ARTICLE

PUBLIC DUTIES ON THE DISPOSAL OF AUSTRALIA'S NON-RENEWABLE RESOURCES: THE CASE FOR REGULATORY REFORM

John A. P. Chandler

University of Western Australia

Australia's non-renewable resources in the form of minerals and petroleum represent a significant part of our national wealth and revenue. This article argues that their disposal should be subject to duties on the part of public officials to oversee the disposal to maximise the benefits for the Australian people. It also argues that where those duties exist, they are seriously deficient. It analyses why that is the case and sets out an argument for change and proposals for reform. One of the main reasons for the lack of duties on disposal is that production takes place under petroleum and mineral licensing statutes that confer rights to the resource on the private sector. This article explores the structure and weaknesses of that approach and the many changes that have occurred since those statutes were enacted.

1 Introduction

1.1 Aim of Article

The model used for the development of Australia's non-renewable resources is the grant of exclusive licences to the private sector. This model was adopted in Australia over a century ago and is referred to in this article as "the licence model". Apart from safety and environmental regulation, its structure has not changed significantly. Neither have the duties of the ministers and regulators responsible for it. The aim of this article is to examine whether those duties are fit for purpose in the light of the massive changes that have occurred. Not least of the challenges now is the large scale of many resource projects and the commensurately large consequences that flow from mistakes in the concept, design, construction and execution.[1] Mistakes of this kind occur frequently and on a recurring basis and should be regarded as failures of the regulatory system. Examples are given later in this part.

There are two main reasons why the fitness of the duties of those responsible for licensing of non-renewable resources is important. The first is the significance of the resources sector in Australia. Non-renewable resources include a diverse range of minerals and petroleum that, according to the Productivity Commission draft report on *Resources Sector Regulation* (*PC RSR Draft*), make up about 8% of Australia's GDP and 59% of exports.[2] The second is whether government is fulfilling a duty of care to maximise the benefit from the disposal of public property that the model involves. If the use of the model means that government is not required to exercise a duty of care it is likely that it is also falling behind modern standards of accountability and good regulation. To achieve those things requires the duties of ministers and regulators to be articulated and reported on, so there is transparency in whether beneficial outcomes are achieved for the Australian people. The issues raised apply beyond non-renewable resources to any activity relying on the private sector to dispose of public property or to provide a service delivering value to the community. They go to the heart of government accountability for its dealings with public property.

The licence model is not something that can, or should, be changed lightly because it has been fundamental to the development of Australia's resources and has created legitimate rights, obligations and expectations of licensees. Nevertheless, as discussed in later parts of this article, other countries have evolved the model to deal with the different challenges faced now. The prime

example is the United Kingdom (UK) that made extensive changes to offshore petroleum regulation in 2016. These followed a 2014 report by Sir Ian Wood, *UKCS Maximising Recovery Review: Final Report* (*Wood Review*) where he recommended keeping licences, but making significant changes.[3]

1.2 Structure of Article – the Lack of Disposal Duties and a Holistic Approach

The first part of this article establishes that the regulators and ministers who supervise the licensing process for Australia's non-renewable resources are under negligible duties in relation to the disposal of public property that this involves. For example there is no duty to maximise the value received, to ensure that development is carried out sustainably or, more basically, to have a strategy or plan to manage the costs, benefits and risks. Duties of this kind will be referred to as "disposal duties" and the decisions made as "disposal decisions", for reasons that will be explained shortly. The final part of this article develops proposals for reform.

The structure of the first part of the article is that it commences in Part 2 with an examination of why reform is required. Part 3 examines the meaning of disposal duties, how they arise and how petroleum and mineral statutes effect and control the disposal. It frames its argument that the disposal duties are deficient in a series of steps: first, establishing that petroleum and minerals are public property and therefore should be subject to disposal duties; second, that they are disposed of through the licensing model without payment being made for them; and third that the petroleum and mineral statutes do not contain appropriate express duties and processes regarding the disposal to safeguard the interests of the Australian people or define the purpose of disposal with sufficient clarity to enable legal accountability of the officials concerned.

Part 5 revisits the research on the existence of trusts over Australia's natural resources and fiduciary duties in relation to their disposal and explains why, in the absence of a significant reconceptualisation, these have limited application to petroleum and mineral disposal decisions.[4] It also examines the potential for a broader public duty in relation to petroleum and resources than has previously been recognised. Part 6 shows that, in the absence of clearly expressed disposal duties, the traditional tools of judicial review and enforcing fiduciary obligations are limited in their effectiveness.

There is a secondary problem to the lack of disposal duties that will also be raised. That problem is that environmental, licensing and fiscal matters are regulated by different sections of government. As a result, a holistic view is not taken of projects in approval processes which means that environmental costs and lack of fiscal return may not be considered adequately. The World Commission on Environment and Development (the Brundtland Report) identified the segregation of regulation as an issue in 1987 that prevented sustainable development, and it still remains one.[5] There is a growing amount of international guidance, including standards, on improving resource extraction and sustainable development.[6] Certainly Australia can learn from this international guidance, but it also arguable that it is lagging behind it,

1.3 Filling a Gap in the Literature

While much has been written about the working of the licensing regimes and environmental and safety regulation,[7] there is a gap in the literature when it comes to disposal duties and disposal decisions. Because of the potential scope of enquiry, this article will mainly focus on petroleum.[8] However, depending on the statutory regime, many of the ideas will apply to minerals and in some cases to renewable resources. To the extent possible, minerals regulation will be referred to, but not regulation of renewables as that would make this article too long.[9]

There have been numerous reviews of the regulation of the resources industry, a number of which will be referred to in this article.[10] Australia's resources policy was reviewed in 2019 after a gap of 20 years.[11] Yet none of the reviews deals satisfactorily with the lack of disposal duties of those administering it.

2 Why Is Reform Required?

2.1 Currently Regulation Does Not Maximise the Benefits for the Australian People from Production of Non-renewable Resources

The essence of non-renewable resources is that they will run out. Australia's approach has been based on the idea that this is not a real threat as Australia has such an abundance of them. But there is evidence to suggest that that is no longer the case. The *PC RSR Draft* shows the life of the economic demonstrated resources of bauxite, gas, gold, iron ore, oil and zinc is less than 50 years, with silver, lead and lithium only a little over that.[12] The minerals industry has argued in the past that the cyclical nature of mineral production means that as prices and demand increase, so will exploration and the discovery of further resources.[13] That view does not remove the fact that the resources are finite. The potential for limits to be reached within 50 years means that prudent risk management alone requires a rethinking of Australia's approach and a plan to manage the risk.

Two points make for a sobering counterpoint to an approach based on continuing abundance. First, the resources sector dominates Australia's economy. Fifty years is not long to restructure it. Second, as elaborated in Part 3.2, the general approach of petroleum and minerals regulation is that a company that makes a commercial discovery is entitled to take that discovery to development and production without satisfying socio-economic criteria. There are hurdles such as environmental and native title processes, and in some cases development approvals. But generally there is no testing by regulators for the tax and other benefits that developments will produce or for the costs and lost opportunities that will result. The reason why this is important is that a minerals or petroleum producer under the Australian licensing model does not pay for the minerals or petroleum it extracts and disposes of. The government's direct return is in the form of taxes and royalties. As the system failures mentioned below illustrate, some projects do not generate direct taxes for the Australian people and others may actually cost them money. Both are poor results. Results of this kind justify a close look at the duties that public officials approving and supervising resource projects should be required to exercise and provide a solid reason for reform. Unlike other countries, Australia has not reviewed the causes of past mistakes and made necessary changes.[14]

There is a bigger underlying question, which is whether the licensing model needs re-examination if we are in the last phase of the production of petroleum and certain minerals. Projects can last up to 50 years and engage available resources and infrastructure. There is a risk that poor performing projects will squeeze out ones that will provide greater benefits. The current regulatory system does not facilitate selecting the best projects.

There are numerous instances of system failure that signify a failure to impose appropriate duties and accountabilities upon the responsible officials. What follows are just two examples. Looking initially at what the disposal produces in the way of benefits for Australia, the regulatory system may allow a petroleum project to proceed in Commonwealth waters where the project's owner pays very little or no tax. If that occurs the state will receive an inadequate direct return for the disposal of public property.[15]

The systemic failures that can produce a negligible tax return in an offshore petroleum project begin with the rules not requiring the regulator to evaluate the economics of a project or the tax payable when approving a petroleum development in Commonwealth waters or the effect of project cost overruns on the fiscal take from a project over its lifetime.[16] Next, there is no obligation to report on the benefits produced and take corrective action in relation to them. Both are consistent with a light touch approach to regulation that has been a hallmark of Australia's offshore petroleum regulation and that is also evident in onshore petroleum and minerals regulation.

Light touch regulation of petroleum and minerals relies significantly on companies having the same interests as the government in profitable production, companies being able to execute projects effectively, and the tax system collecting a fair share of the resource rents. But companies have their own agendas and do not always perform to a high standard.[17] Therefore a fair share of the resource rents is not assured. The tax system does not have within it the means to penalise companies for poor performance. Therefore there is a gap in the regulatory system that is not currently addressed.

On the cost side, there is potential for the government to have to bear costs that will reduce its overall return. Decommissioning provides an example of systemic failure. It is at the forefront of current discussion because of the liquidation of Northern Oil & Gas Australia (NOGA) early in February 2020. That has produced the result that the NOGA companies are not able to decommission the floating production and storage vessel, Northern Endeavour, and subsea wells on their Commonwealth production licence in the Timor Sea, potentially leaving the government with a cost that has been estimated at up to 200 million dollars.[18] Petroleum and mineral operations have the potential to generate long-term costs in terms of rehabilitation of environmental damage.[19] The systemic failures in relation to decommissioning and rehabilitation start with the lack of provision to the regulator of cost estimates that are updated regularly. Other areas requiring consideration in the light of Northern Endeavour include security for those costs and the adequacy of controls over the transfer of licences to companies to verify that they have the financial resources and ability to decommission.[20]

Another reason for reform is that the economic fallout of the 2019 Novel Coronavirus pandemic (known as COVID-19) will put intense pressure on Australian governments to rush the development of Australia's mineral and petroleum resources to generate short-term activity. In other words unless there is a change in approach there will be a further headlong rush into ill-considered development.

