preoccupation with its international market competitiveness, and federal-provincial government tensions. See Stepan Wood, Georgia Tanner and Benjamin J Richardson, ‘What Ever Happened to Canadian Environmental Law’ (2011) 37 *Ecology Law Quarterly* 981. For an earlier critique, see David R Boyd, *Unnatural Law: Rethinking Canadian Environmental Law and Policy* (UBC Press, 2003).

⁶⁴ United Kingdom environmental laws are at least notionally heavily influenced by legal trends in the Europe, which has enshrined sustainable development as a fundamental goal in the constituent treaties of the European Union and European Community; see for example, *Treaty on European Union*, opened for signature 7 February 1992, [1992] OJ C 191/1 (entered into force 1 November 1993), as amended by *Treaty of Amsterdam Amending the Treaty on European Union, the Treaties Establishing the European Communities and Certain Related Acts*, opened for signature 2 October 1997, [1997] OJ C 340/1 (entered into force 1 May 1999), art 2; also, see Marc Pallemerts and Albenaz Azmanova (eds), *The European Union and Sustainable Development* (Institute for European Studies, 2006). However, the UK’s principal environmental laws, including the *Environmental Protection Act 1990* (UK), use sustainable development in a manner that provides no real influence upon development approvals due to problems of legislative complexity, incoherence, and a lack of clarity, integration and transparency; see UK Environmental Law Association, *The State of UK Environmental Law 2011-2012: Is There a Case for Legislative Reform* (UKEKLA, 2012) 6.

⁶⁵ See generally Robert V Percival, *Environmental Regulation: Law, Science and Policy* (Wolters Kluwer, 2009); Richard Macrory (ed), *Reflections on Thirty Years of EU Environmental Law* (2006); Richard Revesz, Philippe Sands and Richard B Stewart (eds), *Environmental Law, the Economy and Sustainable Development: The United States, the European Union and the International Community* (Cambridge University Press, 2008); and Benjamin J Richardson and Nicole Bakker, ‘Breaching the Maginot Line: The Frailty of Environmental Law in Europe and North America’ in P Taylor (ed), *Environmental Law for a Sustainable Society* (New Zealand Centre for Environmental Law, 2013) 51.

All of these possibilities should be laid on the table for consideration in a new process that is aimed at achieving substantial agreement at a national level on a new or revised societal goal that will in turn underpin the next generation of environmental law. **Accordingly, APEEL recommends that it is desirable to initiate a new, wide-ranging consultative process for the purpose of building a consensus on a new societal goal for Australia that could enhance or even replace the current ESD goal. This means, in practice, that Australia needs a new national strategy to replace or update the *NSESD*, especially in light of the adoption by the UN in 2015 of a new set of *SDGs*.**

In advancing this proposal, it is noted that the *NSESD* is now more than two decades old and has never been the subject of any formal revision process.⁶⁶ It is now commonplace for the many countries that adopted national sustainable development strategies (since 1990) to have undertaken regular revisions of these strategies from time to time. Most of these countries are now on a third or subsequent iteration of their original strategy.⁶⁷ In stark contrast, Australia remains saddled with a strategy that reflects the significantly different economic, social and environmental conditions of the late 1980's and which, not surprisingly, has been largely ignored for some years now as a prescription for the future direction of Australian society. On this basis alone, the time is long overdue for a fresh exercise to redefine Australia's relevant national societal goal.

The debate around a new societal goal must also take into account that Australia is a party to numerous international environmental treaties and associated international instruments, many of which affirm sustainable development and related principles for its environmental laws. Therefore, in reflecting on the future role of ESD in Australian environmental law, it is important to keep in mind Australia's existing international legal obligations, whilst also considering alternative paradigms that enjoy increasing support.

In this regard, the recent adoption by the UN in 2015 of the *SDGs*, a decision that the Australian government supported, provides a significant guide to possible fresh directions with respect to the proposed new societal goal and provides a compelling reason of itself to undertake the review process now recommended. Consistent with the 'bottom-up' approach that is envisaged with respect to implementation of the *SDGs*, Australia is obliged to report regularly to the UN on the strategies, targets and other means by which it will contribute to the achievement of the *SDGs* by 2030.

There is a growing body of commentary on how developed countries could address this task.⁶⁸ APEEL is of the opinion that the existing *NSESD* cannot satisfy these obligations and that a new process therefore is required. In this regard, attention is drawn to a recent report by the Stakeholder Forum, which provides some insights into the implications of the *SDGs* for developed countries such as Australia. After noting that, for developed countries, the *SDGs* will require 'new economic paradigms and changes in patterns of behaviour, as well as new policies and commitments of resources', the report concludes:

'In our initial analysis, the methodology identifies the goals of sustainable consumption and production (SDG 12), sustainable energy (SDG 7) and combating climate change (SDG 13) as the three most transformational challenges facing developed countries – and as being the challenges on which the world at large needs to see the developed world place a strong emphasis for action so as to relieve the overall anthropogenic pressures on the planet and its natural systems. Other goals involving significant transformational change in developed countries include the need to achieve more sustainable economies and growth pathways, the goal of greater equality, and the goals to achieve better protection of the oceans and of terrestrial ecosystems'.⁶⁹

APEEL recognises also that perceptions as to which one of the *SDGs* should be accorded the highest priority will be likely to differ across different sectors and stakeholders. For example, a recent survey of Australian and New Zealand

66 APEEL acknowledges, however that the guiding principles of the *NSESD* were broadly adopted in the *EPBC Act*, and that the Act in turn has been subject to a formal review (see *The Australian Environment Act: Report of the Independent Review of the Environment Protection and Biodiversity Conservation Act 1999* (Final report 30 October 2009). APEEL notes also that subsequent strategies which were designed to complement the *NSESD* have been subject to review (for example, the *Australia's Biodiversity Conservation Strategy* that is currently under review, see <<http://www.environment.gov.au/biodiversity/conservation/strategy>>).

67 See Klaus Bosselmann, *National Strategies for Sustainable Development: Options for New Zealand* (NZ Centre for Environmental Law Monograph Series 4, 2014) <<http://www.amazon.com.au/National-Strategies-Sustainability-Options-Monograph-ebook/dp/B00T256JN6>>.

68 For example, see German NGO Forum on Environment and Development, *Implementation of the Global 2030 Agenda for Sustainable Development in and by Germany* (March 2016) <www.forumue.de>. See also Mark Halle and Robert Wolfe, *Follow-Up and Review for the 2030 Agenda: Bringing coherence to the work of the HLPF* (The International Institute for Sustainable Development, March 2016) <www.iisd.org>.

69 Stakeholder Forum, 'Universal Sustainable Development Goals: Understanding the Transformational Challenge for Developed Countries' (May 2015) <http://www.stakeholderforum.org/images/stories/SF_-_SDG_Universality_Report_-_May_2015.pdf>.

industries found a high level of interest in advancing the *SDGs* agenda via strategic partnerships, with the most important goals being identified as gender equality (*SDG 5*), good health and wellbeing (*SDG 3*), decent work and economic growth (*SDG 8*), industry innovation and infrastructure (*SDG 9*), and climate action (*SDG 13*).⁷⁰ Caution will also be needed concerning the inter-relationship of these goals when implementing them, particularly in terms of achieving balanced and integrated outcomes.

APEEL notes a recent report by the UN Special Commissioner on Human Rights, John Knox, which identifies a link between the *SDGs* and human rights related to environmental protection. The report states that:

‘...implementation of the Sustainable Development Goals is highly important to the promotion of human rights and environmental protection. Accordingly, integrating the Goals into national priorities provides an opportunity for states to advance human rights related to the environment’.⁷¹

APEEL pursues the subject of human rights and the environment further in Australian Panel of Experts in Environmental Law, *Democracy and the Environment* (Technical Paper 8, 2017).

Whilst advancing the argument for a process to develop a new societal goal for Australia that encompasses environmental, economic and social needs, APEEL recognises that it is also necessary to have a realistic view of what law can achieve in terms of facilitating the recognition of such a societal goal. The central challenge for modernising Australian environmental law, as in any country, is that legislative prescriptions, no matter how well drafted or designed, are no assurance for success when they clash with other societal values or vested political interests. If law (of any variety) is understood as intended merely to follow or give effect to pre-determined social values, then there is a significant limitation on what can be achieved in Australian environmental law. While many Australians polled in surveys profess to care deeply about their natural environment, individuals tend to be much more reluctant to make meaningful behavioural changes, especially those changes that carry a financial cost to themselves. Consequently, if environmental law is ahead of social values, it will struggle to be implemented (assuming it can be adopted in the first place).

Conversely, if the law is conceived as a means to drive social change, then there is reason to be more hopeful about what it can achieve. The historical record shows that some societies have occasionally and dramatically shifted their moral sensibility through legal reform, for example, through the abolition of slavery, the rise of the animal welfare movement and, most recently, the greatly improved status of women in many countries. Similarly, the legal system might be used to engender or facilitate changes in social values regarding the natural environment, as the imprimatur of law has a legitimating function that can enable the targets of its regulation to be viewed by people as more serious or important. Legislating ambitious action on climate change, for instance, might be viewed by some people as a sign that climate change is indeed a very serious concern that warrants attention.

A third way to conceive the relationship between law and society is somewhere between these two models, namely that the law can create *processes* that serve to enhance participation, understanding and dialogue, which in turn can be harnessed to shape societal values and thereby build the momentum for reform. In Canada, the use of ‘round tables’ including the pioneering work of the former National Roundtable on the Environment and Economy, provides an example of the type of process that can help shape and build a national consensus for environmental policy.⁷² Likewise, Australia’s former Resource Assessment Commission (RAC) in the early 1990s played a seminal role in addressing highly contentious disputes over natural resources management, such as in the forestry sector. The public inquiry mechanism used by the RAC is the kind of institutional process that could be used more widely by law-makers to cultivate shifts in social values.⁷³

Applying these observations to the specific context of identifying a new societal goal, APEEL is of the opinion that the process it recommends for this purpose could be enhanced with legislative backing. The *NSES* was not the product

70 Australian Centre for Corporate Social Responsibility, *Pathways to the Sustainable Development Goals: Annual Review of the State of CSR in Australia and New Zealand 2016* (June 2016) <<http://accsr.com.au/csr-services/latest-research/>>.

71 *Report of the Special Rapporteur on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment*, A/HRC/31/53 (1 February 2016) <http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2729588>.

72 See Wood, Tanner and Richardson, above n 63.

73 Benjamin J. Richardson and Ben Boer, ‘Contribution of Public Inquiries to Environmental Assessment’ (1995) 2 *Australian Journal of Environmental Management* 90.

of a legislatively-mandated process, and was adopted instead through a non-public, political dialogue that involved its adoption ultimately by the Council of Australian Governments (COAG). In the course of this final, political evaluation of the outcomes of an earlier wide-ranging consultative process, compromises were struck in order to achieve political consensus. APEEL recommends an alternative approach that involves a process driven by a Commonwealth authority acting in accordance with a legislative mandate.

