

Recent Developments in Australian Climate Change Litigation:

Forward Momentum From Down Under

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Studies indicate that Australia has one of the worst environmental records of any developed country.² Particularly striking is its role in the climate change debate: despite being the current leading emitter of greenhouse gases in the world on a per capita basis, Australia originally joined the United States in refusing to sign the Kyoto Protocol.³ These disparate climate change positions have a common denominator: coal.⁴ Australia is the world's fourth largest coal producer and largest coal exporter, sending out approximately 60% of its annual production, which accounts for almost 30% of global coal exports.⁵ Not only is the country's trade economy reliant on coal,⁶ so too is its electricity production: over 75% of Australia's electricity comes from burning coal.⁷

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² JOSEPH SMITH & DAVID SHEARMAN, CLIMATE CHANGE LITIGATION: ANALYSING THE LAW, SCIENTIFIC EVIDENCE AND IMPACTS ON THE ENVIRONMENT, HEALTH, AND PROPERTY 43 (2006). For example, Australia still allows the dumping of highly toxic metal waste, chlorine, and other chemicals into its ecologically sensitive waters. *Id.* at 43-44.

³ *Id.*

⁴ See Wendy Frew, *Loyalty to Coal Takes Wind Out of Clean Energy Advocate's Sails*, SYDNEY MORNING HERALD, Nov. 3, 2007, at 1, available at <http://www.smh.com.au/articles/2007/11/02/1193619145340.html>.

⁵ Coal Fact Sheet, The Greens New South Wales Coal Mining, July 1, 2006, available at <http://lee.greens.org.au/index.php/content/view/13328/65/>.

⁶ Mining in New South Wales employs approximately 21,000 people and creates another 100,000 jobs around the state. New South Wales Mineral Council Ltd., available at <http://www.nswmin.com.au/home>. This single state mining industry contributed \$1.5 billion in government royalty payments and state and federal taxes in FY 2006. *Id.* New South Wales and the neighboring state of Queensland produce 100% of Australia's black coal exports. Coal Fact Sheet, *supra* note 5.

⁷ Australian Coal Association, available at <http://www.australiacoal.com.au/electricity.htm>. Australian electricity prices are some of the lowest in the world. Australia's Electricity, Briefing Paper 37, May, 2006, available at <http://www.uic.com.au/nip37.htm>.

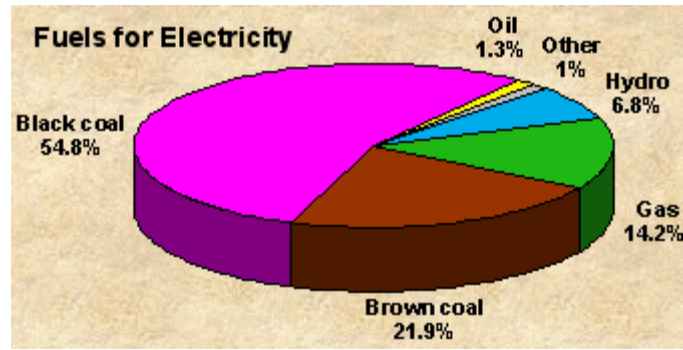


Figure 1⁸

As Dr. Mark Diesendorf, Director of the Sustainability Centre at Sydney's University of Technology, pointed out, "[t]he greenhouse pollution produced by these [coal fired] power stations is equivalent to the annual emissions from about 40 million cars, four times Australia's actual car fleet."⁹

But today, the business as usual mentality and relative environmental indifference is quickly becoming a thing of the past. Ubiquitous climate change headlines both popularize the issue and arguably educate the public.¹⁰ The Intergovernmental Panel on Climate Change's Fourth Assessment Report unequivocally documents the scientific consensus on climate change's anthropogenic sources.¹¹ Closer to home, record drought in Australia and its toll on the agricultural sector -- particularly cotton exports -- has

⁸ Australia's Electricity, Briefing Paper 37, September 2007, available at <http://www.uic.com.au/nip37.htm>.

⁹ Coal Fact Sheet, *supra* note 5.

¹⁰ See *Thousands March for Walk Against Warming*, NEWS.COM.AU., Nov. 11, 2007, at 1, available at <http://www.news.com.au/story/0,23599,22739694-1702,00.html>; see also *Climate Change Threatens Human Health, According to Australian Report*, SCIENCE DAILY, Oct. 30, 2007, at 1, available at <http://www.sciencedaily.com/releases/2007/10/071030094648.htm>; see also Emma Maris, *Australia Warms to Climate Change*, 6 NATURE REPORTS CLIMATE CHANGE 90 (2007), available at <http://www.nature.com/climate/2007/0711/full/climate.2007.62.html>.