The conclusion of this discussion is that current licensing decisions do not ensure that the benefits to the Australian people are maximised from non-renewable resource projects. If that is to change, two areas must improve: first, the duties placed upon public officials when it comes to granting and administering licences and approving projects and, second, their duties to rigorously review projects to ensure the best outcomes.

2.2 What Is Best Practice in Regulation?

Petroleum and minerals regulation should meet best practice in regulation, and reform is required if it does not. An essential element of good regulation is clarity of purpose. This is recognised by the OECD that states that the "legislation establishing a regulatory scheme or framework should be written so that the purpose of the regulator and the objectives of the regulatory scheme are clear to the regulator's staff, regulated entities and citizens".[21] Clarity of purpose is necessary for good governance, but also so that citizens can monitor the delivery of regulatory outcomes and the proper use of public authority and resources to achieve them.[22] In other words, the setting of objectives and reporting on results is an essential part of accountability of public officials.

The *PC RSR Draft* identifies criteria for assessing leading practice that mirror the OECD's requirements of clarity of purpose and accountability. Under the heading of Regulatory Design, the report has the criterion that "Objectives of regulation are clearly defined and consistent across different regulations".[23] Under the heading Regulator Governance, it has the criterion that "Decision makers are accountable" as another leading-practice principle.[24]

3 Disposal Duties for Petroleum and Minerals – What Are They and How Do They Arise?

3.1 What Is a Disposal Duty

A duty can be expressed in a statute expressly or arise by implication. An example of an express duty would be: "the regulator is under a duty to ensure that the applicant's work bid for an exploration permit contains a market valuation of the cost of the work proposed". Such a provision is unlikely in petroleum and minerals legislation. More probably the valuation would be specified in a regulation as a requirement of a complying application.[25] This puts the burden on the applicant of satisfying the requirement if it wishes its application to be considered by the regulator.

A duty can arise by implication from the way in which an executive power is stated. Executive power must be exercised for the purpose and within the boundaries for which it was conferred. Those limits can be enforced through judicial review and in some cases through the prerogative writs. The applicable principle is commonly expressed using the following quotation from Brennan J:

> Judicial review is neither more nor less than the enforcement of the rule of law over executive action; it is the means by which executive action is prevented from exceeding the powers and functions assigned to the executive by law and the interests of the individual are protected accordingly.[26]

The language of duty or trust is sometimes applied to indicate that the power should not be used for personal or collateral purposes. Hence the following statement from Wade and Forsyth's *Administrative Law* is often quoted:

> Statutory power conferred for public purposes is conferred *as it were* upon trust, not absolutely – that is to say, it can validly be used only in the right and proper way which Parliament when conferring it is presumed to have intended.[27]

The implied duty therefore is generally a duty not to act otherwise than in accordance with the provision. This means that the word "duty" needs to be treated with some caution. It can be more useful to inquire as to the purpose and limits of a power and whether there are any preconditions to its exercise or required standards. A failure to act within the terms allowed is just that and accordingly gives rise to a breach of the implied duty. The petroleum and mineral statutes analysed in Part 3 contain negligible express disposal duties. Hence the purposes of those statutes and the powers within them are vital in determining what limits can be enforced and the extent of implied duties.

The following sub-parts establish that petroleum and minerals are public property. While it is argued in this article that the disposal of public property, including petroleum and minerals, should attract disposal duties, whether they exist and how they are framed depends on the wording of the statute providing the means of disposal. That the state's resources are special is evident from the approach to statutory construction of a statutory regime conferring powers on the executive government to grant exclusive rights to exploit the state's resources. Where such a statute "prescribes a mode of exercise of the statutory power, that mode must be followed and observed".[28] But the end point of this discussion is that, where a licensing statute prescribes the licence model as the means of disposal, the duty of the responsible officials is likely to be restricted to following the prescribed steps in the statute and any specific duties in it, and nothing more.

There have been recent cases in Australia that have dealt with conflicts of interest of public officials and the nature of their public duty.[29] It is clear from those cases that public officials must act in the public interest. It is also clear from other cases that if a public official is under a clear duty, then fulfilling that duty can be enforced through the common law writ of mandamus.[30] But what is in the public interest in a particular context will be ascertained "by implication from the subject-matter, scope and purpose" of the provisions of the relevant legislation.[31] For reasons that are advanced in the rest of this part, the main purpose of petroleum and minerals legislation has been viewed by the courts as promoting exploration and mining or the allocation of land for mining or exploration.[32] Disposal of public property for the benefit of the people of Australia has not been viewed as even a subsidiary purpose. For this to change requires reform of that legislation, which is discussed in Part 7, or the imposition of an overarching general duty.

Some of the reasons for that reform have been advanced in Part 2. But in addition the legislation does not give effect to current government policy or principles of stewardship. As to policy, the 2019 *National Resources Statement* begins its first policy principle with "Australia's national resources wealth belongs to the Australian people and should be developed for their benefit."[33] Applicable federal legislation such as the *Offshore Petroleum and Greenhouse Gas Storage Act 2006* (*OPGGSA)* and much state legislation do not set out a guiding principle or object of developing resources for the public benefit. That legislation does not contain performance measures in relation to achieving public benefit as an outcome. As to stewardship, it is suggested that the public interest requires public officials to have a stewardship obligation over public property. In a general sense stewardship means that they should look after it and, if they dispose of it, they should ensure that maximum benefits are received. Such stewardship obligations are also not reflected in petroleum or minerals legislation.

3.2 Disposal Duties Should Arise because Minerals and Petroleum Are Public Property

The Australian Constitution gives the Parliament power to make laws "for the peace, order, and good government" of the Commonwealth with respect to the listed matters. There is no provision

dealing specifically with petroleum or natural resources, except for fisheries.[34] State constitutions contain a similar law-making power in relation to the state and have similar gaps, but without the limitations of the Australian Constitution.[35] Therefore the minerals and petroleum statutes are critical in establishing if there are any disposal duties. The starting point in analysing the potential for disposal duties in Australia in relation to disposal decisions, and the use of those expressions to describe them, is to understand that minerals and petroleum in Australia are public property.

3.2.1 Public Ownership of Petroleum and Minerals and the Development of Statutory Licensing Regimes

State ownership of onshore minerals and petroleum in Australia has been reinforced by statutes that confirm that ownership is vested in the state.[36] There are statutes dealing with petroleum licensing that set out that confirmation,[37] while the equivalent provisions for minerals are in their own statutes.[38] By the early 1900s minerals legislation contained the important principle that the holder of a mining right was entitled to occupy Crown land and obtain ownership of gold and minerals found on it.[39] It also provided for the grant of mining leases.[40] The mining right captures an important idea that underpins the early legislation and affects the drafting of its purpose in current statutes. That is the principle of possessory right. What this means is that the legislation contemplates the transfer of property in minerals from the state to the miner. A similar theme is evident in state petroleum legislation. That legislation was developed as petroleum grew in importance. Separate petroleum legislation meant that petroleum was no longer included in minerals legislation, but some of the features of the minerals legislation were retained, like marking out of permit areas and having a permit to allow small scale prospecting.[41]

Many of those features of minerals legislation had disappeared by the 1960s and are not evident in statutes like the *Petroleum and Geothermal Energy Resources Act 1967* (WA) (WAPGERA). But some of the key elements of the earlier minerals legislation were retained, notably a separate title for exploration from that for production. Those elements and government policy carried with them the idea of possessory right which meant that a petroleum producer obtained ownership of petroleum produced in its licence area. State petroleum statutes diverged from minerals legislation in adopting a structured approach to the grant of exploration permits. Typically this required applications to be invited for specified acreage. Each application was to be accompanied by the applicant's proposals for work and expenditure, its technical qualifications, its financial resources and the technical advice available to it.[42] Exploration and development were a major focus of government. The amount of exploration an applicant was prepared to commit to was a key element of the issue of permits – hence the terminology developed of these being called "work-bid applications".

Ownership of offshore minerals on the continental shelf outside territorial waters relies on treaties that culminated in the United Nations Convention on the Law of the Sea (UNCLOS). UNCLOS provided for Australia's sovereign rights over the petroleum under the seabed of its continental shelf.[43] While less than proprietary rights, sovereign rights under UNCLOS give effective and exclusive means to the state to control the production and ownership of petroleum on the continental shelf.

3.2.2 The Impact of the Offshore Petroleum Common Code

Protracted disputes between federal and state governments were occurring in the 1960s in other nations with a federal structure, such as Canada. The federal government in Australia played an important role in preventing disputes in Australia by negotiating a unique arrangement with the states offering legal certainty to investors without resolving the legal position of ownership. This arrangement involved all the states and the Northern Territory adopting a common petroleum code so they all had similar regulation. The code was contained initially in the *Petroleum (Submerged Lands) Act 1967* (Cth) (PSLA), and copied in mirror legislation in the states and Northern Territory.[44] That code had many of the same elements as state petroleum legislation. The PSLA and government policy were directed at creating a framework encouraging oil companies to explore and produce, and this was done by enabling the transfer of ownership of petroleum to a producer.[45]

The common mining code approach continued after the *Seas and Submerged Lands Act 1973* (Cth) and the Offshore Constitutional Settlement that resulted in Commonwealth jurisdiction from three nautical miles from the baselines of the territorial sea (generally the low-water mark) and state and relevant Territory jurisdiction up to that point.[46] The PSLA was rewritten as the *Offshore Petroleum Act 2006 (Cth)*, subsequently amended to become the OPGGSA. The state and Northern Territory statutes governing their three nautical mile zone have generally not been updated in the same way.[47]

3.2.3 How Does the Disposal Occur?

The legislation being considered here is the federal, state and Northern Territory onshore and offshore petroleum legislation: OPGGSA; state and Northern Territory offshore petroleum legislation;[48] and state and Northern Territory onshore petroleum legislation.[49] In each case the disposal of Australia's petroleum occurs through the licence model, although the petroleum titles issued under it have various names, such as permit, lease or licence.[50] Also the grant of petroleum titles is more structured through the use of standard conditions and application processes.