Australian Panel of Experts on Environmental Law, *Environmental Governance* (Technical Paper 2, 2017) advances a range of ideas for the reform of ‘environmental federalism’ in Australia, including the development of new Commonwealth institutions and new models and mechanisms for securing nationally coordinated approaches to environmental management. One possibility canvassed in that paper is to establish a Commonwealth Sustainability Commission with wide-ranging powers to promote an ESD/sustainability agenda in Australia, including the oversight of a process to develop a new societal goal in this context. APEEL sees those ideas as dove-tailing closely with the recommendations in this paper concerning the undertaking of a process to develop a new societal goal.

RECOMMENDATION 1.1

The Commonwealth government initiate a wide-ranging, national consultative process for the purpose of building a substantial agreement on a new societal goal for Australia that would enhance or replace the current Ecologically Sustainable Development (ESD) goal contained in the National Strategy for Ecologically Sustainable Development (1992) (NSESD), especially in light of the adoption by the United Nations in 2015 of the new Sustainable Development Goals (SDGs); and that it consider providing for the undertaking of this consultative process in its legislation.

3. Objects of environmental law

3.1 Overview

In pursuing the task of designing the next generation of environmental laws for Australia, a weighty consideration is whether – and how – to define some specific objects that should be attributed to the relevant legislation. This is not at all a theoretical or purely academic exercise. It is now commonplace to include an ‘objects clause’ in both Commonwealth and state environmental legislation, which sets out the purposes of the particular legislation. Such clauses can be referred to by courts when faced with uncertainty as to the meaning or effect of particular statutory provisions, in pursuance of the so-called ‘purposive’ approach to statutory interpretation.⁷⁴ For example, Australian courts have been called upon, from time to time, to decide whether, and to what extent, economic considerations should be taken into account in the exercise of decision-making functions under environmental legislation and have relied considerably in this context on an examination of the relevant objects clauses.⁷⁵

The value of objects clauses is widely accepted in Australia and most other countries. As one researcher explains, ‘[t]he reason for the prominence of objects clauses in Australian environmental law is that they have become a favoured method of introducing contemporary environmental principles and policies into both the federal and state regulatory frameworks’.⁷⁶ In practice, objects clauses have been used for the following distinct purposes:

- to endorse the societal goal of ESD;
- to set out environmental principles or policies, including those that elaborate the ESD goal (for example, the precautionary principle and the principle of inter-generational equity); and
- to identify specific objectives which are directly linked to the context of the particular legislation (for example, to protect native vegetation or to ensure the sustainable management of natural resources).

This part of the paper challenges this multiplicity of functions for objects clauses and proposes a more disciplined and tightly-focused approach to their drafting.

3.2 Analysis

The objectives of current Australian environmental legislation are not solely or wholly to be ascertained from the objects clauses contained therein, even under the purposive approach to statutory interpretation that is now widely endorsed by Australian courts. Judges must still have regard to the broad framework of the relevant legislation and cannot invoke a statement of objects to override the meaning of a provision where that is plain and clear. This means that it is important to take into account, when considering how to frame the next generation of environmental laws in Australia, the general objects of the existing system of environmental laws.

As a general observation, it is evident that a large proportion of current Australian environmental legislation, both Commonwealth and state/territory, has been produced with an underlying assumption that there must be some balancing of environmental and economic considerations in its operation. Environmental planning and protection legislation (for example, land use, EIA, pollution and hazardous chemicals laws) is broadly based on the assumption that activities should be allowed to proceed provided that they do not present unreasonable risks of harm to the

⁷⁴ This is a theory of statutory interpretation which holds that a court should consider the purpose behind a piece of legislation when interpreting its meaning. This approach has been confirmed in Australia – the *Acts Interpretation Act 1901* (Cth) s 15AA states that the interpretation that best achieves the purpose or object of the Act is to be preferred to all other interpretations.

⁷⁵ See for example, the High Court’s decision in *Phosphate Cooperative of Australia v Environment Protection Authority (Vic.)* (1977) 138 CLR 134 (where a majority held that economic considerations were irrelevant in relation to a licensing decision under the *Environment Protection Act 1970* (Vic); for contrary conclusions, see *Bienke v Minister for Primary Industries and Energy* (1994) 34 ALD 413 (holding that the phrase ‘optimum utilisation’ in *Fisheries Act 1952* (Cth) s 5B(b) was not limited to conservation measures and could include economic exploitation for the benefit of the littoral estate; and *Great Barrier Reef Marine Park Authority v India Pacific Pearls* (2004) 82 ALD 627 (holding financial benefits and detriments to a company seeking a pearl licence from the GBRMPA were relevant considerations).

⁷⁶ Brendan Fuller, ‘Statutory Interpretation and Environmental Law in Australia’ (Working Paper, Australian Centre for Environmental Law, 2002) <<https://digitalcollections.anu.edu.au/bitstream/1885/41601/3/StatutoryInterpretationandEnvironmentalLawinAustralia.pdf>>.

environment or human health. There is an increasing invocation of ‘risk-based’ approaches to decision-making under such laws, building on the traditions of cost-benefit analysis, whereby a balance is sought between potential impacts on the one hand and economic considerations on the other (both the potential economic benefits from the proposed activity and the alleged economic costs of more stringent environmental conditions).⁷⁷ It is far more common for activities to be approved subject to prescribed conditions under such laws than to be rejected altogether on environmental grounds.

The same observations may be made with respect to natural resources legislation in Australia, much of which was originally developed by the states well over a century ago for the purpose of ensuring an orderly allocation of land, water, minerals, oil and gas, fisheries and forests to those seeking to exploit such resources. The redesign of such laws over the past 40 or so years has resulted in the emergence of additional (and competing) objectives linked to the sustainable management of renewable resources and the protection of environmental values in the course of permitted extraction. However, there remains an underlying assumption, if not an expectation, that natural resources will be allocated and used for promoting economic development and growth in the perceived wider interests of society. This stance is manifestly evident in state mining, oil and gas laws, which generally enjoy a privileged priority over environmental legislation.

CASE STUDY: OBJECTS OF MINING LAWS IN NSW

The *Mining Act 1992* (NSW), includes in its objects: ‘to encourage and facilitate the discovery and development of mineral resources in New South Wales, *having regard to the need to encourage ecologically sustainable development*’ (emphasis added).⁷⁸ Not only is the wording particularly weak in terms of actually ensuring or achieving ESD, but NSW has also witnessed attempts via a subordinate legal instrument, in this case, a State Environmental Planning Policy (SEPP), to pre-determine decisions by explicitly prioritising economic considerations over social and environmental considerations.⁷⁹ (This is despite the fact that the primary planning laws of NSW also enshrine ESD as an object).

It is only laws that provide for the identification and protection of ‘high value’ components of the environment (for example, protected areas, endangered species, world heritage and built and cultural heritage) where there is an underpinning policy of environmental protection that can be considered to have some priority over economic considerations. But even here, pressures for mining, tourism and logging activities in various types of protected areas continue to create challenges for the effective implementation of such laws, both with respect to resistance to the creation of new protected areas and efforts to open up established conservation areas to development activities. While there are examples of legislative attempts to prioritise environmental protection over activities such as mining, it is impossible to avoid the contest between environmental protection and economic imperatives, except perhaps in relation to some specific sites.

⁷⁷ The merits of ‘risk-based’ regulation and its inter-action with the precautionary principle are discussed below, Section 4.3.1.1.

⁷⁸ *Mining Act 1992* (NSW) s 3A.

⁷⁹ *State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007*, pt 3, cl 12AA ‘Significance of resource’. Sub-clause (4) states: ‘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’. This amendment met with strong community opposition and has since been reviewed and repealed.

CASE STUDY: ARKAROOLA PROTECTION AREA IN SOUTH AUSTRALIA

Located in the northern Flinders Ranges, Arkaroola is widely recognised for its outstanding geological, paleontological, biodiversity, conservation, landscape, wilderness, cultural, educational and tourism values. Community interest and debate about the conservation of Arkaroola led to the state government conducting public consultation on future management arrangements for balancing mining and conservation. On 22 July 2011, the South Australian Government announced that Arkaroola would be permanently protected through the establishment of the Arkaroola Protection Area. The [Arkaroola Protection Act 2012](#) (SA) was enacted to establish the Arkaroola Protection Area and to provide for the proper management and care of the area. In order to achieve the objects of the Act, the legislation specifically establishes that no mining activities, without exception, are permitted within the Arkaroola Protection Area.⁸⁰ The Arkaroola land was reserved from the operation of the *Mining Act 1971* (SA) and the *Opal Mining Act 1995* (SA) by a proclamation of the Governor. This additional level of environmental protection was achieved by site specific, special legislation, rather than by application of more general protected areas legislation.⁸¹

While there are examples such as Arkaroola of statutory objects that prioritise environmental protection, unfortunately many objects clauses fail to provide adequately for environmental protection. If the objectives of environmental legislation, whether explicitly stated in objects clauses or implicitly assumed by legislators when such laws are being drafted and adopted, are inconsistent or flawed in terms of the level of protection that they envisage for the environment, then this is a clear recipe for failure. Such laws are doomed from the outset in terms of achieving their stipulated environmental objectives due to the need for their implementation to take into consideration (and often give priority to) other, competing factors. But the identification of clearer and stronger objectives is not a simple task and, in particular, will be strongly influenced by, and likely to reflect, whatever is the broader societal goal that has been identified or assumed (as discussed in Part 1 of this paper). Thus, there is a clear link between the goals for, and objects of, environmental law.

Specified legislative objects are important to give legal effect to the goals for environmental law. Elevating ESD to the status of a legally binding 'object' rather than a non-binding 'goal' however, requires elaborating on the constituent elements of ESD and determining the weight to give them, especially when legislation may purport to have a variety of objects. The now common practice of including objects clauses in Australian environmental legislation frequently has involved lengthy and wide-ranging prescriptions that provide only marginal, and at times, conflicting guidance with respect to the interpretation of specific provisions. Furthermore, objects clauses often include statements of 'principles' that are of a different character from objectives and therefore not appropriate to include in such clauses.

⁸⁰ *Arkaroola Protection Act 2012* (SA) s 10(1). For further information, see <<http://www.environment.sa.gov.au/our-places/Arkaroola>>.

⁸¹ See *National Parks and Wildlife Act 1972* (SA).