The disposal process starts with the decision to seek applications for exploration permits and the preparatory work associated with selecting the licence areas and accompanying marketing materials. The grant of an exploration permit is the critical step that gives exploration and then production rights to the permittee. Conditions are attached to titles that require compliance with work programmes and provisions of the legislation such as approvals for various activities, observing good work practices and completing reports of activities. Exploration permits are generally issued on a competitive work bid basis.[51] The purpose of this approach is to find commercial reservoirs that can be produced. If one is found, the permittee can convert its title to a production licence and, subject to various approvals, develop the reservoir and produce petroleum. Petroleum titles in Australia all share the common element that the titleholder, usually a company or companies in joint venture, obtains ownership, and with it the right of disposal and sale of the petroleum it extracts.[52]

The end point of the licensing process that results in a production licence and a producing well is that the Commonwealth or the relevant state or Territory disposes of the extracted petroleum to the titleholder. At this point they are clearly disposing of public property. When account is taken of the fact that the grant of an exploration permit allows exclusive access to an area for exploration, the ability to transfer that permit and to convert it into a production licence, it becomes apparent that the licensing process is in practical terms a disposal of public property.[53] Minerals legislation contains the same principles; title holders obtain ownership of minerals produced and can convert an exploration title to a production title.[54] While it is doubtful that petroleum licences in Australia constitute contracts between the licensee and the state,[55] there is a bargain element: the petroleum licensee carries out exploration work and pays fees in exchange for the right to explore for petroleum and produce it.[56] The same is true for minerals. It is also implicit in government policy that there is a disposal.[57]

However, as already mentioned in Part 1, under the model used in Australia, as with most countries with a licensing system, the titleholder does not pay for the petroleum extracted. It does pay tax, however, which can take the form of federal income tax and petroleum resource rent, as well as indirect taxes and royalties at the state level. There will be differing opinions on what represents a reasonable amount of tax for a producer to pay and the best way to collect it. It is outside the scope of this article to explore these areas. But what is important to note here is the lack of transparency about the return to the Australian people. Title conditions involve detailed reports of matters like the amount of production. But there is no reporting of the economic results of the bargain. It is impossible to calculate from publicly available information the total return to the Australian people from any individual project. Governments in Australia do not appear to produce this information for their own administrative purposes.[58]

An interesting comparison is with the reports produced by the petroleum industry. In recent years, to justify its social licence to operate and for other reasons, the industry has produced sustainability and other reports that demonstrate the amount of tax being paid and the other economic benefits produced, such as employment.[59] Currently there is a lack of commonality in company reports. But this is likely to change as there is significant pressure on companies to improve their reporting

coming from large global investors, like superannuation funds. Mechanisms like international financial reporting standards are continually being updated.

3.3 Mineral Statutes Use the Licensing Model Also

The legislation being considered here is the state and Northern Territory minerals legislation that regulates mining.[60]

All of these use the licensing model, with the major production licence commonly being called a mining lease.[61] They each use a less developed process for the grant of a prior exploration or prospecting permit in the sense that the applicant does not generally go through a competitive process involving the evaluation of the best application.[62]

4 Objects of Petroleum and Mineral Statutes and Associated Policy

4.1 The Increased Use of Objects Clauses

Statutory drafting has changed in Australia since the 1960s with the increasing use of objects clauses. They are often located at the beginning of a piece of legislation to outline its underlying purpose, and have been described as a "modern day variant on the use of a preamble to indicate the intended purpose of legislation".[63] However, other objects clauses go further to "set out general aims or principles that help the reader to interpret the detailed provisions of the legislation".[64] These clauses can prefer an interpretation of legislation that is consistent with the objects of an Act, but do not "command a particular outcome of exercise of discretionary power".[65]

The development of objects clauses can be seen in the different versions of the common mining code. So the *PSLA* of 1967 had a preamble but no objects clause. The *Offshore Petroleum Act 2006 (Cth*) did not contain an objects clause. However, in one of the relatively early amendments in 2008 to include the greenhouse gas provisions the following statement was included as s 3:

> The object of this Act is to provide an effective regulatory framework for:
>
> (a) petroleum exploration and recovery; and
>
> (b) the injection and storage of greenhouse gas substances;
>
> in offshore areas.

This is the same in the version of the *OPGGSA* as at 30 June 2020. Some state statutes such as the *Mining Act 1978* (WA) do not contain objects. On the other hand some states have developed the use of objects clause and examples are examined in Part 7.2 below.[66]

4.2 Lack of Disposal Duties and Review of Economic Performance

Other than these provisions concerning the grant of exploration permits and provisions dealing with the transfer or substitution of titles that often give the regulator a discretion to refuse consent, Australian petroleum and mineral statutes have limited provisions regarding disposal decisions.[67] Their structure is to set out the machinery and administration provisions for permits and licences.

The administration provisions give powers to a regulator that include cancellation of a title for breach of a condition or the statute. But the important point here is that once a permit or licence has been issued, the regulator does not have a general discretionary power to either review the economic performance of the titleholder or cancel the title for no reason.[68] There is a limited power in some of the petroleum and minerals legislation to review economic viability at the development stage. This is discussed in Part 4.3 below.

4.3 The Evolving Position of Controls over Operations

Leaving to one side environmental and safety approvals, controls over operations have evolved in three areas. The first is public consultation that is a normal part of environmental impact assessment under environmental legislation. But this has been extended into petroleum and minerals legislation. For example the Victorian government recently passed the *Petroleum Legislation Amendment Act 2020* (Vic) that increases public consultation and the ability to make submissions prior to the grant of an exploration permit.[69]

Next there is development approval. In the *OPGGSA* and some state petroleum legislation approval of a field development plan is an important checkpoint before development can occur. The licensee provides detailed information to the regulator about the petroleum resource and means of extraction. But as already noted, this does not include economic information about the project or the taxes that will be paid.[70] For minerals the regulatory approach is usually to require the applicant to provide mining plans for approval before any ground-disturbance can occur, but this also does not require the provision of economic information or tax projections.[71] Neither are there approval criteria based on economics, costs or taxes.

The third area is illustrated by the position taken in New South Wales, which has a more evolved approach when it comes to major petroleum and minerals developments. An initial part of the process is the presentation to the New South Wales Division of Resources and Geoscience of a conceptual project development plan. Under Schedule 1 of the New South Wales *State Environmental Planning Policy (State and Regional Development) 2011* any development for petroleum production and any development for the purposes of mining that has a capital investment value of more than $30 million is regarded as significant.[72] This will invoke a requirement for approval by the relevant consent authority before the Minister for Resources can grant a mining lease or petroleum production licence. The Department's website notes that it has an integrated mining policy. Its aims include to "improve the regulation and assessment of major mining projects" and "strike a balance between the significant benefits mining can bring to the economy and the potential impacts on communities and the environment".[73] Part of the process is an economic assessment, for which there are published guidelines for mining.[74] There are no economic benchmarks for project approval or subsequent monitoring. The economic assessment feeds into consideration of issues like the public interest. But the result can be that a project is found not worthy to proceed. The *Gloucester Coal Case* discussed in Part 6.2 provides an illustration.

What should also be noticed at this point is the impact of the taxation arrangements in the Australian constitution. States are restricted to levying royalties on petroleum and minerals. It can therefore be envisaged that they would have limited interest in the profitability of production. The Commonwealth collects income tax that should give it an incentive to police the profitability of projects on state land and in state waters. Under the current federal arrangements not only is this not done, but it would be difficult to see how it could be done.[75]

But there is another aspect of petroleum and mining operations that should come within the stewardship duty of regulators, and that is to take measures to prevent poor execution of mining and generation of waste. Practices like flaring of gas and "high grading" have been documented in the literature and still continue.[76] What high grading can mean in relation to minerals is that value is destroyed for a state because when commodity prices are low a miner extracts the richest ore, but in so doing damages the ability of the mine to produce other ore later, even to the point of "sterilisation" of the ore body.[77] Similar activities in petroleum can adversely affect future recovery from a reservoir.

4.4 Policy

At the federal level resources policy has emphasised development of the nation's resources for broad goals, typically enhancing "national prosperity".[78] This theme continues in the latest update of federal resources policy that, after referring to Australia's national resources wealth being developed for the benefit of the Australian people, goes on to say that in particular "the development of resources should contribute to public revenues and provide business and employment opportunities to remote Australia and to Aboriginal and Torres Strait Islander people".[79] While the policy provides information about the employment and tax generated, it does not set measurable objectives for these things for the future. The broad nature of the policy settings contributes to the lack of objectives for project regulation and the consequent lack of accountability.

Neither is there any apparent willingness to examine mistakes that have been made so they are not repeated. For example, the *National Resources Statement* refers to the three liquefied natural gas plants on Curtis Island in Queensland for the size of the investment, not for how they may be open to criticism for increasing gas prices in the eastern states or for how they cost more because

three self-contained plants were built at the same time.[80] The Productivity Commission sets its own objective in the PC RSR Draft as producing a regulatory framework that "delivers the greatest possible net benefit for the community", but there is no critical examination of failures of regulation to achieve projects producing those benefits.[81]

Government policy in Australia has always focused on development, as it is only through development that resources companies generate employment and other economic benefits for Australia and pay tax. At the same time, except during the late 1980s and early 1990s when Australia was developing its policy on ecologically sustainable development, there has been little reflection on the implications of petroleum and minerals being non-renewable resources.[82] There has been an implicit assumption of continuing abundance that contrasts with the Norwegian view that its petroleum is a limited store of wealth.