CASE STUDY: EPBC ACT OBJECTS

The *EPBC Act* is less of an offender in terms of the length of its objects clause than many other Acts, but it still reflects an internally conflicted approach to its task. Sub-section 3(1) sets out eight objects of the Act. These include the goal-related objective ‘to promote ecologically sustainable development through the conservation and ecologically sustainable use of natural resources’ and a range of more subject-specific objectives such as ‘to provide for the protection of the environment, especially those aspects of the environment that are matters of national environmental significance’ and ‘to promote the conservation of biodiversity’. Commendably, the Act purports to distinguish objects from principles, and sets out separately in section 3A five widely-recognised ‘principles’ of ESD, including that ‘decision-making processes should effectively integrate both long-term and short-term economic, environmental, social and equitable considerations’. Finally, it also affords specific recognition to the precautionary principle by requiring the Minister to have regard to it when making various decisions under the Act.⁸²

Whilst the *EPBC Act* objects are an example of a relatively disciplined legislative drafting approach, there is nevertheless an internal ambiguity that arises from the objectives related to environment protection and biodiversity conservation on the one hand, and the promotion of ESD, with the specific endorsement of the integrative approach, on the other. This leaves open to varied interpretations the question as to how far it is acceptable to trade off environmental protection and biodiversity conservation objectives and their related values in favour of long-term and short-term economic considerations. This ambiguity is replicated in many other objects clauses in Commonwealth and state legislation and inevitably has resulted in substantial contention with respect to decisions made under such legislation and a lessened confidence in its operation, both on the part of the community and regulated parties.⁸³

3.3 Proposals for reform

APEEL is of the opinion that there should be a more disciplined approach to the drafting of objects clauses in environmental legislation to ensure that they specify only the agreed societal goal for environmental law and the more specific objects of the particular legislation.

APEEL supports the inclusion within such clauses of specific objectives that are designed to elaborate the agreed, broader societal goal. As discussed below in relation to the principles of environmental law, this paper considers the ‘principles’ of inter and intra-generational equity, which are now embedded in the mainstream conception of sustainable development, to be more in the nature of a statement of objects than legally binding, directing principles. It would be appropriate therefore that these be given a specific recognition as part of the relevant societal goal articulated in an objects clause. To avoid the length and complexity that typifies current objects clauses, APEEL recommends that these aspects of the goal could be identified in the definitions clause that is usually included at the beginning of Australian legislation.

APEEL also supports the inclusion in objects clauses of a limited number of additional objectives that relate to the specific subject-matter of the legislation involved. There is still an important role for objects clauses to perform in providing a clearly-focused statement of the specific objects of each piece of environmental legislation that is related to its particular context. APEEL recommends that there be a much greater alignment between these respective types of objectives (goal-related and legislation-specific) in order to avoid the internal ambiguity and inconsistency that is

⁸² *EPBC Act* s 391.

⁸³ Arguably, the *EPBC Act* should be interpreted as giving primacy to the conservation of biodiversity and ecological integrity as the Act declares in section 3A that these are a ‘fundamental consideration in decision-making’ (emphasis added). This imperative also has been acknowledged in the *NSESD*, whose stated ‘core objectives’ include to ‘protect biological diversity and maintain essential ecological processes and life-support systems’ (emphasis added), however, the significance of this guiding principle is diminished by its presentation alongside a number of other, different principles.

widely evident in objects clauses in current environmental legislation, particularly with respect to the balancing of economic and environmental considerations.⁸⁴

APEEL also urges a clear separation between the statement of these goal-related objectives and the prescription of ESD/sustainability related principles of a 'directing' nature that are to be required to be applied in the course of exercising administrative functions provided for by environmental legislation. Such principles serve a distinct purpose from prescribed objects, in that they are essentially legally-required considerations, whereas objects are, or at least should be considered to be, simply an aid to the interpretation of particular aspects of legislation where some ambiguity or doubt exists with respect to their meaning. APEEL therefore advocates the exclusion from objects clauses of requirements for those charged with the implementation of the legislation to take into account various principles of a directing nature spelled out therein. APEEL urges instead that such principles be set out separately elsewhere in environmental legislation as matters that are required to be referred to and applied in the exercise of various functions under such legislation.

RECOMMENDATION 1.2

Law-makers should adopt a more disciplined approach to the drafting of objects clauses in the next generation of Australian environmental legislation to ensure that: (1) they specify only the agreed societal goal for environmental law and some more specific objects applicable to the context of the particular legislation; (2) closely align these goal-related and context-specific objects statements; and (3) avoid the inclusion of principles of a 'directing' nature in such clauses.

⁸⁴ This tension between economic and environmental considerations may also be lessened if the recommendations in Australian Panel of Experts on Environmental Law, *The Private Sector, Business Law and Environmental Performance* (Technical Paper 7, 2017) are adopted with regard to reforming corporate law, tax law and other aspects of economic governance that presently often convey signals contrary to ESD.

4. Principles of environmental law

4.1 Overview: differentiating environmental law principles

In seeking to establish the foundations upon which the next generation of environmental laws in Australia should be built, APEEL has set itself the task of identifying the ‘core’ principles that will underpin this system. The idea that the next generation of Australian environmental laws should be based upon such principles is disarmingly simple, but quite challenging in its application. At the outset, as has been explained in the previous two sections of this paper, it is necessary to distinguish principles from goals and objects. For example, the so-called ‘principle’ of ESD in support of the conservation of biological diversity and ecological integrity is better regarded as an object, in that it is purposive and directed to a desired outcome. Many other purported principles of environmental law likewise are essentially objects in reality. For example, the *Earth Charter*, which is claimed to be a declaration of principles for a just, sustainable and peaceful world, actually comprises 16 statements that are mainly objects that can contribute collectively to the achievement of its overall goal. By contrast, the essential element of a principle is its capacity to guide how something happens or works, or to operate as a rule that is to be followed. By applying this test, APEEL believes that it is possible to identify several distinct types of principles that each serve a particular purpose related to the design of the next generation of environmental laws.

There are now numerous collations and catalogues of so-called environmental law principles (see text-box immediately below).⁸⁵ An early statement of principles of environmental law was produced in the 1987 *report of the United Nations World Commission on Environment and Development, Our Common Future*,⁸⁶ and other versions have emerged since.

BOX 3: LINKS TO LISTS OF RECOGNISED AND EMERGING ENVIRONMENTAL LAW PRINCIPLES

- The United Nations *World Charter for Nature* (1982), identifies 24 principles and prescriptions. See: <http://www.un.org/documents/ga/res/37/a37r007.htm>
- The United Nations *Rio Declaration on Environment and Development* (1992), sets out 27 principles. See: <http://www.un.org/documents/ga/conf151/aconf15126-1annex1.htm>
- The *Declaration by the European Council on the Environmental Imperative* (1990).
- See: <https://www1.umn.edu/humanrts/environmentaldeclaration.html>
- **The *Earth Charter*** (2000). See: <http://earthcharter.org/discover/what-is-the-earth-charter/> (but, as noted above, this is an ethical framework for building a just, sustainable, and peaceful global society that identifies 16 principles, better described as objects).
- The *Draft IUCN International Covenant on Environment and Development (Part II)* (5th edition, Updated Text, 2010). See: http://cmsdata.iucn.org/downloads/eplp_31_rev_4.pdf

⁸⁵ See Eloise Scotford, *Environmental Principles and the Evolution of Environmental Law* (Hart Publishing, 2016).

⁸⁶ World Commission on Environment and Development, above n 32.

This ‘catalogue’ approach of listing and explaining a range of purported principles of environmental law has some educational value, but it does not offer a clear and convincing basis for their recognition and reflection in environmental legislation. APEEL considered a large number of the principles identified in these various ‘catalogues’, but has decided to take a more nuanced approach by seeking to categorise environmental law principles **according to their function**, rather than simply compiling a shopping list of general principles. Accordingly, in this paper, the focus is on two specific categories of principles that serve quite distinct functions. These are principles that guide how laws are designed and drafted (**design-based principles**); and principles of a rules-based nature that must be applied by decision-makers when they are performing functions under environmental legislation (**directing principles**).

Before elaborating on these two types of environmental law principles, it is important to note that there is at least one other possible functional category involving **principles for allocating roles and responsibilities** (for example, the subsidiarity principle) and that this area is explored in Australian Panel of Experts on Environmental Law, *Environmental Governance* (Technical Paper 2, 2017). Also, APEEL does not seek to canvass here those principles which operate exclusively in the international environmental law sphere, which serve to define relationships and responsibilities between nations with respect to environmental harm (for example, the principle of common, but differentiated responsibility which has been invoked in relation to climate change mitigation).

4.2 Design-based principles

4.2.1 Description and analysis

A substantial proportion of the principles that have been identified in the various catalogues serve the function of setting out guidelines or criteria that should be applied to the design of environmental legislation. Such principles can be reflected in the provisions of environmental legislation through the various mechanism and tools that are provided for therein. A simple example is the widely-accepted *polluter pays principle*. Whilst it might be possible to recognise this principle explicitly in legislation, there is usually no direct legal consequence in doing so. Unlike statements of objectives, the articulation of this principle in legislation is unlikely to assist in its interpretation. Likewise, it is unlikely to constitute a workable rule to be applied in the performance of functions prescribed by legislation and hence APEEL concludes that it should not be regarded as a directing principle, but rather as a design principle.

APEEL suggests that there is nothing to be gained by incorporating design-based principles *within* environmental legislation, although it is common for this to be done by way of inclusion in lengthy objects clauses (thereby also confusing the distinction between objects and principles). On the other hand, the identification and endorsement by other means⁸⁷ of specific design-based principles that are intended to guide the substantive content of environmental legislation is highly desirable. For example, in the case of the *polluter pays principle*, it may result in the application of this principle through legislative provision for regulatory measures that enable the recovery of the costs of pollution incidents from responsible parties or the legislative prescription of market-based mechanisms that place a price on particular forms of pollution.

APEEL recommends that design-based principles may themselves be divided into seven sub-categories.

First, there is a group of principles that have been advocated as a means of promoting the objective of ‘**smart regulation**’⁸⁸, including the following:

- the *policy mix principle* – that is, a complementary range of instruments is desirable to address an issue. These should include regulatory tools, economic measures, information-based measures, self-regulatory alternatives (for low impact, low risk activities) and voluntary measures.

⁸⁷ For example, governments might endorse design principles via a strategy statement that expresses the principles upon which they intend to base their legislation, policy and management approaches with respect to the environment. Alternatively, design principles could be incorporated as a specific component of a sustainable development strategy, provided that, in so doing, they are clearly distinguished from directing principles.

⁸⁸ Neil Gunningham and Peter Grabosky, *Smart Regulation: Designing Environmental Policy* (Clarendon Press, 1998).