There are examples of broad policy statements at the state level.[83] There have also been policy statements on particular issues. These range from bans on fracture stimulation,[84] statements on alternative energy and statements on emissions and climate change.[85] New South Wales is seemingly exceptional in having a planning policy in relation to mining and petroleum, the aims of which include the proper management of non-renewable resources and, amongst other things, "to ensure a balanced use of land by potentially competing industries".[86]

5 Public Trusts and Public Duties

5.1 Public Trusts

One way in which a disposal duty could be created over non-renewable resources is if they were subject to a trust or constitutional provision. There are two possible sources of such a trust. The first is an express trust created by the constitution or by statute in favour of, say, the Australian people with provisions dealing with disposal. These are not present in the Australian or state constitutions or Australian petroleum and mining legislation. The second is an implied public trust as discussed in Part 5.1.1 below. Private and charitable trusts can be created over natural resources under English law, a matter examined by Redgwell in her book *Intergenerational Trusts and Environmental Protection*.[87] In Australia, there are private trusts, charitable trusts and statutory non-charitable public purpose trusts under things like local government legislation that serve a limited purpose.[88] There are examples in Australia and England of a statute making the Crown or a public agency a trustee of certain property or creating a reserve through a trust arrangement.[89]

5.1.1 The Public Trust in the United States

In a 1970 article Professor Joseph Sax enlivened the question of whether there is a public trust protecting certain natural resources. He started his examination by pointing to Roman and English law protection of traditional uses such as navigation, recreation and fishery in rivers, the sea and the seashore.[90] He then reviewed cases in Massachusetts, Wisconsin and California concerning the use of lands dedicated to the public interest, generally lands owned by the government in one form or another.[91] It should be noticed that these cases are limited to rivers, lakes, the sea and the seashore and land in proximity to them. There do not appear to be any cases concerning minerals or petroleum.

As Sax points out, "What really seems to be at stake, then, is the question whether the government can or should be viewed as having made any irrevocable commitments about the use of particular governmental resources."[92] Whether that is the case will depend on the situation, but what the cases in the United States illustrate is that, although government is expected to manage actively resources it holds, under the public trust the courts will view very suspiciously any significant disposal by government or limitation of its management, and, if the resource is one which the public uses, any significant limitation of that public use.

The 5.1.2 Public Trust in Australia

Professor Bonyhady has raised the applicability of the public trust doctrine in Australia, examining two Australian cases at the end of the 19th century that recognised a public trust.[93] In one, the *Palmer* case,[94] the Victorian state government tried to raise money by selling off part of Albert

Park. The action failed because the plaintiff Palmer lacked standing, but nevertheless caused considerable interest and parliamentary discussion at the time because of comments by the judge about the legality of the state's actions. In the other, the *Sydney Harbour Collieries* case,[95] a colliery company had obtained a lease to conduct coal mining along a stretch of foreshore between Mosman and Neutral Bay, but needed to get its wharfage lease approved, a matter that ultimately came before the New South Wales Land Appeal Court. The Court found that the Crown occupied a position in relation to public lands something in the nature of a trustee, which meant that the Crown was under an obligation to alienate or dispose of those lands "only in the interest and for the benefit of people of this Colony".[96] That meant that if the Crown were to grant the wharfage lease, then it needed to obtain the best possible price, which was not represented by the lease it had entered into with the colliery company.

These cases, particularly the potentially more useful *Sydney Harbour Collieries* case, do not appear to have been followed in Australia, providing support for the statement by Justice Finn that:

> … no consideration has been given to adapting to our own purposes that evolving species of "public" (or "sovereign") trust of natural resources which has been used in the United States to circumscribe governmental decision making affecting resources in which the public has rights."[97]

In reviewing the development of Finn's ideas, Justice Gageler, writing ex-judicially, comes to a similar conclusion that the trust is "too stylised a form of relationship to accommodate the complexity of contemporary public administration".[98]

5.2 The Potential for a Fresh Look at Public Duties

The House of Lords decision in *Magill v Porter* concerned councillors seeking to change the voting demographic in marginal wards to improve the position of their party by selling council houses.[99] Lord Bingham said in summary of what he regarded as settled law:

> It follows from the proposition that public powers are conferred as if upon trust that those who exercise powers in a manner inconsistent with the public purpose for which the powers were conferred betray that trust and so misconduct themselves. This is an old and very important principle.[100]

This statement resonates with the statement of Brennan J and the quotation from Wade and Forsyth in Part 3.1 above.[101] What that means in a practical sense is summarised by Justice Gageler through the uncontroversial proposition that "the holder of a public office has a duty to exercise public power only by reference to some version of the public interest".[102] As already noted in Part 3.1 what is in the public interest is circumscribed by the subject matter, scope and purpose of the statute setting out the power.[103]

For a different approach to be taken would require a significant reappraisal of the public interest by introducing some overriding principles, such as stewardship or sustainable development. To achieve this, other countries have found it necessary to introduce legislation. An innovative example is the *Well-being of Future Generations (Wales) Act 2015* that requires a public body to act in accordance with the sustainable development principle and aim to achieve the well-being goals, including setting objectives to maximise its contribution to achieving them.[104] It was recently copied in England by the Well-being of Future Generations Bill (HL) 2019.

6 The Role of the Courts in Determining Accountability – the Limitations of Judicial Review

As Justice Preston has pointed out, ex-judicially, the function of courts is adjudication.[105] They do not seek out disputes to resolve, and accordingly they are reactive rather than proactive. They are limited by the dispute under consideration and also by their role in adjudicating it.

It is often stated that judicial review is about whether a decision was properly made in accordance with the law and not whether it was good on its merits.[106] The codification of the grounds of judicial review in s 5(1) of the *Administrative Decisions (Judicial Review) Act 1977 (Cth)* (ADJR) gives a clear indication of the boundaries of judicial review by specifying grounds like breach of the rules of natural justice,[107] failure to observe the procedures required by law,[108] improper exercise of power,[109] error of law.[110] Improper exercise of power is elaborated in s 5(2).[111]

In a thoughtful paper about the limitations of judicial review, Justice Pepper, speaking ex-judicially, makes the point that there have been relatively few judicial review cases before the Land and Environment Court.[112] What is striking is the relatively low success rate for judicial review applications (29%) as opposed to merits review (54%).[113] One of the possible reasons for the limited use of judicial review and limited success in environmental matters lies in the point made by Justice Pepper, "Decision-making involving complex questions of policy are also less likely to be amenable to judicial review".[114] She goes on to say, "In particular, decisions mediating the competing interests of environmental protection as opposed to the development of natural resources, are unlikely to be reviewable".[115]

These comments support the likelihood of an application for judicial review of the issue of an exploration licence failing if its basis is that the disposal decision is a poor bargain for the state. The primary reasons are that it is the merits of the decision and the underlying policy that are being challenged. This is explored further in Part 6.1 below dealing with the *Cazaly* decision that is compared with the merits review in the *Gloucester Coal* case.

6.1 Judicial Review – *Re Minister for Resources: Ex Parte Cazaly Iron Pty Ltd* (2007) 37 WAR 403

This is a mining case and used for the purposes of illustration of the impact of lack of objectives or decision criteria in a statute, given that there is no decided case providing a good petroleum example. The facts of the case are that the application of a subsidiary of Rio Tinto Ltd (Rio) as manager of the Rhodes River Joint Venture to extend an exploration licence covering the Shovelanna iron ore resource was not delivered by the courier and so the licence expired. Cazaly Iron Pty Ltd (Cazaly) lodged a tenement application over the area that as a result of the expiry became open for mining, soon followed by applications from other mining companies. The Rio subsidiary applied for a mining lease over the area and asked the responsible minister to exercise his power under s 111A(1)(c) of the *Mining Act 1978* (WA) (Mining Act) to terminate Cazaly's application, which he could do if "satisfied on reasonable grounds in the public interest". The minister terminated Cazaly's application and Cazaly applied for a writ of certiorari and declaratory relief to have the minister's decision quashed on a number of grounds including error in law. Cazaly's error in law argument was largely based on the minister's reliance on the state's iron ore policy that recognised the need for long term tenure to encourage investment. The Court of Appeal (WA) did not agree with Cazaly and refused declaratory relief.

The Mining Act contains no objects clause. The Court of Appeal referred with approval to the High Court's statement of its primary object being "to encourage and promote the prospecting and exploration for, and mining of, mineral deposits in the state".[116] According to the court the list of relevant matters of policy and principles which the minister was entitled to take into account if he were deciding whether to grant or refuse an exploration licence were those "governing the exploration of mineral deposits in this state" which included:

(a) the promotion of a strong and stable mining industry and economy generally;

(b) the reconciliation of exploration of mineral deposits with the protection and encouragement of competing land uses;

(c) environmental considerations; and

(d) any other matters that are in the public interest.[117]

What can be noticed about these is their focus on the primary object of the Mining Act established by the court. Disposal of state property is not mentioned.

The actual decision in the *Cazaly case* mainly concerned whether the minister's decision was on reasonable grounds, and here the court saw its role as assessing "whether each expressed ground for the decision is properly to be characterised as a reasonable ground for his satisfaction in the public interest".[118] The court therefore examined the minister's reliance on the state's iron ore policy and his opinion on the consequences of departing from it in terms of the state's sovereign risk profile and promoting investment in Western Australia. The court found these to be reasonable grounds.[119] But again there was no mention by the minister of his having any disposal duties.

If it was desired to make a court review the disposal aspects of the case in more detail, then the Mining Act would have had to have spelled out the purpose of s 111A with that in mind and set out matters for the minister to consider and on which to provide reasons. By way of example, these could include the financial and technical ability of the parties, their development plans and estimates of the economic and tax benefits to be produced for the state.[120] There are other cases such as *Blue Wedges Inc. v Minister of the Environment, Heritage and the Arts*[121] that illustrate this need for specific criteria and reasons.