- the *parsimony principle* – that is, less interventionist instruments or approaches should be applied first to achieve desired environmental outcomes (for example, it would make little sense to deploy scarce enforcement resources on those who are willing to comply voluntarily under less interventionist approaches).
- the *escalation principle* – that is, regulatory measures should ascend a dynamic instrument pyramid to the extent necessary to achieve policy goals.⁸⁹

Second, there are design principles that promote various **economic measures**, the most widely-recognised being the principle that polluters should pay for their environmental impacts. There is also the principle that has been recognised in the *IGAE*, the *NSESD* and the *EPBC Act* that supports *improved valuation, pricing and incentive mechanisms*. This principle has been poorly applied in practice via legislation (for example, a clear pricing mechanism for carbon emissions was repealed in 2014) and it also requires complementary measures such as the reform of Gross Domestic Product (GDP) accounting and the development of new indicators of environmental performance.

A third sub-category of design-based principles involves the endorsement of particular **regulatory tools or mechanisms** that should be incorporated within environmental legislation, for example, EIA as a means of providing for robust and preferably independent scientific advice to decision-makers. APEEL also specifically includes here the variant of EIA, strategic environmental assessment (SEA), which covers plans and programs.⁹⁰

A fourth sub-category of design principles involves the recognition of principles related to procedures for achieving **environmental democracy**, the most widely accepted of which are the so-called ‘three pillars’ that arise from the *Aarhus Convention: access to information, public participation and access to justice*.⁹¹ For each of these ‘pillar’ principles to have any direct legal force or effect, it is necessary for environmental legislation to establish specific procedural mechanisms to give effect to them. For example, with respect to access to justice, there must be legislative provision for open standing or the avoidance of costs awards in public interest cases. To these core environmental democracy principles could be added principles in support of transparency and accountability in the administration of environmental legislation and the emerging principle of free, prior and informed consent in relation to actions that might have a serious impact within the lands of indigenous peoples. These matters are dealt with in detail in Australian Panel of Experts in Environmental Law, *Democracy and the Environment* (Technical Paper 8, 2017).

The remaining sub-categories of design principles that APEEL identifies involve new and evolving concepts that are still undergoing development. These relate to ensuring responsiveness and flexibility in environmental management, to recognising the need for environmental restoration at an ecosystem level and to avoiding regression in the levels of environmental protection afforded by law.

APEEL recommends the recognition of a design principle of **flexible and responsive environmental governance** in view of the fact that environmental conditions are rarely static. APEEL suggests it is essential that the next generation of environmental legislation enables environmental governance to have the flexibility to adapt to changing circumstances. Pollution standards may need to be strengthened, water allocations may need to be cut or nature conservation plans may need revision. Climate change, if unmitigated, will likely intensify the pace of environmental change, often in an adverse manner through events such as more frequent droughts and inundation of coastal shorelines. Apart from the dynamic properties of the environment, social values also shift and with time a community might demand higher or different environmental standards.

A number of APEEL papers, including Australian Panel of Experts on Environmental Law, *Terrestrial Biodiversity Conservation and Natural Resources Management Governance* (Technical Paper 3, 2017), highlight the need for the next generation of Australian environmental laws to be more flexible and responsive to their dynamic context. APEEL therefore concludes that a foundational design principle in support of this concept should be recognised for the next

⁸⁹ One example of how this principle is applied is in relation to establishing a hierarchy of options to address non-compliance with an environmental law. An inspector might assume a duty holder was willing to comply voluntarily and send an information letter explaining legal requirements. However, if this did not produce willing compliance, this might escalate to a warning letter, then to a remediation or clean up notice, followed by a penalty notice, with the option of last resort involving legal action in the form of civil or criminal sanctions.

⁹⁰ APEEL notes other types of assessments may be associated with EIA, including with respect to cumulative, health, social and strategic impacts.

⁹¹ *Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters*, opened for signature 25 June 1998, 2161 UNTS 447 (entered into force 30 October 2001).

generation of Australian environmental law. APEEL is of the opinion that it behoves regulators to design policies and laws that are capable of being adjusted in light of performance failures, new environmental circumstances, changing scientific knowledge and evolving social values. This may require that future licences and other kinds of environmental authorisations are not necessarily regarded as permanent and immutable, but rather as contingent and open to revision. Similarly, management plans for national parks, rivers, fisheries and other natural resources should be amenable to periodic adjustment.

Having such adaptiveness also may require in some instances that the rights of developers or property owners are articulated differently at the time of being granted. For instance, a right to harvest fish or take water may need to be expressed as a percentage share of a variable allocation rather than a fixed quantitative entitlement. Having increased adaptive flexibility may sometimes even necessitate halting an economic development or resource activity. However, APEEL acknowledges that, in the absence of behaviour which constitutes a serious breach of environmental or other laws (for example, regarding worker safety), such action should only be undertaken where existing property rights and other legal entitlements are respected through due process and compensation arrangements.

APEEL also proposes the introduction of an **environmental restoration principle**.⁹² Whilst some current environmental legislation contains provisions for the rehabilitation of specific places affected by environmental damage (such as former mines or brownfield sites), these provisions have often proved far from effective⁹³ and they rarely address the more ambitious challenge of restoration of entire landscapes and ecosystems. The latter is a particularly serious challenge for Australia given the huge environmental changes and losses across the continent over the past two centuries. Sustaining some aspects of Australia's present environment is unlikely to be attainable if some of this prior damage is not addressed. An explicit design principle concerning environmental restoration could help to address this significant challenge by requiring law-makers to have regard to the opportunities to promote restoration when drafting the next generation of environmental laws. This could be accomplished by including provisions that require the implementation of specific environmental legislation to be guided by a strategic plan for the environmental restoration of any asset, place or resource governed by the relevant legislation (where biologically feasible, socially acceptable and financially affordable). It could also be provided that all decisions under such legislation should take into account the goals of a strategic plan for environmental restoration and the opportunities for environmental restoration that may be available in the course of undertaking any activities that are subject to such decisions. APEEL considers that any environmental restoration obligations incorporated into legal decisions (for example, approvals, licences, or the adoption of land use plans) need to be framed with reference to an underlying restoration strategy because, without such a 'big picture' strategy, it would be impossible to achieve restoration of the environment through ad hoc, incremental decisions.

In proposing this new principle of environmental restoration, APEEL acknowledges the reality of ongoing ecological change (which will likely intensify if climate change is not mitigated), and emphasises that it should not be understood as requiring reinstatement of environmental conditions that existed in some historic, 'pristine' era, but rather as aiming to improve the complexity, structure and resilience of ecosystems to enable them to adapt to changing conditions. In other words, where ecological changes have resulted in irreparable shifts to a 'novel' ecosystem, any environmental restoration program will need to take a more pragmatic and limited approach.⁹⁴ Even where restoration to a more historic condition might be biologically feasible, it might still be questionable for reasons of community opposition or financial cost.⁹⁵

The final category of emerging design principles is the **principle of non-regression**, which focusses on the overall impact and efficacy of environmental legislation, in particular the idea that there should be no retreat or backwards movement with respect to the level of protection afforded to the environment. In a sense, it provides a direct

92 APEEL defines 'environmental restoration' to mean 'actions to initiate or facilitate the recovery of an ecosystem, in whole or in part, with respect to its integrity, health and sustainability': see Benjamin J Richardson, 'Reclaiming Nature: Eco-restoration of Liminal Spaces' (2015) 2 *Australian Journal of Environmental Law* 1. See also Margaret A Palmer and J B Ruhl, 'Aligning restoration science and the law to sustain ecological infrastructure for the future' (2015) 13 *Frontiers in Ecology and the Environment* 512.

93 See for example, Environmental Justice Australia, *Dodging Clean-up Costs – Six Tricks Coal Mining Companies Play* (April 2016) <https://envirojustice.org.au/sites/default/files/files/EJA_Dodging_clean_up_costs.pdf>.

94 Lauren M Hallett et al, 'Towards a Conceptual Framework for Novel Ecosystems' in R J Hobbs, E S Higgs and C. Hall (eds), *Novel Ecosystems: Intervening in the New Ecological World Order* (Wiley-Blackwell, 2013) 18.

95 Benjamin J Richardson and Ted Lefroy, 'Restoration Dialogues: Improving the Governance of Ecological Restoration' (2016) 24(5) *Restoration Ecology* 668.

counterpart to the principle of responsiveness and flexibility, which promotes the concept of continuous improvement, by seeking to preclude regressive measures. In recent years, the respected French environmental lawyer, Michel Prieur, has promoted the recognition of the *principle of 'non-regression'* as a fundamental element of environmental law. Prieur notes widespread 'back-sliding' in levels of environmental protection in some countries and observes that: '[a]t a time when environmental law is enshrined in numerous constitutions as a new human right, it is paradoxically threatened in substance'.⁹⁶

Whilst this principle is still in its infancy in terms of its international recognition and acceptance, it might usefully inform the development of the next generation of Australian environmental law. In its most credible form, the principle asserts that non-regression in the levels of environmental protection is required for effective environmental regulation at the international, regional, and national levels.⁹⁷ However, the principle has some potential limitations that need to be considered.

One issue is that it may be argued to be inconsistent with the basic constitutional concept of the mutability of legislation (in other words, that laws should be able to be amended from time to time, or even repealed), which is fundamental to the rule of law and democracy. APEEL suggests this objection can be dismissed if the principle is treated for the purposes of domestic law as a design principle rather than a firm legal rule.

A second challenge is that even among committed environmental lawyers and policy makers, there may be disagreement about whether a particular legal change is 'progressive' or 'regressive'. For instance, in recent years, there has been strong disagreement about the use of biodiversity and carbon offsets. Some welcome offsets as a means to efficiently achieve environmental gains, while others view them problematically as providing a loophole for environmentally pernicious development.⁹⁸ More specific and credible criteria are clearly needed for determining whether a law change is to be characterised as 'regressive', as distinct from 'progressive'. For example, if regression is to be assessed according to the intended environmental outcome of a law, then repeal of land clearing laws or repeal of a carbon pricing mechanism provide clear examples of legislative changes that would qualify as 'regressive'. APEEL believes there are many situations in which efforts by governments to wind back existing levels of environmental protection will be readily discernible as 'regressive' in nature and hence susceptible, to the application of this principle. By treating non-regression as a design principle rather than embedding it within the architecture of environmental law regimes, it can serve to operate in a political context in the same way as other design-based principles of environmental law.

4.2.2 Proposals for reform

With the exception of the principles of flexible and responsive environmental governance, environmental restoration and non-regression, the design principles as described above are already widely recognised and well understood. However, they are not consistently reflected in current Australian environmental legislation. APEEL therefore proposes that, together with these three new design principles, they should constitute a simple 'checklist' for governments and legislative drafters to refer to when preparing new or amended environmental legislation that is intended to present the next generation of Australian environmental law.

⁹⁶ Michel Prieur, 'Non-Regression in Environmental Law' (2012) 5(2) *Surveys and Perspectives Integrating Environment and Society* 53 <<https://sapiens.revues.org/1405>>.

⁹⁷ The International Union for the Conservation of Nature (IUCN) has provided a qualified endorsement of the non-regression principle, at its 2012 World Conservation Congress. Noting 'the need for measures to prevent backsliding or regression on the level of protection attained by each state according to its development status', the Congress resolved to urge 'national governments to recognise that non-regression in their environmental law and policy is necessary for achieving sustainable development objectives except where flexibility enhances conservation': see WCC-2012-Res-128-EN, 'Need for non-regression in environmental law and policy' <http://2012congress.iucn.org/member_s_assembly/resolutions/>.

⁹⁸ Philip Gibbons and David Lindenmayer, 'Offsets for Land Clearing: No Net Loss or the Tail Wagging the Dog?' (2007) 8 *Ecological Management and Restoration* 26; Ricardo Bayon, Nathaniel Carroll and Jessica Fox (eds), *Conservation and Biodiversity Banking* (Earthscan, 2008). Offsets are also addressed in Australian Panel of Experts on Environmental Law, *Terrestrial Biodiversity Conservation and Natural Resources Management Governance* (Technical Paper 3, 2017).

RECOMMENDATION 1.3

When designing the next generation of Australian environmental laws, law-makers should draft legislation that is consistent with, and gives effect to, the following ‘design-based’ principles:

- *Principles of smart regulation;*
- *Principles supporting the use of economic measures;*
- *Principles that endorse specific, widely-recognised regulatory tools and mechanisms; and*
- *Principles in support of environmental democracy;*

together with the following new principles which have not yet been widely recognised or adopted in Australia:

- *A principle of flexible and responsive environmental governance;*
 - *A principle of environmental restoration; and*
 - *A principle of non-regression*
-

4.3 Directing principles

4.3.1 Description and analysis

Rules-based principles have been described by the European legal scholar, Nicholas de Sadeleer, as ‘directing principles’. De Sadeleer suggests that these principles take the form of rules of indeterminate content and that they defy the dichotomy between principles and rules identified by the legal philosopher, Ronald Dworkin.⁹⁹ De Sadeleer proposes three directing principles of environmental law: the polluter pays principle; the precautionary principle; and the prevention principle and argues that precaution and prevention are more significant than the polluter pays principle because they are designed to avoid environmental harm rather than impose liability for it.

In terms of established, well-recognised directing principles, APEEL agrees with De Sadeleer’s endorsement of the precautionary and prevention principles as directing principles. However, as noted above, APEEL believes that the polluter pays principle is better regarded as a design principle than as a directing principle that operates as a legal rule as it provides a clear conceptual basis for the design of specific provisions within environmental legislation that will ensure the internalisation of the costs of environmental harm (for example, load-based licensing provisions, the imposition of obligations with respect to the clean-up of pollution and compensation of victims and provision for the payment of natural resources damages).

APEEL has formed the view that directing principles involve the imposition of a legally enforceable duty imposed by legislation on decision-makers to seriously address particular prescribed matters when exercising their statutory functions. APEEL believes both the precautionary principle and the prevention principle fall into this category and constitute well-recognised and accepted examples of directing principles. Before examining these particular principles in detail, however, it is necessary to elaborate a little further on the specific legal nature and effect of these principles. APEEL has suggested, in defining the term ‘principle’, that directing principles are ‘rules-based’ in nature and are required to be applied in the implementation of environmental law (both in the making of decisions and the development of policies, plans and programs). They are therefore of a higher status than so-called ‘relevant considerations’ which are required to be taken into account by those implementing environmental legislation. Many

⁹⁹ See Nicolas De Sadeleer, *Environmental Principles: From Political Slogans to Legal Rules* (Oxford University Press, 2002).

environmental law cases involving judicial review of administrative decisions indicate how it is relatively simple for decision-makers to satisfy a court that they have ‘had regard to’ required relevant considerations, whilst also proceeding to ultimately dismiss them in the particular circumstances.

APEEL therefore suggests that when the directing principles outlined below are incorporated into the next generation of Australian environmental legislation, the relevant provisions should use language that is considerably stronger than the conventional statutory requirement to ‘have regard to’ particular matters. Looking to suitable precedents overseas, the *Environment (Wales) Act 2016* requires that the Minister administering the Act ‘must apply’ the principles of sustainable management of natural resources set out in the Act (s 4(1)(b)). An even stronger mandate is imposed under the *Canada National Parks Act (SC 2000, c32)*, section 8(2) of which provides that ‘the maintenance or restoration of ecological integrity...shall be the first priority’ of the Minister administering the Act. Strong statutory language along the abovementioned lines is required to ensure that the status of these fundamental, ‘directing’ principles is appropriately reflected in the next generation of Australian environmental law.

4.3.1.1 The precautionary principle

In environmental law, the precautionary principle requires that where there are threats of serious or irreversible damage to the environment, lack of full scientific certainty shall not be used as a reason for postponing measures to prevent environmental degradation.¹⁰⁰ There are various ways in which the precautionary principle may be applied in practice. It can, for example, provide a principled justification for the adoption of policies and laws of a preventive nature in the face of a lack of full scientific certainty, as has been argued is warranted with respect to climate change mitigation. In this regard, it might be characterised as a type of design principle. But it is clear that it may also operate as a directing principle, by being prescribed as a relevant consideration for decision-makers (see for example, the *EPBC Act*, s 391(1)). What this means, or at least should mean in practice, is that where scientific knowledge about possible environmental damage likely to arise from a proposed activity is incomplete or uncertain, decision-makers should err on the side of caution by not approving such activity where there is the possibility of serious or irreversible damage. There is an obvious ‘threshold’ issue involved in this regard as to when such a possibility exists. This can result in the principle becoming subject to significantly differing interpretations and application.

APEEL believes that the effective implementation of the precautionary principle in Australia has been undermined by a reluctance on the part of both decision-makers and Australian courts to give vigorous effect to it in many instances. The proper application of this principle requires a willingness by decision-makers to look beyond conventional or mainstream scientific evidence and take into account epistemological, methodological and sociological deficiencies in the current science; it also necessitates public engagement in this investigative process.¹⁰¹ For instance, while a scientific risk assessment may reveal the boundaries of certainty and uncertainty, democratic decision-making needs also to properly take account of the community’s perception of, and appetite for, risk, and must include provision for appropriate risk communication and management measures. These are necessary features of a precautionary approach that are not addressed through scientific risk assessment alone.

In the courts, proper application of the principle will also require a change in legal culture to countenance reference by decision-makers not only to scientific risk assessments, but also to these other forms of understanding of risk arising from democratic and political processes.¹⁰²

¹⁰⁰ This prescription of the precautionary principle is presented in the *IGAE*, cl 3.4; the *NESD Guiding Principles*; and, in a slightly restructured format, in section 391(2) of the *EPBC Act*. It differs slightly from the prescription presented in article 15 of the *Rio Declaration on Environment and Development 1992* by excluding the term ‘cost-effective’ in relation to ‘measures to prevent environmental degradation’; however, the *IGAE* also states that the application of the principle should be guided by ‘an assessment of the risk-weighted consequences of various options’. For a detailed judicial analysis of the principle, see the judgment of Preston CJ in *Telstra Corporations Case* (2006) 67 NSWLR 256, where he concludes that, in applying the principle, preventive measures should be proportionately calibrated to the threatened damage.

¹⁰¹ See J Peel, *The Precautionary Principle in Practice – Environmental Decision-making and Scientific Uncertainty* (The Federation Press, 2005). See also C Bryan, ‘Co-opting the precautionary principle: The Victoria Planning Provisions’ “one kilometre consent requirement” for wind energy facilities’ (2016) *Environmental Planning and Law Journal* 203, 211.

¹⁰² Jacqueline Peel, ‘When (Scientific) Rationality Rules: (Mis)Application of the Precautionary Principle in Australian Mobile Phone Tower Cases’ (2007) 19 *Journal of Environmental Law* 103; see also Bryan, above n 101.

There is an additional, potential challenge to the proper application of the precautionary principle that is presented as a result of the widespread endorsement by Australian governments of so-called ‘risk-based regulation’ which focuses on achieving prescribed outcomes, whilst minimising regulatory processes and compliance costs.¹⁰³ This approach is now being widely adopted by state and Commonwealth environmental authorities across a range of regulatory processes, including environmental licensing, EIA processes and natural resources management (for example, mining regulation).¹⁰⁴ A recent example is the adoption by the Commonwealth of a performance-based approach to the setting of conditions for approvals under the *EPBC Act*.¹⁰⁵

Risk-based regulation places the responsibility on proponents, in consultation with the regulator, to identify the impacts that may accrue as a result of their proposed activity and then to agree on outcomes that must be met in order to ensure that the impacts remain within acceptable limits. The identification of likely impacts involves a risk-based assessment process that is now widely favoured by environmental authorities in Australia, in preference to the application of more rigid, technology-based standards that have been relied upon in the past. The proponent must then assume responsibility to undertake agreed activities (often framed as conditions) to achieve the agreed outcomes. The proponent is also required to continue to monitor and report in order to demonstrate that the desired conditions are being met and will not be compromised during subsequent operations. The regulator assumes the role of a negotiator to ensure that all relevant impacts are identified, that appropriate conditions are agreed upon for the development proposal to proceed and that these conditions are met and outcomes achieved subsequently during operations.

This approach needs to be linked also to the concept of adaptive management, as described above, in the context of the suggested design principle of flexible environmental governance. Where designated outcomes have not been accomplished, it must be possible under environmental legislation to adjust the conditions applicable to a particular activity to enable the problems to be addressed. In extreme circumstances where significant, unanticipated impacts have occurred, there may need to be a capacity to withdraw approval for the relevant activity (as has occurred recently with respect to attempts to pursue underground coal gasification trial projects in Queensland).¹⁰⁶

APEEL believes that the general merits of risk and outcomes-based regulation are highly contingent upon certain basic requirements being satisfied. Its advocates argue that this approach is particularly suited to situations where risks are relatively predictable, with a corresponding reliance being placed upon an adaptive management process to alter the responsibilities of proponents where unanticipated consequences arise. APEEL considers that a risk and outcomes-based approach that is rigorous, efficient, transparent and well managed can provide a credible method to meet the objectives of environmental legislation, but it is sceptical about the likelihood of these conditions being met regularly in practice. Ensuring that risk and outcomes-based programs manage anticipated risks requires environmental legislation to include **independent review processes** at both the proposal and operation stage. It is also essential that **adequate baseline data** is available and used appropriately to identify all likely impacts from proposed activities and to negotiate required outcomes. Unless such measures are provided for in environmental legislation, and are accompanied by adequate resourcing of environmental authorities to ensure their effective implementation, there is a serious danger that risk-based regulation can become a process of negotiated regulatory outcomes in which the outcomes specified may be compromised or arbitrary and their accomplishment is neither monitored nor guaranteed.