6.2 Merits Review – *Gloucester Resources Limited v Minister for Planning* [2019] NSWLEC 7

The facts of this case were that Gloucester Resources Limited (GRL) had unsuccessfully applied to the Minister for Planning for development consent for the Rocky Hill Coal Project in the Gloucester Valley in New South Wales. GRL appealed to the Land and Environment Court, which on appeal exercised the function of the minister. The role of the court amounted to a merits review circumscribed by what the minister had to consider. Development applications for coal mines in New South Wales are covered by detailed legislation and policies. These include relevant sections of the *Environmental Planning and Assessment Act 1979* (NSW) (NSWEPA*)* and local and mining planning policies. These meant that the court gave detailed consideration to the visual, amenity and social impacts of the proposed mine, which Preston J found were incompatible with the existing, approved and likely preferred uses in the vicinity.[122]

Section 4.15(1) of NSWEPA requires the relevant authority in determining a development application to take the public interest into consideration, which in turn has been found to include the principles of ecologically sustainable development (ESD).[123] The discussion of the public interest involved whether the public benefits outweigh its costs to the members of a community and whether they outweigh the public benefits of other land uses. New South Wales has guidelines for the economic assessment of mining and coal seam gas proposals. The court gave detailed consideration to a cost benefit analysis and estimates of tax payable and employment benefits. Preston J found that the economic benefits of the project were uncertain and overstated.[124] He also found that there was distributive inequity in the project. For future generations this was because there were "groups within the current generation receiving economic benefits but future generations experiencing environmental costs (Economic Assessment Guidelines, p 19)".[125] Preston J. found that the negative impacts outweighed the benefits of the project, and accordingly that it was not in the public interest and that the development application should be refused.[126]

The case and the underlying policies in New South Wales provide an excellent example of the sorts of matters that need consideration if the value of a disposal is to be examined. Importantly, even though Preston J agreed with the minister, there was a clear demonstration of rigorous analysis of a project's benefits, rather than a casual assumption that it would be beneficial.

7 Reform Options

This part will examine some options for reform. The first part has brought out that non-renewable resources do not receive any special treatment under the Australian or state constitutions, and there is little likelihood of their being awarded special significance through the idea of a public trust. The concept of statutory power is too deeply entrenched for the common law or equity to provide a solution. Any solution is therefore likely to come from a clearer definition of statutory purpose and criteria for making decisions. An important assumption is that the licensing model will continue as the basic model for resource exploitation in Australia. To some degree the model may need to evolve, but that is independent of the need for a more radical overhaul of the attendant public duties and regulation.

7.1 Solutions Developed in Other Countries

Other countries have found it necessary and desirable to have some key principles that direct the management of their resources and the attendant duties of regulators.

7.1.1 Norway

The Norwegian parliament took a close interest in the nascent petroleum industry because of its relative importance to a country with a small population and manufacturing base. The parliament approved the so-called "golden rules" in 1972, fundamental to which were state control and resource management to be "carried out in a long-term perspective for the benefit of the Norwegian society as a whole" with objectives regarding revenue, welfare, employment and an improved environment.[127] State control was expressed at a number of levels, in particular the holding of a direct interest in licences through the state oil company and the creation of an expert regulator, the Norwegian Petroleum Directorate. For its time the Norwegian approach was remarkable. A number of its processes, such as economic review of projects and detailed reporting of outcomes, could be followed in Australia. The objectives in the petroleum legislation on matters like revenue are broadly stated, and they would need to be updated and reviewed for Australian conditions.

7.1.2 UK

Following the *Wood Review*, the *Petroleum Act 1998* (UKPA) was amended to require relevant parties such as licensees to comply with a strategy, which has the objective of "maximising the economic recovery of UK petroleum", and is known as MER.[128] MER contains a central obligation that "relevant persons must take the steps necessary to secure that the maximum value of economically recoverable petroleum is recovered from the strata beneath UK waters".[129] MER is the central principle of the UK system. It has many unusual characteristics, not least of which is that it is a strategy binding on licensees and others, subject to various safeguards.[130] There are three main problems with MER. The first is its focus on recovery rather than the benefits of disposal. The second is the lack of decision criteria when it comes to disposal decisions. The third is its unusual nature as a strategy.

What is useful about MER as an example for Australia is, first, the setting out of a clear duty that is binding on the regulator as well as licensees to achieve a beneficial outcome for the UK. So it counteracts one of the main structural problems with the licence model, which is that licensees are focused on profits from their exclusive licence areas rather than the national interest. Secondly, the regulator, the Oil and Gas Authority, has used it as the basis for more detailed strategies to improve exploration and production efficiency and to benchmark oil company performance. Thirdly, the Oil and Gas Authority has been set up as an independent authority and is therefore free from political interference in implementing a clear brief. Independence and a clear brief for regulators are regarded as hallmarks of good regulation.[131] While such regulators exist in relation to environmental and safety matters in Australia, there are few if any examples in petroleum and mineral licensing.

7.2 Amending Australian Petroleum and Mining Statutes

Objects clauses were gradually picked up by petroleum and mining statutes of states in Australia. Common themes are the encouragement of exploration and providing a regulatory framework. These themes are reflected in the main objects of the state and Northern Territory Acts that have objects (all except Tasmania and Western Australia). Queensland and Victoria are given as examples:

- *Petroleum and Gas (Production and Safety) Act 2004* (Qld) (QLDPSA) s 3(1):

  … to facilitate and regulate the carrying out of responsible petroleum activities and the development of a safe, efficient and viable petroleum and fuel gas industry …;

- *Petroleum Act (1998)* (Vic) *(*VICPA*)* s 3(1):

  … to encourage the exploration for petroleum in Victoria and to promote petroleum production for the benefit of all Victorians by providing—

  (a) an orderly, fair and competitive system for granting authorities enabling petroleum exploration and production; and

  (b) clear and effective administrative frameworks for organising petroleum development activities….

There are similar provisions in mining legislation.[132] The state petroleum acts have some other common themes that might be expected in onshore legislation: rehabilitation of land affected by petroleum operations, compensation for access to and use of land,[133] and minimisation of environmental impacts.[134]

What is of greater interest in this article is the extent to which the objects include disposal obligations that relate to financial, socio-economic or other benefits or recognise sustainability of operations. The following are less common.

Financial benefits:

- *Petroleum (Onshore) Act 1991* (NSW) *(*NSWPA) s 2A:
  (a) to recognise and foster the significant social and economic benefits to New South Wales that result from the efficient development of petroleum resources, and …
  (d) to ensure an appropriate return to the state from petroleum resources, …
- VICPA s 3:
  (1) … to encourage the exploration for petroleum in Victoria and to promote petroleum production for the benefit of all Victorians by providing—
    (c) fiscal regimes that offer petroleum explorers a fair return while benefiting all Victorians; …
  (2) … this Act seeks to have regard to economic, social and environmental interests by ensuring—
    (a) the efficient exploration for, and production of, petroleum; ….

Sustainability

- NSWPA s 2A:
  … having regard to the need to encourage ecologically sustainable development, …
- *Petroleum Act 1984* (NT) s 6A:
  (1) The Minister must consider and apply the principles of ecologically sustainable development in making the following decisions under this Act:
    (a) the decisions specified in Schedule 1;[135]
- QLDPSA s 3(1):
  (a) manages the state's petroleum resources—
    (i) in a way that has regard to the need for ecologically sustainable development; …

The problem with all these objects is that they are not elaborated by criteria that the relevant minister or regulator must consider in awarding a licence or approving a development. As a result they lack sufficient clarity and accountability to meet the good regulation criteria for disposal decisions. Also, by way of example, the lack of criteria in NSWPA for what is meant by "an appropriate return" would mean, if the minister in New South Wales approves a development and issues a mining lease, that a challenge through judicial review is destined to fail if the ground asserted is that he or she has not acted in accordance with the purpose of securing "an appropriate return to the state from petroleum resources". It would be different if the minister were required to take certain steps – such as a cost benefit analysis – and then provide reasons why the return is appropriate, and failed to carry out those steps or provide reasons.

There are two suggestions that can be made to commence improvement. The first is to specify decisions where financial or sustainability criteria are to be considered and to require reasons to be provided. The *Petroleum Act 1984* (NT) s 6A is an example of the application of principles of ecologically sustainable development to decisions like the grant or refusal of an exploration permit. The second is to improve the economic information that the regulator receives at important stages such as approval of a field development plan or mining plan. Companies do not generally commence operations until they have detailed cash flow and tax projections. In other countries like Norway the regulator is provided with this information.

Both these suggestions apply to secondary legislation that sometimes contains objectives. An example in Commonwealth waters is regulation 1.04 (1) of the *Offshore Petroleum and Greenhouse Gas Storage (Resource Management and Administration) Regulations 2011* that

requires that operations be carried out in accordance with good oilfield practice and are compatible with optimum long-term recovery of petroleum.[136] The difficulty with these is that they are not elaborated by clear criteria. This brings out the point that clarity of criteria is essential if there is to be any improvement in disposal decisions.

7.4 Ecologically Sustainable Development (ESD)

Australia's *National Strategy For Ecologically Sustainable Development* (National ESD Strategy) was produced in 1992.[137] The strategy was endorsed by the Council of Australian Governments in December 1992. Key principles including a definition of ecologically sustainable development were introduced into the *Environment Protection and Biodiversity Conservation Act 1999 (Cth*) (EPBC). One reform possibility is to strengthen the application of ESD to petroleum and mineral projects. However, there are some significant difficulties.

The aim of ESD as expressed in the National Strategy is "to meet the needs of Australians today while conserving our ecosystems for the benefit of future generations". Three core strategies are articulated as follows:

- 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

These are laudable as aims, and since 1992 all nine Australian jurisdictions incorporate principles of ecologically sustainable development in their legislation, primarily environmental legislation. However, they are not strong in petroleum licensing statutes, perpetuating the problem noted in the Brundtland Report that sustainability issues are considered separately from licensing and disposal issues so that a holistic view is not taken of projects.[138] This is the first difficulty of ESD as a reform option.