With respect to the specific question of the proper application of the precautionary principle, APEEL believes there is a need to avoid the substitution of the risk and outcomes-based approach for the application of the precautionary principle in circumstances where there is a substantial lack of scientific certainty with respect to potentially serious risks together with a possibility of serious or irreversible damage. As noted above, APEEL believes that the precautionary principle should be recognised explicitly in environmental legislation and given full force and effect in

103 APEEL acknowledges the advice and input of Dr Lyn Brake in relation to the following examination of outcomes-based approaches to environmental management. It nevertheless takes responsibility for the observations and conclusions offered with respect to this topic.

104 For a detailed description of the wide-ranging initiatives with respect to risk-based regulation, see *National Review of Environmental Regulation: Interim Report* (March 2015) 6-9.

105 Department of Environment (Cth), *Outcomes-Based Conditions Guidance* (July, 2015).

106 See ‘Queensland bans underground coal gasification over environmental risks’, *The Guardian* (online), 16 April 2016 <<https://www.theguardian.com/australia-news/2016/apr/18/queensland-bans-underground-coal-gasification-over-environmental-risk>>. As noted above, such action may also give rise to the need for due process and compensation in some circumstances.

those circumstances where it is potentially applicable. Risk-based regulation should not be employed as a negotiated alternative to the deferral of activities in circumstances where the application of the precautionary principle is clearly warranted.¹⁰⁷

4.3.1.2 The prevention principle

The precautionary principle is closely related to, but is widely considered to differ from, the prevention principle, which calls for action to be taken to prevent known risks of environmental harm from materialising.¹⁰⁸ It seeks to address likely or anticipated risks through preventive measures, whereas the precautionary principle deals with uncertain or hypothetical risks by constraining possibly damaging activities.

It is difficult to point to express endorsements of the prevention principle in Australian environmental legislation. Although pollution prevention is often defined in various ways as an object of environment protection legislation, this has not translated into a directing principle of the same nature as the precautionary principle. The prevention principle has its origins in international environmental law, where it calls on states to take anticipatory action to prevent damage to the environment by avoiding, prohibiting or controlling activities that threaten harm, but it has also been widely recognised as a companion to the precautionary principle in European national environmental law.¹⁰⁹ In Australia, courts and tribunals have on occasions called for a 'cautionary' approach in situations where the threshold of uncertainty required to trigger the precautionary principle has not been reached,¹¹⁰ but there has not been a clear endorsement of the prevention principle in this context.

In discussing this situation, Gerry Bates has posed the following question: 'Would it not be more useful for practical decision-making if prevention and precaution were to replace reliance on caution and precaution?'¹¹¹ APEEL believes that an affirmative answer to this question is clearly warranted and therefore supports the recognition of the prevention principle as a separate and additional directing principle that would sit alongside the precautionary principle in the next generation of Australian environmental law. APEEL also notes that the prevention principle has been reflected in a practical manner in some environmental legislation through the prescription of a general environmental duty of care. This concept is discussed in more detail in the next section of this paper.

4.3.1.3 Other 'recognised' directing principles

Another possible directing principle that some commentators believe emanates from the goal of sustainable development is the principle of **inter-generational equity**. This principle is concerned with ensuring that the present generation maintains or enhances the health, diversity and productivity of the environment for the benefit of future generations.¹¹² Whilst this principle has not been prescribed in Australian environmental legislation as commonly as the precautionary principle, it has been invoked occasionally by Australian courts where the goal of ESD has been stated as a legislative objective.¹¹³ It has, for example, been referred to in legislation relating to Aboriginal cultural heritage, as illustrated by the following case study.

¹⁰⁷ Also note the recommendation below to apply a principle of prevention, rather than a so-called 'cautionary approach', in circumstances where risks are thought to be sufficiently clear as to warrant the use of a risk and outcomes-based approach.

¹⁰⁸ Some commentators support the view that prevention as a stand-alone principle is being absorbed into the precautionary principle: for example, see Arie Trouborst, 'Prevention, Precaution, Logic and Law' (2008) 2 *Erasmus Law Review* 106.

¹⁰⁹ See de Sadeleer, above n 99, 125.

¹¹⁰ See for example, *Dixon & Australian Fisheries Management Authority* [2000] AATA 242; see also Preston CJ in *Telstra Corporations Case* (2006) 67 NSWLR 256.

¹¹¹ G M Bates, *Environmental Law in Australia* (LexisNexis, 8th ed, 2013) 252.

¹¹² For example, see the *EPBC Act* s 3A(c).

¹¹³ See for example, *Gray v Minister for Planning* [2006] NSWLEC 720.

CASE STUDY: THE ANDERSON CASE¹¹⁴

In this case, traditional owners of land at Angels Beach, East Ballina, challenged the validity of a consent issued under the NSW *National Parks and Wildlife Act 1974* (NSW) (*NPW Act*) which allowed the destruction of Aboriginal cultural heritage for a residential subdivision. Section 2A of the *NPW Act* specifies that the objects of the Act are to be achieved by applying the principles of ESD. Pain J stated that the consent authority was not literally required by the *NPW Act* to refer to the principles of ESD. However, Pain J found that ‘in the circumstances of this case it is striking that he has not referred to issues relevant to an assessment of significance from an inter-generational perspective’. Pain J went on to state that ‘a key matter attested to in the Applicants’ affidavits and evidence in the case is the importance to Aboriginal people of sites where their ancestors have been present demonstrated by, inter alia, the presence of objects which they consider significant by virtue of that association. Obviously the fewer of these sites that remain, the less opportunity there will be for future generations of Aboriginal people to enjoy the cultural benefits of those sites’.

A leading international scholar on the intergenerational equity principle, Professor Edith Brown-Weiss, has suggested that it constitutes a legal framework that encompasses ‘planetary rights and obligations held by each generation’ and which provides ‘a normative basis for the concept of sustainable development’.¹¹⁵ Viewed this way, it is difficult to categorise this concept as a rules-based principle that is capable of regular application by decision-makers. Anderson’s case, referred to above, is an unusual exception in this regard.

On balance, APEEL concludes that the principle of inter-generational equity may be better regarded as an objective arising from the underlying goal of sustainable development to which regard may be had by decision-makers (and the courts) where it may assist in the interpretation of particular legislation, rather than a directing principle which decision-makers should be required to apply. The same observations are appropriate with respect to the principle of **intra-generational equity**, which also derives its existence from the concept of sustainable development. The principle can be incorporated as part of a defined object of environmental legislation, but more specific measures and tools also will need to be laid out within such legislation for it to have any legal force or effect. In the United States, this has been pursued through various legal measures designed to ensure ‘environmental justice’,¹¹⁶ but there has been little explicit attention devoted to this dimension of environmental law in Australia. APEEL notes that this object has relevance also to the legal context for indigenous peoples and their access to land and other natural resources. These considerations are canvassed in more detail in Australian Panel of Experts in Environmental Law, *Democracy and the Environment* (Technical Paper 8, 2017).

The following section presents proposals for reform with respect to directing principles, including the recommendation of two new principles that could provide valuable reinforcement to the two principles which have just been described and supported. These new directing principles have not been the subject of any serious discussion or recognition in Australia until now, but their adoption as foundational principles for the next generation of environmental laws could significantly enhance the quality and outcomes of environmental decision-making.

¹¹⁴ *Anderson & Anor v The Director-General of the Department of Environment and Conservation & Ors* [2006] NSWLEC 12 [199].

¹¹⁵ Edith Brown Weiss, ‘In Fairness to Future Generations and Sustainable Development’ (1992) 8 *American University Law Review* 19.

¹¹⁶ Michael B Gerrard and Sheila R Foster (eds), *The Law of Environmental Justice: Theories and Procedures to Address Disproportionate Risks* (American Bar Association, 2008).

4.3.2 Proposals for reform

4.3.2.1 Existing directing principles

Both the precautionary and the prevention principles should be clearly prescribed as directing principles in the next generation of Australian environmental law. However, APEEL also recognises that, in relation to the precautionary principle, its implementation requires a more vigorous interpretation by decision-makers, to be reinforced also by the courts, than has been evident to date.¹¹⁷ There is a limit to the capacity for legislation to mandate such an approach through a strengthened formulation of the principle;¹¹⁸ instead, there is a need for a greater emphasis to be placed by decision-makers on ensuring that protective or preventive measures are proportionate to the threat of environmental harm that is presented by a particular situation. This will require a more critical appraisal of mainstream scientific evidence and also much greater public engagement and involvement in decision-making processes. In particular, in such a precautionary decision-making framework, society should have a say in what level of risk and potential harm is acceptable (see also Australian Panel of Experts in Environmental Law, *Democracy and the Environment* (Technical Paper 8, 2017)).

In the case of the prevention principle, APEEL suggests that this could take the form of a duty imposed on decision-makers to require all reasonable measures to be taken to prevent any likely or anticipated environmental harm that may arise from a proposed activity.¹¹⁹

APEEL notes also, in this context, the wide support within Australian governments for risk and outcomes-based regulation, sometimes also characterised as the adoption of a 'cautious' approach. APEEL believes, first, that this approach should not be allowed to override or exclude the implementation of the precautionary principle in circumstances where the threshold levels concerning scientific uncertainty and potential consequences have been crossed; and second, that a focus on prevention rather than caution would be a far more satisfactory approach in circumstances where likely or anticipated risks are involved.

RECOMMENDATION 1.4

The precautionary principle and the prevention principle should be essential prescriptions¹²⁰ in the next generation of Australian environmental law, accompanied by provision for the engagement of the public in decision-making with respect to the level of risk and potential harm that is deemed acceptable.¹²¹

4.3.2.2 New directing principles

In addition to endorsing the abovementioned, established directing principles, APEEL also proposes that some new principles be developed as a part of the next generation of environmental law, particularly to drive **environmentally sustainable innovation** (ESI). The ESI principles would provide stronger guidance on how to implement the societal goal of ESD (or a new version focussed on sustainability) in practice by affording greater significance to environmental objectives than occurs at present. Like the precautionary and prevention principles, they would need to be reinforced by strong statutory language that requires decision-makers to fully apply or give priority to them in exercising their statutory functions.

117 Some guidance may be provided in this regard from Europe, where the 1996 *Communication from the EU Commissioner on the precautionary principle* (COM/2000/0001 final) outlines the strengths and weaknesses of risk-assessment and risk-based approaches and how they might be addressed in policy and regulatory terms.

118 As noted above, APEEL also urges that instead of the usual requirement to consider relevant matters, directing principles should be made the subject of stronger statutory language that calls for decision-makers to 'fully apply' or 'give priority' to these principles.

119 See further the following section of this paper on norms of environmental law.

120 Namely, in addition to setting out the relevant principles, the relevant legislation should impose an obligation on decision-makers to 'fully apply' or 'give priority' to these principles (and those spelled out in Recommendation 1.5) when exercising their statutory functions.

121 With respect to the precautionary principle, APEEL also concludes that the current shift by environmental regulators towards risk and outcomes-based regulation should not replace the application of this principle wherever the required threshold level of scientific uncertainty exists.

APEEL proposes the adoption of two new principles that are based on the concept of ESI. In order to ensure that the implementation of environmental legislation is guided by a clear duty to strive for the best possible environmental outcomes, APEEL believes that decision-makers should be required to apply standards that will deliver **innovative solutions** rather than those that have been fixed on the basis that they will deliver the most economically achievable outcomes in any given situation. In advancing these principles, APEEL proffers the view that environmental effects and change are dynamic in nature, as is human innovation, and that decisions that are based on static standards are counterintuitive because they ignore this dynamism. APEEL notes that this approach has been adopted in recent years in the European Union (EU) and has proved feasible in practice. Drawing on the EU experience, APEEL proposes two specific principles that should guide decision-making under the next generation of environmental laws.

First, APEEL proposes the adoption of a **high environmental quality principle**. This principle requires all decisions and actions to aim for an optimal level of environmental protection and biodiversity conservation and could be framed as follows: ‘In the implementation of this Act, all decisions and actions shall achieve a high level of environmental protection and biodiversity conservation, consistent with what is technically feasible in the particular circumstances’. In a similar form, this principle has been applied already in judicial decisions and opinions in the EU.¹²² Defined carefully, APEEL believes it could provide a strong alternative to the current ESD-related approach of integrating economic, social and environmental considerations, which has often resulted in prioritising economic over environmental and social concerns.¹²³

Second, APEEL proposes a **best available techniques principle**. This principle would require all decisions and actions to be based upon the application of the best available techniques,¹²⁴ by mandating the application of up-to-date tools and methods suitable for protecting the environment and conserving biological diversity.¹²⁵ It could be implemented through the inclusion in environmental legislation of a provision to the following effect: ‘In the implementation of this Act, all decisions and actions shall be based upon the application of the best available techniques (BAT)’. BAT could be defined as ‘the most effective and advanced stage in the development of particular techniques and their methods of application, which indicates their practical suitability for protecting the environment and conserving biological diversity’.¹²⁶

RECOMMENDATION 1.5

The next generation of environmental laws should also prescribe the following, new directing principles concerning environmentally sustainable innovation (ESI):

- *A principle of achieving a high level of environment protection; and*
 - *A principle of applying the best available techniques (BAT).*
-

122 Three of the most recent cases are: *Shell Nederland Verkoopmaatschappij BV v. Belgian Shell NV* (Court of Justice of the European Union, C-241/12, C-242/12, 12 December 2013); *European Commission v. Kingdom of Spain* (Court of Justice of the European Union, C-151/12, 24 October 2013); *Essent Belgium NV v. Vlaamse Reguleringsinstantie voor de Elektriciteits- en Gasmarkt (VREG)* (Court of Justice of the European Union, C-204/12, C-206/12, C-208/12, 11 September 2014).

123 In proposing this principle, APEEL gave serious consideration to proposing a ‘highest’ environmental quality principle, on the basis that this would clearly prioritise environmental considerations over economic ones. However, APEEL have opted ultimately to recommend the version of this principle that has been adopted and applied successfully in Europe in recent years, in the belief that this would still provide a significant, new standard for decision-making that should work better than current approaches based on the balancing of economic, environmental and social factors.

124 ‘Techniques’ includes both the technology used and the way in which a project, undertaking or installation is designed, built, maintained, operated and decommissioned. Note that this principle differs substantially from the ‘best available technology’ standard employed in past years, particularly in the United Kingdom, as an approach to pollution control. It has a wider ambit in terms of both the circumstances in which it may apply and the types of solutions it commands.

125 A recent Victorian case that helps to demonstrate the possible application of this principle: *G3 Projects Pty Ltd v Yarra CC (Red Dot)* [2016] VCAT 373 (9 March 2016). This case reviewed the proposed construction of a 10 storey building that Council had refused to approve, partly because it considered it did not meet ESD objectives that were contained in Clause 22.17 of the Yarra Planning Scheme. In particular, Council was concerned that inadequate consideration was given to providing best practice internal environmental quality through adequate daylight to dwellings. The decision discusses how to assess the objective to achieve best practice in ESD for daylighting and how to identify what best practice is. The Tribunal found this should be based on the best practice tools identified in the policy in the absence of any alternative industry best practice derived from an independent authority.

126 For examples of the application of a similar version of this principle in the EU, see sub-articles 3(10) and 11(6) of *Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions (integrated pollution prevention and control)*, [2010] OJ L 334, 17.12. also sub-articles 2(11) and 9(4) of *Council Directive 96/61/EC of 24 September 1996 concerning integrated pollution prevention and control*, [1996] OJ L 257, 26. For sample judicial decisions in this regard see: *Ragn-Sells AS v. Sillamäe Linnavalitsus* (Court of Justice of the European Union, C-292/12, 12 December 2013) not yet reported, and *European Commission v. Ireland* (Court of Justice of the European Union, C-158/12, 11 April 2013) 17, not yet reported (re: duty to apply best available techniques and quality standards). Compliance with BAT has also been recognised by the International Court of Justice in the case entitled *Pulp Mills on the River Uruguay (Argentina v. Uruguay)* [2010] ICJ Rep (20 April 2010) not yet reported.

4.3.3 Possible, deeper 'sustainability' principles

APEEL has advanced the new, directing principles concerning ESI outlined above on the basis that they may give some specific force and effect to a substantially revised ESD societal goal. In doing so, it is aware that there has already been some experience with the operation of these principles within the EU. However, should the process recommended in Part 1 of this paper lead to the adoption of a new societal goal based on a deeper sustainability concept, APEEL recognises that other, even more far-reaching, directory principles may be required to assist the implementation of this goal. Such principles could be derived, for example, from the five axioms of sustainability advanced by Richard Heinberg referred to in Section 2.1 of this paper, for example, in the following forms:

- **a principle that no use of *renewable* resources should be permitted if such use is at a rate that is less than or equal to the rate of natural replenishment;**
- **a principle that no use of *non-renewable* resources should be permitted unless it involves a rate of decline in such use that is greater than or equal to the rate of depletion;**
- **a principle that** the exploitation of natural capital should be confined to areas already strongly modified by human activities.

APEEL recognises that principles of this nature are more far-reaching than those already proposed above and that their recognition in a future generation of environmental legislation would only be possible if based on a prior, substantial community consensus concerning a societal goal that embraces a deeper sustainability concept. APEEL does not suggest that the principles proposed above would be the most likely, or the only, ones to be associated with such a goal, but they are presented here to demonstrate how it may be possible to reflect a deeper sustainability goal in legislation through the prescription of related directing principles. **APEEL will welcome feed-back or suggestions concerning the directing principles that might be regarded as necessary and appropriate to the implementation of a deeper sustainability societal goal.**

5. Norms of environmental law: general rights and duties

5.1 Overview

The idea that the system of environmental law as described at the beginning of this paper can be underpinned by certain norms in the form of general rights and duties with respect to the environment is largely alien to the Australian context, but it enjoys considerable recognition and application in many other countries. APEEL has identified two reasons for this contrasting situation.

First, the prescription of normative environmental rights and duties has been accomplished in many instances through national constitutions, a phenomenon that has been described as 'environmental constitutionalism'.¹²⁷ The vast majority of national constitutions around the world have been written or substantially revised over the past 30 to 40 years, at a time and in circumstances where environmental degradation has presented as a clear and pressing national challenge. Accordingly, the inclusion of normative provisions concerning the environment in constitutions drafted or substantially revised during this period has become commonplace. It is estimated that more than 75 nations now have provisions within their constitutions that set out rights and duties with respect to the environment in one form or another.¹²⁸ There is a question in some instances as to whether the constitutional language used is purely inspirational and hortatory or, on the other hand, it has normative effect in the sense that the relevant provisions can be regarded as giving effect to legally enforceable rights and duties. But the clear trend is towards the latter situation, with courts in many countries showing a willingness to give some substantive effect to such provisions.¹²⁹

Australia, by contrast, has a *Constitution* that is now more than a century old and one which has proved extremely difficult to amend. The idea of inserting provisions of a normative nature concerning the environment into the *Australian Constitution* has not been seriously raised and the concept of environmental constitutionalism remains alien to the Australian system of environmental law. Indeed, even the idea of an amendment to section 51 of the *Constitution* to provide a specific power to legislate on environmental matters was rejected by the Constitutional Commission in the course of its wide-ranging examination of the *Australian Constitution* in the late-1980s, on the rather spurious ground that it would be too difficult for the Commonwealth to implement such powers given state control of land use and ownership of mineral resources.¹³⁰

The second, and related, reason why general environmental norms, at least those based on the prescription of fundamental rights, have not been contemplated in Australia is the absence of a Bill of Rights through which such rights might be established. Despite calls for the adoption of a Bill or Charter of Rights from time to time,¹³¹ this avenue for the prescription of normative environmental rights remains unavailable in Australia currently. This subject is discussed more fully in Australian Panel of Experts in Environmental Law, *Democracy and the Environment* (Technical Paper 8, 2017).

It remains possible that general environmental rights and duties could be prescribed in environmental legislation within each jurisdiction within Australia, as an alternative to having one set of over-arching norms generated by the *Constitution* or a national Bill of Rights. There are examples of this approach elsewhere, for example, the Michigan *Environmental Protection Act 1970* and the *Ontario Environmental Bill of Rights 1993*.¹³² Likewise, it may be possible to

127 See J R May and E Daly, *Global Environmental Constitutionalism* (Cambridge University Press, 2014); and May, J R and Daly E, *Environmental Constitutionalism* (Edward Elgar Publishing, 2016).

128 See J R May and E Daly, 'Constitutional Environmental Rights' (2014) *Encyclopaedia of Public Administration and Public Policy* <http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2787211>. The authors indicate that some 75 countries have constitutions that provide for substantive environmental rights, and which, in many instances, also impose environmental duties on individuals and government; they also note that over 120 constitutions contain provisions related to natural resources in one form or another. See also L Kotze, *Global Environmental Constitutionalism in the Anthropocene* (Hart Publishing, 2016).