But that is not the only problem were ESD intended to be a central organising principle for petroleum and energy operations. The principles adopted in state statutes frequently mirror the principles set out in s 3A of the EPBC. One of the objects of the *EPBC* is "to promote ecologically sustainable development through the conservation and ecologically sustainable use of natural resources".[139] Section 3A sets out principles of sustainable development that begin with the overarching idea of integration, sometimes called the integration principle, that "decision-making processes should effectively integrate both long-term and short-term economic, environmental, social and equitable considerations".[140] There then follow four other principles: the precautionary principle,[141] intergenerational equity,[142] conservation of biological diversity and ecological integrity,[143] and improved valuation, pricing and incentive mechanisms.[144]

Having these principles would seem a promising start, but then two difficulties are encountered. By way of illustration of the first, in New South Wales the four other principles of ESD mentioned above are set out in s 6 of the *Protection of the Environment Administration Act 1991* (NSW) and s 4.1 of NSWEPA. But as Biscoe J comments, "New South Wales legislation does not mandate ESD as an outcome but, in varying ways, as part of a process".[145] Commonly that process requires the decision-maker to take ESD or the principles of ESD into account as part of the decision-making process.[146] The overall result in the context of NSWEPA is a legislative goal that "encouragement of ESD, including precaution regarding the environment, is to take its place along with other considerations so as to ensure an environmentally informed decision-making process".[147] This gives rise to the first difficulty that "an informed decision-making process" is not necessarily one having clear criteria to define the benefits of disposal supporting disposal duties. If, as is frequently the case, the mining and petroleum minister is the ultimate decision-maker he or she may be able to allow the development to proceed if he or she considers the economic benefits are more significant without specifying what those benefits are or giving reasons.[148] The judicial review cases illustrate that where the decision-maker has that kind of broad discretion the decision is not susceptible to review.

The wording in other states can vary.[149] The Victorian legislation contains a useful definition of ESD in the *Commissioner for Environmental Sustainability Act 2003* (Vic) s 4(1): "Ecologically

sustainable development 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." It goes on to set out three objectives that include enhancing "individual and community well-being and welfare by following a path of economic development that safeguards the welfare of future generations" and seven guiding principles that include the precautionary principle.[150]

The second difficulty is that numerous problems have been identified that follow from ambiguity and lack of guidance as to how the principles of ESD are to be applied and the weight to be given to them.[151] Sustainable development requires a balancing act between economic, environmental and social considerations. In many versions of the legislation it is not clear, in contrast to the Victorian legislation quoted above, that ESD requires development that "maintains the ecological processes on which life depends". In other words there is frequently no environmental bottom line. In ex-judicial writing Justice Preston argues that there is such a thing and that ESD "requires living within the planet's ecological limits".[152] Nevertheless, for something so important, clarity in the legislation is essential and is not currently achieved.

8 Conclusion

This article has sought to bring out that there are currently negligible disposal duties in respect of Australia's petroleum and minerals. Accordingly there is very little accountability when it comes to their disposal through Australia's licensing regimes. There is an absence of those duties in the petroleum and minerals legislation that can partially be explained by their history. The roots of the legislation go back beyond 1900 when their focus was providing a more organised allocation of mining rights. As mining developed from small scale operations and petroleum gained in importance, government reliance on the private sector to carry out operations in the nation's best interests as well as the interests of the companies concerned has also grown. As the remaining life of Australia's non-renewable resources diminishes and the scale and complexity of projects increases, the risks in this approach have grown substantially.

It is suggested that the time has come to amend Australia's petroleum and minerals statutes to have clear objectives and duties relating to the disposal of public property that they involve. Reform is also required to the duties of public officials when it comes to granting and administering licences and approving projects. In particular there should be clear duties to rigorously review projects to ensure the best outcomes. It should not be acceptable that regulators do not receive sufficient economic information to evaluate how projects should perform. The result is that they are not capable of evaluating whether projects will in fact produce benefits and whether those benefits are adequate. From this flows a significant gap in accountability as there can be no public reporting of project performance.

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1 The increasing scale of mineral projects, declining ore grades and increasing production of wastes are trends identified by GM Mudd, *The Sustainability of Mining in Australia – Key Production Trends and Their Environmental Implications for the Future* (Melbourne: Monash University and Mineral Policy Institute, October 2007, revised April 2009) iii.

2 Australian Government Productivity Commission, *Resources Sector Regulation* (Draft Report, March 2020) 61.

3 Sir Ian Wood, *UKCS Maximising Recovery Review: Final Report* (24 February 2014) 5.

4 The work of Professor, later Justice, Paul Finn in this area is acknowledged. See, for example, Paul Finn, "Public Trusts, Public Fiduciaries" (2010) 38(3) *Federal Law Review* 335, and the commentary in Part 5.

5 World Commission on Environment and Development, *Report of the World Commission on Environment and Development, Note by the Secretary-General*, UN Doc A/42/427 (4 August 1987), Annex, *Report of the World Commission on Environment and Development: Our Common Future* 12.12, 12.43.

6 For example, Organisation for Economic Co-operation & Development, Paris, 12 August 2016, *Collaborative Strategies for In-Country Shared Value Creation*, Framework for Extractive Projects; United Nations Development Programme, Bangkok, 28 March 2018, U Gankhuyag, F Gregoire, *Managing Mining for Sustainable Development: A Sourcebook*, UNDP Bangkok Regional Hub and Poverty-Environment Initiative Asia-Pacific of UNDP and UN Environment.

7 For example, T Daintith, *Discretion in the Administration of Offshore Oil and Gas: A Comparative Study* (AMPLA Australia, 2005); Tina Hunter and John Chandler, *Petroleum Law In Australia* (LexisNexis Butterworths 2013).

8 The expression “petroleum” will be used to describe oil and gas. When they need to be referred to separately, the expressions “oil” and “gas” will be used.

9 Depending on the definition, renewables cover categories that include growing crops, forests, and alternative energy like wind and wave energy.

10 Past reports include the Industry Commission, *Mining and Minerals Processing in Australia: Vol 1 Report*, Report No. 7, 25 February 1991 (Australian Government, 1991); Productivity Commission, *Mineral and Energy Resource Exploration*, Inquiry report No 65, 27 September 2013. (Australian Government, 2013). In 2019 Professor Graeme Samuel AC commenced his Independent Review of the Environment Protection and Biodiversity Conservation Act 1999 and has produced an interim report.

11 Australian Government, *National Resources Statement (*Commonwealth of Australia 2019).

12 Above n 2, 6, Fig. 2, referring to sources including A Senior et al., Australia’s Identified Mineral Resources 2019, Geoscience Australia, Canberra, 2020.

13 Mudd, above n 1, 7.

14 For the UK offshore petroleum example see Oil and Gas Authority (2017) *Lessons Learned from UKCS Oil and Gas Projects 2011-2016*.

15 Diane Kraal, “Review of Australia’s Petroleum Resource Tent Tax: Implications from a Case Study of the Gorgon Gas Project” (2017) 45(2) *Federal Law Review,* 316, 338. Given its high carry forward expenditure, Dr Kraal questions whether the Gorgon project will ever pay any PRRT. The position is more complicated onshore because the states can generally only levy royalties. But even onshore federal taxes apply as well.

16 *Offshore Petroleum and Greenhouse Gas Storage (Resource Management and Administration) Regulations 2011* (Cth), Reg 4.07 sets out a detailed list of matters to be included in a field development plan that does not include project economics.

17 There have been numerous examples in the press over the years. For a recent example see Angela Macdonald-Smith, “LNG chiefs fight to revive tattered dream”, *Australian Financial Review*, 12 August 2020 1. The same mistakes tend to occur throughout the industry irrespective of where the project is located. For further examples see n 14 above, 8. This revealed an average 10 month delay in project completion and a 35% cost overrun in a group of projects.

18 The Hon Keith Pitt, Minister for Resources, Water and Northern Australia*, Government ensures safety and security of Northern Endeavour*, 20 April 2020*;* Peter Milne, “Big taxpayer bills for failed Northern Endeavour start”, 6 March 2020.

19 For minerals see Mudd, above n 2, iii.

20 There are varying approaches to these issues. For example, under minerals legislation some states have had rehabilitation bonds to cover the cost of mine rehabilitation. Pursuant to the *Offshore Petroleum and Greenhouse Gas Storage Act 2006*, s 571, the National Offshore Petroleum Safety Environmental Management Authority requires evidence of financial assurance to cover extraordinary costs, such as might arise from the escape of petroleum, prior to the acceptance of an environment plan. See *Financial assurance for petroleum titles* (Document No: N-04730-GN1381 A342339, 3 July 2020) 3. Query therefore whether financial assurance applies to decommissioning costs.

21 OECD, *The Governance of Regulators*, OECD Best Practice Principles for Regulatory Policy, OECD Publishing (2014) 30.

22 Above n 21, 79.

23 Above n 2, 96, Table 3.1.

24 Above n 23.

25 Department of Industry, Energy, Science and Resources, *Offshore Petroleum Exploration Guideline: Work-bid,* effective 1 July 2019 (Australian Government 2019) [1.26].

26 *Church of Scientology v Woodward* [1982] HCA 78, (1982) 154 CLR 25, 70 (Brennan J).

27 Sir William Wade and Christopher Forsyth, *Administrative Law* (Oxford University Press, 9th edn, 2004).

28 *Cudgen Rutile (No 2) Pty Ltd v Chalk* [1975] AC 520, 533, applied to a mining lease under the *Mining Act 1978* (WA) in *Forrest & Forrest Pty Ltd v Wilson & Others* [2017] HCA 30, [64]-[66].

29 For example *Re Day No 2* [2017] HCA 14, (2017) 91 ALJR 598, supports the idea that the role of a Member of Parliament is to serve, and serve only, the public interest.

30 For a recent example from the High Court of Australia, see *Plaintiff S297/2013 v Minister for Immigration and Border Protection* [2015] HCA 3.