129 J R May and E Daly, above n 128, 9 noting that '...courts around the world are increasingly accepting constitutional environmental challenges and engaging with the difficult questions they pose'.

130 Commonwealth of Australia, *Final Report of the Constitutional Commission*, vol 2 (1988) 757-760. Australian Panel of Experts on Environmental Law, *Environmental Governance* (Technical Paper 2, 2017) discusses further the question of whether such an amendment to the *Australian Constitution* should be pursued.

131 See for example, M R Wilcox, *An Australian Charter of Rights?* (Law Book Company, 1993).

132 Section 2(1) of the Michigan *Environmental Protection Act 1970* provides that any person may seek relief from the courts to protect the 'air, water and other natural resources and the public trust therein from pollution, impairment or destruction'. This simple provision afforded both procedural (that is, standing) rights and a substantive cause of action. By contrast, the *Ontario Environmental Bill of Rights (S.O 1993)* provides a strictly procedural approach.

turn to **common law** principles in the search for normative rights and duties, the most significant example being the recognition in the United States of the ‘public trust’ doctrine for the purpose of protecting certain natural resources held in public ownership from exploitation.¹³³ However, neither legislative prescription of environmental rights and duties nor judicial recognition and application of the public trust doctrine have presented as significant elements of the Australian system of environmental law and there remains, as a result, a substantial vacuum with respect to this fundamental component of the foundations of Australian environmental law.

5.2 Analysis

The question that obviously arises in this context is whether the vacuum with respect to normative environmental rights and duties in Australia should be filled. Would the Australian system of environmental law be enhanced in terms of its capacity to secure desirable environmental outcomes by vesting a power in citizens to invoke general environmental rights or duties in particular circumstances?

APEEL is of the view that this question should be answered in the affirmative. The establishment of such norms would serve to provide a basic standard of environmental protection that underpins and potentially overrides the operation of more specific environmental measures where the operation of those measures has failed to meet the relevant normative standard. Whilst it is reasonable to expect that, in the vast majority of situations, the operation of the next generation of environmental laws will provide better and more effective outcomes, APEEL believes this goal can be reinforced by the availability of recourse to legal action based on normative rights and duties in the occasional circumstances where this expectation has not been met. The lesson to be learned from the steadily expanding experience with environmental constitutionalism in many other countries is that such a ‘backstop’ for the environmental law system provides a valuable safeguard against the maladministration of environmental laws.¹³⁴

Australian Panel of Experts in Environmental Law, *Democracy and the Environment* (Technical Paper 8, 2017), explores in much greater detail how a ‘rights-based’ approach to environmental law could be developed in Australia, including by way of a national Bill of Rights. *Technical Paper 8* also canvasses the possibility that this may be accomplished through uniform measures within environmental legislation across all the jurisdictions within Australia rather than by way of a constitutional amendment or a Bill of Rights.¹³⁵ For this reason, this paper does not propose any specific reforms with respect to the prescription of environmental rights, deferring instead to the more detailed treatment of this subject in Australian Panel of Experts in Environmental Law, *Democracy and the Environment* (Technical Paper 8, 2017).

However, in the following section, the creation of two forms of environmental duty are proposed, which APEEL believes would give specific force and effect respectively to one of the directing principles and one of the design principles identified above: the prevention principle and the principle of environmental restoration.

5.3 Proposals for reform

APEEL first proposes the idea of a general **environmental duty of care**, which the Panel notes has found some limited recognition already in Australian environmental legislation in recent years. The South Australian, Tasmanian and Queensland environmental protection Acts each specifically provide for a ‘general environmental duty’.¹³⁶ These provisions impose a general obligation upon all persons to take all reasonable and practical measures to prevent

¹³³ The modern form of the public trust doctrine (which is based on Roman law principles) was first advanced by Professor Joseph Sax in 1970: see J L Sax, ‘The Public Trust Doctrine in Natural Resources Law: Effective Judicial Intervention (1970) 68 *Michigan Law Review* 471; for a more recent and reframed exposition of the doctrine, see M C Wood, *Nature’s Trust: Environmental Law for a New Ecological Age* (Cambridge University Press, 2013).

¹³⁴ There is empirical evidence to support the view that countries with such rights and duties have better environmental governance and conditions: see D Boyd, *The Environmental Rights Revolution: A Global Study of Constitutions, Human Rights and the Environment* (University of British Columbia Press, 2012).

¹³⁵ Australian Panel of Experts on Environmental Law, *Environmental Governance* (Technical Paper 2, 2017), also advances some ideas concerning how a relatively uniform approach to the prescription of environmental rights and duties could be secured by the Commonwealth as part of a broader, national strategic leadership approach to environmental management.

¹³⁶ *Environment Protection Act 1993* (SA) s 25; *Environmental Management and Pollution Control Act 1994* (Tas) s 23A; *Environment Protection Act 1994* (Qld) s 319; *Environment Protection Act 1997* (ACT) ss 22-23A.

or minimise pollution or environmental harm that is threatened by their activity. In this regard, they give clear legal expression to the prevention principle by creating a general norm in the form of a duty of care towards the environment. This general duty is enforceable normally only by means of civil sanctions and a breach thereof does not constitute an environmental offence, although APEEL sees no reason why this should not also be the case.

There have been some attempts to prescribe a general duty of care in other environmental law contexts. For example, the South Australian *Natural Resources Management Act 2004* imposes a 'general statutory duty' on all persons to 'act reasonably in relation to the management of natural resources within the State' (s 9 (1)). This provision seeks to reflect the idea that land-holders have a duty of care towards the land they occupy. Once again, this duty is enforceable only through the imposition of civil sanctions and does not give rise to any criminal penalty. Its wording, however, is of such a general nature that it is open to a wide range of interpretations. It would benefit from being framed in a more specific manner (for example, 'to take all reasonable and practicable measures to avoid causing harm to the natural resources of the State unless authorised to do so').

APEEL believes it is appropriate for a general duty of care to be prescribed as a routine component of the next generation of environmental legislation.¹³⁷ Such a duty of care would amount to a prohibition on the causing of environmental harm or damage in appropriate circumstances. In the absence of a capacity or willingness to impose such a duty constitutionally, APEEL envisages that it would need to be incorporated in general environmental legislation on an Act by Act basis.

APEEL also considers that it would be appropriate to provide for a general **environmental duty to repair and restore**, as a specific means of implementing the environmental restoration design principle alongside the approach outlined in the discussion above of this principle. This duty could be imposed by environmental legislation on all persons who have caused environmental harm. It could also extend to government authorities (for example, those responsible for the management of public lands) to oblige them to take proactive action to repair and restore degraded areas. Such a duty would need to be reinforced by mechanisms for its enforcement, including requirements for bonds or other forms of financial security to be posted when undertaking potentially damaging activities.

APEEL notes that there are measures of this kind within existing environmental protection legislation (for example, in relation to the clean-up of pollution and remediation of contaminated sites) and that similar provisions also exist in mining legislation. It is also noted that, in the latter context, these provisions have often failed to be implemented effectively. A recent report indicates that there are more than 50,000 abandoned mines in Australia, three quarters of which have closed unexpectedly or without proper rehabilitation plans.¹³⁸ APEEL believes that the immunity that is widely enjoyed by mining and petroleum activities from the operation of state environmental legislation is no longer justifiable and that a duty to repair and restore prescribed in the next generation of environmental legislation should apply explicitly to such activities.

In proposing the prescription of a duty to repair and restore, it is appreciated that this is more likely to operate at the level of individual sites or incidents and may be less easily applied at the broader landscape and ecosystem scale that APEEL have contemplated when proposing a directing principle of environmental restoration. But it may nevertheless provide an additional regulatory tool on occasions for the implementation of strategic plans for ecological restoration, alongside the operation of this directing principle as a guide for decision-makers.

APEEL does not recommend the introduction of an additional duty based on the concept of the public trust, believing that the above measures would be sufficient to cover the same goals. Should the prescription of such a duty be contemplated, it would be necessary for some detailed guidance to be provided as to its exact scope and content for the benefit of decision-makers and the courts, so as to avoid some of the pitfalls that have been experienced with the interpretation of terms such as 'ecologically sustainable development' (as noted above).

¹³⁷ Australian Panel of Experts on Environmental Law, *The Private Sector, Business Law and Environmental Performance* (Technical Paper 7, 2017) details a range of legal reforms to business law that would encourage corporations to improve their environmental performance, including a general duty of care on all companies as well as other mechanisms.

¹³⁸ R Roche and S Judd, *Ground Truths: Taking Responsibility for Australia's Mining Legacies* (2016) Mineral Policy Institute <<https://www.acfonline.org.au/sites/default/files/resources/MPI%20mine%20rehab%20report.pdf>>.

RECOMMENDATION 1.6

The next generation of environmental laws should routinely provide for a general environmental duty to be imposed on all persons (including those undertaking mining activities) to: (1) prevent or minimise environmental harm likely to arise from their activities; and (2) to repair environmental harm they have caused and to restore ecological functions that they have impaired, to the greatest extent practicable.

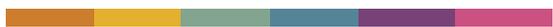
6. Conclusion

This first *Technical Paper* seeks to identify the core components of environmental law that APEEL believes should constitute the foundations of the next generation of Australian environmental laws. In so doing, the paper distinguishes what it describes as the fundamental societal goal *for* environmental law from the core components *of* environmental law (which it is suggested take the form of objects, principles and norms). The lengthy discussion of the relevant societal goal canvasses the diversity of views that currently abound in relation to its possible focus and content. The paper has also critiqued the specific goal of ESD, which underpins much of the existing environmental law system in Australia. The recommendation on this matter is for the Commonwealth to initiate a new national process to review and revise the ESD goal, particularly given the length of time that has elapsed since such a process was last pursued in Australia.

The paper has also called for a more disciplined and focused approach to the prescription of objects in the next generation of Australian environmental law, particularly to ensure that there is a strong alignment between objects statements that give effect to the agreed societal goal and those statements that relate to the specific context of the particular legislation.

Finally, with respect to the important and challenging task of identifying the most significant principles of environmental law, this paper has departed from the traditional approach of cataloguing a long list of recognised principles by seeking to distinguish those principles which should serve as a guide to law-makers in designing environmental laws ('design principles') from those which should be given full force and effect by decision-makers (as rules-based principles) when implementing environmental laws ('directing principles'). In each instance, this paper has aimed to identify the most significant principles that have already been widely recognised internationally and also suggests some new principles that are emerging and which can serve to enhance the effectiveness of the next generation of Australian environmental laws.

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The Australian Panel of Experts
on Environmental Law