31 *Minister for Aboriginal Affairs v Peko-Wallsend Ltd* [1986] HCA 40, (1986) 162 CLR 24, 40 (Mason J), *Re Minister for Resources: Ex Parte Cazaly Iron Pty Ltd* [2007] WASCA 175*,* (2007) 34 WAR 403, 426 [69] (Buss J).

32 See Part 6.1 which discusses above n 31 *Re Minister for Resources: Ex Parte Cazaly Iron Pty Ltd* (2007) and *Nova Resources NL v French* (1995) WAR 50, 57-58 (Rowland J).

33 Above n 11, 21.

34 Section 51(x) *Commonwealth of Australia Constitution Act 1900* (UK).

35 For example, *Constitution Act 1902* (NSW) s 5; *Constitution Act 1889* (WA) s 2.

36 For the history of Crown ownership of minerals prior to these statutes, see JRS Forbes, AG Lang *Australian Mining and Petroleum Laws* (Butterworths, 2nd edn, 1987) Ch. 2.

37 The current state statutes and ownership provisions are: *Petroleum (Onshore) Act 1991* (NSW) s 6(1); *Petroleum Act 1923* (Qld) s 9; *Petroleum and Gas (Production and Safety) Act 2004* (Qld) s 26; *Petroleum and Geothermal Energy Act 2000* (SA) s 5(1); *Petroleum Act 1998* (Vic) s 13; *Mineral Resources Development Act 1995* (Tas) s 6; *Petroleum and Geothermal Energy Resources Act 1967* (WA) (WAPGERA) s 9. The Northern Territory has the same arrangement under the *Petroleum Act 1984* (NT) s 6.

38 Examples of current statutes comprehensively vesting minerals in the Crown are: *Mineral Resources Act 1989* (Qld) s 8(3); *Mineral Resources (Sustainable Development Act) 1990* (Vic) s 9; *Mining Act 1971* (SA) s 16; *Mining Act 1978* (WA) s 9. Those which are selective include *Coal Acquisition Act 1981* (NSW) s 5(1); *Mineral Resources Development Act 1995* (Tas) s 5(1).

39 For example, *Mining Act 1904* (WA) s 31; *Mines Act 1890* (Vic) s 5.

40 Above n 39, *Mining Act 1904* (WA) s 42; *Mines Act 1890* (Vic) s 49.

41 For example, *Mines (Petroleum) Act 1935* (Vic); *Petroleum Act 1936* (WA); Michael Crommelin, "Petroleum (Submerged Lands) Act: The Nature and Security of Offshore Titles", 1979 AMPLA Journal 135.

42 For example WAPGERA s 31.

43 The United Nations Convention on the Law of the Sea, opened for signature 10 December 1982, 1833 UNTS 3 (entered into force 16 November 1994). For mineral and other non-living resources such as petroleum see Article 77.

44 *Petroleum (Submerged Lands) Act (1967)* for each state and the Northern Territory.

45 In moving the second reading the Minister for Development said that the legislation's primary goals were to avoid the litigation that was occurring in the US and Canada over offshore petroleum rights and to place governments in Australia "in a position where they can ensure that the interests of the nation are secured while allowing those who face the commercial and financial risks a proper chance of legitimate gains from their enterprise", Commonwealth, *Parliamentary Debates*, House of Representatives, 18 October 1967, 3 (The Honourable David Fairbairn DFC, Minister for National Development).

46 Attorney General's Department, *Offshore Constitutional Settlement: A Milestone in Cooperative Federalism* (Australian Government Publishing Service, Canberra, 1980).

47 The current versions are the *Petroleum (Submerged Lands) Act 1982* of each of Queensland, South Australia, Tasmania and Western Australia. The Northern Territory Act was dated 1981. In New South Wales it is called the *Petroleum (Offshore) Act 1982 (NSW).* The Victorian Act was replaced and updated by the *Offshore Petroleum and Greenhouse Storage Act 2010 (Vic).*

48 Above n 47.

49 Above n 37.

50 Some countries, such as Norway, only issue one licence called a production licence that covers all the phases of petroleum exploitation: exploration, appraisal, development, production and decommissioning. The Australian jurisdictions all require a separate exploration permit for exploration and appraisal and a production licence for production.

51 There is power under some of the legislation (for example OPGGSA s 111) to issue a permit for a cash payment, but this has rarely been used and in the offshore is not likely to be used for the foreseeable future. Department of Industry, Science, Energy and Resources, 2018 Offshore Acreage Release cash bidding results, 22 February 2019.

52 For example, *OPGGSA* s 285, *Petroleum and Geothermal Energy Act 2000* (SA) s 5(1), *Petroleum Act (1998)* (Vic) s 17. Disposal rights may be restricted by export licences and similar mechanisms.

53 The Henry Tax Review puts it on the basis that "providing private businesses with the right to exploit the community's non-renewable resources is akin to selling a public asset": Commonwealth of Australia, *Australia's future tax system - Report to the Treasurer* (December 2009) 219. The legal nature of licences has been subject to much deeper analysis and the view expressed here does not engage with that. See for example T Daintith (above n 7) [3300]; Crommelin (above n 41); *Commonwealth of Australia v WMC Resources Ltd* [1998] HCA 8. For further discussion about minerals, see Northcutt Ely, "Policy Considerations in the Development of Mineral Laws" (1970) 3 *Natural Resources Lawyer* 2, Arlon R Tussing and Gregg K Erickson, *Mining and Public Policy in Alaska Mining Policy, The Public Lands and Economic Development* (Institute of Social, Economic and Government Research, University of Alaska College, SEG Report 21, June 1969).

54 See for example *Mineral Resources (Sustainable) Development Act 1990* (Vic) ss 11, 15(1A), *Mining Act 1978* (WA) ss 75(7), 85(2).

55 Above n 7, Daintith [3300].

56 It is clear that in some jurisdictions the bargain is contractual because both parties sign a document expressed as a contract.

57 Above n 11, National Resources Statement 21, begins its first policy principle with "Australia's national resources wealth belongs to the Australian people and should be developed for their benefit".

58 Regulator Interview, June 2020. Interviews were conducted for this research on the basis that interviews would be referred to by defined categories such as regulator and industry and the month in which the interview was conducted.

59 For example, Woodside Petroleum, Sustainable Development Report 2018.

60 *Mining Act 1992 (NSW*), *Mineral Titles Act 2010 (NT), Mineral Resources Act 1989* (Qld), *Mineral Resources (Sustainable Development Act) 1990 (Vic*), *Mining Act 1971 (SA*) *Mineral Resources Development Act 1995 (Tas*) and *Mining Act 1978 (WA*).

61 In the *Mineral Resources (Sustainable) Development Act 1990 (Vic)* it is called a mining licence.

62 There is commonly a provision in mining legislation allowing tenders for licences specifically or the issue of licences on special conditions which could be used to allow tenders: *Mineral Resources (Sustainable) Development Act 1990 (Vic)* s 27; *Mining Act 1978 (WA)* s 19.

63 D Pearce, R Geddes, *Statutory Interpretation in Australia* (LexisNexis, 6th edn, 2006), 154, quoted in Australian Law Reform Commission, *For Your Information: Australian Privacy Law and Practice*, ALRC Report 108, Vol 1 (2008) [5.90].

64 Office of Parliamentary Counsel, *Working with the Office of Parliamentary Counsel: A Guide for Clients* (3rd edn, 2008), [125] as quoted by the Australian Law Reform Commission (above n 63).

65 *Minister for Urban Affairs and Planning v Rosemount Estates Pty Ltd* (1996) 91 LGERA 31, 78 (Cole JA); s 15AA, *Acts Interpretation Act 1901* (Cth) and its state equivalents.

66 For example *Petroleum (Onshore) Act 1991* (NSW) s 2A: "to ensure an appropriate return to the state from petroleum resources".

67 There are exceptional provisions, such as *Mining Act 1978 (WA)* s 111A, that allows cancellation of applications.

68 However, *OPGGSA* s 274 allows cancellation for non-compliance.

69 *Petroleum Legislation Amendment Act 2020* (Vic) s7 inserting a new s 19A into *Petroleum Act (1998*) (Vic).

70 See above n 16.

71 There can be requirements for additional material such as mineralisation reports and mining proposals. Under the *Mineral Resources (Sustainable Development) Act 1990* (Vic) s 15(6B) the applicant for a mining licence must "satisfy the minister that there is a reasonable prospect that the mining of the mineral resource described in the application will be economically viable". There is a similar provision in in the *Mining Act 1971* (SA) s 35(3) which requires a reasonable prospect that the land can be "effectively and efficiently mined".

72 NSW Government, *State Environmental Planning Policy (State and Regional Development) 2011, Schedule 1, 5(3)(b).*

73 NSW Government, Department of Resources, *Integrated Mining Policy*.

74 NSW Government, *Guidelines for the economic assessment of mining and coal seam gas proposals* (December 2015).

75 Above n 75, 10, the NSW Guidelines nevertheless estimate a share of income tax from a project that is attributable to NSW.

76 On the vast flaring of gas that occurred in the early years in the United States, see T Daintith, *Finders Keepers? How the Law of Capture Shaped the World Oil Industry* (RFF Press 2010) 77. Flaring still occurs there, for example, in the production of hydrocarbons from shale where there are no available facilities for dealing with the gas.

77 Kathryn Diss, *Iron ore high-grading by junior miners facing price slump questioned by analysts* (ABC 9 July 2015).

78 Department of Primary Industries and Energy, *Offshore Strategy: Promoting Petroleum Exploration Offshore Australia* (1990) 1.

79 Above n 11, 21.

80 Above n 11, 14. Some critical comment is emerging, including from ministers of the day. See above n 17.

81 Above n 2, 96.

82 As part of the research for this article in 2019 the writer examined released cabinet documents concerning the development of policy on ecologically sustainable development. They included the draft speech of the then minister for Primary Industries and Energy, the Hon John Kerin, entitled Resolving Resource Use Conflicts, to be given to the Australian Agricultural Economics Society (ACT Branch) 21 November 1989, containing the important statement on intergenerational equity and wealth generated by non-renewable resources that "the role of government, as agents for these community returns, is in priority setting and in ensuring that rents are efficiently collected and not squandered".

83 For example, *Leading practice principles for a sustainable resources sector: a Western Australian perspective* (Government of Western Australia 2018).

84 NSW, SA and WA have localised restrictions on fracking. Tasmania has a complete ban on it. Victoria lifted its moratorium on conventional gas exploration from June 2021: above n 69, *Petroleum Legislation Amendment Act 2020* (Vic).

85 Office of Environment and Heritage, NSW Climate Change Policy Framework (2016) NSW has committed to achieve net zero emissions by 2050. Climate change, and government policy about it, has very significant implications for all fossil fuels. it is outside the scope of this article to address that.

86 NSW Government, *State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007* s 2(d)(iii).

87 Catherine Redgwell, *Intergenerational trusts and environmental protection* (Juris Publishing, 1999).

88 *Bathurst City Council v PWC Properties Pty Ltd* (1998) 195 CLR 566, cited in Finn (n 4) 344.

89 *Registrar of Accident Compensation Tribunal v Commissioner of Taxation (Cth)* [1993] HCA 1, (1993) 178 CLR 145.

90 Joseph Sax, "The Public Trust Doctrine in Natural Resource Law: Effective Judicial Intervention" (1970) 68 *Michigan Law Review*, 471. On page 556 Sax argues that the public trust concept can have wider application. Above n 87, 68, Redgwell also mentions this, indicating that no case has yet confirmed the extension of the principle to protect wildlife and biological diversity.

91 For example *Illinois Central Railroad Company v Illinois* 146 U.S. 387 (1892); *Gould v Greylock Reservation Commission* 350 Mass. 410, 215 N.E. 2d 144 (1966*).*

92 Above n 90, 480.

93 T Bonyhady, "A Usable Past: the Public Trust in Australia" (1995) 12(5) *Environmental and Planning Law Journal* 329: the cases were *Re Sydney Harbour Collieries Co* (1895) 5, Land Appeal Court Reports 243; *Palmer v Board of Land and Works* (1875) 1 VLR 80.

94 Above n 93, *Palmer*.

95 Above n 93, *Re Sydney Harbour Collieries*.

96 Above n 93, *Re Sydney Harbour Collieries*, 243, 259.

97 Above n 4, Finn 344.

98 Stephen Gageler, "The Equitable Duty of Loyalty in Public Office" in Tim Bonyhady (ed), *Finn's Law – An Australian Justice* (Federation Press, 2016) 126, 136.

99 *Magill v Porter* [2001] UKHL 67, [2002] 2 AC 357.

100 Above n 99, [2001] UKHL 67.19, [2002] 2 AC 357, 463.

101 Above n 27.

102 Above n 98, Gageler 146.

103 For a statute that has quite a broad scope, such as an environmental planning and assessment Act, and has an object of encouraging ecologically sustainable development, this may require the decision-maker to consider matters like the principles of ecologically sustainable development in determining what is in the public interest. *Minister of Planning v Walker* [2008] NSWCA 224, [43] (Hodgson JA,)

104 *Well-being of Future Generations (Wales) Act 2015* s 3. Section 5 sets out the sustainable development principle that requires a public body to act in a manner which seeks to ensure that the needs of the present are met without compromising the ability of future generations to meet their own needs and under s 5(2)(a) to take account of "the importance of balancing short term needs with the need to safeguard the ability to meet long term needs, especially where things done to meet short term needs may have detrimental long term effect".

105 Brian J. Preston, "The judicial development of ecologically sustainable development" in Douglas Fisher (ed), *Research Handbook on Fundamental Concepts of Environmental Law* (Edward Elgar, 2016) 475.

106 For example Brennan J in *Attorney General (NSW) v Quin* [1990] HCA 21, (1990) 170 CLR 1, 35-36 says "The duty and jurisdiction of the court to review administrative action do not go beyond the declaration and enforcing of the law which determines the limits and governs the exercise of the repository's power….The merits of administrative action, to the extent that they can be distinguished from legality, are for the repository of the relevant power and, subject to political control, for the repository alone."

107 *Administrative Decisions (Judicial Review) Act 1977 (Cth)*, s 5(1)(a).

108 Above n 107, s 5(1)(b).

109 Above n 107, s 5(1)(e).

110 Above n 107, s 5(1)(f).

111 Above n 107. To include matters like failing to take a relevant consideration into account in the exercise of a power (s 5(2)(b)), bad faith (s 5(2)(d)) and an exercise of power so unreasonable that no reasonable person could have so exercised it (s 5(2)(g)).

112 R A Pepper, *Judicial Review is Dead. Long Live Judicial Review!* Paper delivered at the 2018 ANU Public Law Weekend, ANU College of Law, Canberra, 3 November 2018, 3, in which she says that judicial review challenges comprised only 3.2% of the Court's finalised caseload in 2017.

113 Above n 112.

114 Above n 112, 15, citing Gerry Bates, *Environmental Law in Australia* (LexisNexis Butterworths, 9th edn, 2016) 958.

115 Above n 114.

116 *Re Minister for Resources; Ex Parte Cazaly Iron Pty Ltd* [2007] WASCA 175; (2007) 34 WAR 403, 426 [70] (Buss J.), citing *The Commonwealth of Australia v The State of Western Australia* (1999) 196 CLR 392, 450-451 [172] (Kirby J).

117 Above n 116, [72].

118 Above n 116, [235].

119 Above n 116, [237]-[240].

120 It is arguable that the minister should do this in other competing application situations. See the decision of Warden Calder in *Jindalee Resources Ltd v Blackham Resources Ltd & Others* [2008] WAMW 7 [57]-[67] where he states that there are two stages to the grant of an exploration licence under the *Mining Act 1978* (WA) and in the second stage, which involves the minister, where there are competing applications for which the minister must consider "whether all things are equal". See also the *Mineral Resources (Sustainable Development) Act 1990* (Vic) s 23 which requires the minister to rank competing applications.

121 *Blue Wedges Inc. v Minister of the Environment, Heritage and the Arts* [2008] FCA 399.

122 *Gloucester Resources Limited v Minister for Planning* [2019] NSWLEC 7, 22 [86].

123 Above n 122, 111 [498].

124 Above n 122, 142 [664].

125 Above n 122, 143 [669]. Guidelines, above n 74, 19.

126 Above n 122, 147 [688].

127 Currently Norway's *Act 29 November 1996 No 72 Relating to Petroleum Activities*, s 1-2.

128 *Petroleum Act 1998* (UK), s 9A(1)

129 Oil and Gas Authority, *MER UK Strategy* (18 March 2016, last updated 1 October 2016).

130 Above n 128, s 9C makes it binding on relevant parties such as licensees.

131 Above n 21, 46-49.

132 See for example *Mineral Resources Act 1989* (Qld) s 2(f) and *Mineral Resources (Sustainable) Development Act 1990* (Vic) s 2(1).

133 *Petroleum (Onshore) Act 1991* (NSW) s 2A; *Petroleum Act 1998* (Vic) s 3(2)(c), (d).

134 *Petroleum and Geothermal Energy Act 2000* (SA) s 3 (d); *Petroleum Act 1998* (Vic) s 3 (2)(b).

135 The decisions in Schedule 1 include important decisions such as the grant of exploration permits. NTPA s 6A (2) says that "in making a decision under this Act and stating the reasons for that decision, the Minister is not required to specify how the Minister considered or applied these principles".

136 *Petroleum and Geothermal Energy Resources (Resource Management and Administration) Regulations 2015* (WA) reg 47 (1) (b) uses the same tests. *Petroleum and Gas (Production and Safety) Act 2004* (Qld) s 382 requires the plan to optimise the production of petroleum. *Petroleum Act 1998* (Vic) s 61 requires the minister's approval without specifying limitations.

137 Government of Australia, *National Strategy for Ecologically Sustainable Development* (Australian Government Publishing, December 1992)

138 Brundtland Report (n 5) Chapter 12 para 12 and 43. In *Walker v Minister for Planning* [2007] NSWLEC 741, [69], Biscoe J noted that New South Wales alone had 55 Acts and Regulations referring to ESD and the Commonwealth had 19. The range covered is very broad extending through coastal protection, fisheries, local government, national parks, transport, water and waste.

139 *Environment Protection and Biodiversity Conservation Act 1999* (Cth), s 3(1)(b).

140 *Above n 139,* s 3A(a).

141 Above n 139, s 3A(b), "if 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".

142 Above n 139, s 3A(c), "that the present generation should ensure that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations".

143 Above n 139, s 3A(d), :"the conservation of biological diversity and ecological integrity should be a fundamental consideration in decision-making".

144 Above n 139, s 3A(e), "improved valuation, pricing and incentive mechanisms should be promoted".

145 *Walker v Minister for Planning* [2007] NSWLEC 741, [70].

146 Above n 145.

147 Above n 145, [74]. For more detail on how this works and particularly whether ESD has to be considered see the New South Wales Court of Appeal decision *Minister for Planning v Walker* [2008] NSWCA 224 at [52]–[56] (Hodgson JA).

148 A development in South Australia requires a statement of environmental objectives. Approval of this is the responsibility of the petroleum minister (*Petroleum and Geothermal Energy Act 2000* (SA) s 101).

149 Bates (n 112) 11, notes that legislation in Victoria is particularly expansive, referring to *Commissioner for Environmental Sustainability Act 2003* (Vic) s 4.

150 Compare *Mineral Resources (Sustainable Development) Act 1990* (Vic) *s 2A* which requires the administration of the Act to have regard to the principles of sustainable development, and the definition of those principles in that section.

151 Paul Stein, "Are Decision-Makers Too Cautious with the Precautionary Principle?" Land and Environment Court of New South Wales Annual Conference (1999), Supreme Court of New South Wales.

152 Brian J. Preston, "The judicial development of ecologically sustainable development", Conference Paper, IUCNAEL Colloquium "Environment in Court", Oslo 2016, 7.