¹¹ Climate Change 2007: Synthesis Report, Summary for Policymakers, available at http://www.ipcc.ch/pdf/assessment-report/ar4/syr/ar4_syr_spm.pdf.

raised awareness and concern over global warming.¹² Such a massive turn in public perception has led to a political reevaluation of Australia's climate change position. On November 24, 2007, Labor Party candidate Kevin Rudd was elected Prime Minister in the world's first climate change election.¹³ Promising to make the issue a priority, Rudd immediately signed the Kyoto Protocol and played an active role in the U.N. climate summit in Bali.¹⁴

The growing scientific consensus about climate change and Australians' fears about irreversible ecological impacts has also led to a search for more proactive domestic regulation via environmental impact assessments. During the past five years, Australian conservation foundations have spearheaded a grassroots movement to use the courts as a tool for climate change reform. In so doing, these environmental advocates have pushed the judiciary to interpret and apply the Environment Protection and Biodiversity Conservation Act of 1999 (EPBC) to climate change. Through a series of cases,¹⁵ courts have decided that environmental impact assessments, required under the EPBC and relevant state environmental planning statutes,¹⁶ must consider climate change and its intergenerational effects. To reach this conclusion has required case-by-case analysis of the EPBC's terms in light of its overall purpose. It has also required a measure of courage, for, by taking a general environmental protection statute and applying it

¹² See John Vidal, *Australia Suffers Worst Drought in 1,000 years*, GUARDIAN, November 6, 2006, at 1, available at <http://www.guardian.co.uk/australia/story/0,,1941942,00.html>.

¹³ Julian Glover, *The Lucky Country?*, GUARDIAN, Nov. 23, 2007, at 1, available at <http://www.guardian.co.uk/environment/2007/nov/23/climatechange.australia>.

¹⁴ See Barbara McMahon, *Australia's New Prime Minister Ready to Sign Kyoto Pact*, GUARDIAN, November 26, 2007, at 1, available at <http://www.guardian.co.uk/australia/story/0,,2216949,00.html>.

¹⁵ See Part II, *infra*.

¹⁶ See Part I, *infra*.

progressively to the home-grown causes of global climate change, Australian judges have stepped into a breach that legislators and executive branch agencies have avoided.¹⁷

This article seeks to explain how Australian jurisprudence came to take this position on climate change. In Part I, we briefly describe the EPBC, its key principles and provisions, and how these ideas made their way into national legislation. In Part II, we explore the recent climate change decisions of various federal and state trial and appellate courts. We specifically analyze how key EPBC provisions have been interpreted to require recognition of global and intergenerational accountability for Australia's coal industry. As we conclude in Part III, studying the EPBC and how the courts have interpreted their role in addressing anthropogenic climate change shows us how this strand of legal dialogue contributes to the broader narrative of climate change litigation currently occurring around the world.¹⁸

I. The Starting Point: Environment Protection and Biodiversity Conservation Act of 1999

The Environment Protection and Biodiversity Conservation Act of 1999 (EPBC) established a schema of environmental impact assessment requirements and guidelines. Although a federal statute, individual Australian states and territories look to its principles and structure when formulating their own environmental regulations. Along

¹⁷ Some would argue that this is precisely a court's role. *See, e.g.*, Mary Wood, Atmospheric Trust Litigation (draft chapter on file with authors) (arguing that U.S. courts, via the development of the common law public trust doctrine, have a pivotal role in policing the legislature and agencies, given "the enormity of climate crisis and the crucial role of the judiciary.")

¹⁸ *See* Hari M. Osofsky, *Climate Change Litigation as Pluralist Legal Dialogue*, 43 *Stan. J. Int'l L.* 181, ? (p. 5 of my copy) (2007) (positing that the many forms of climate change litigation currently taking place around the world "might lead to a better understanding of its [climate change litigation] regulatory role" in the pluralistic international legal discourse on climate change).

with the general objectives of protecting the environment and conserving biodiversity, the EPBC takes a strong stand on sustainable development and intergenerational equity.¹⁹

A. Precursor principles

After signing many international environmental treaties and protocols beginning in the 1980s, the Commonwealth, States, and Territories of Australia adopted the National Strategy for Ecologically Sustainable Development (NSES D) and the Intergovernmental Agreement on the Environment (IGAE) in 1992. These two agreements established ecologically sustainable development as an accepted principle of environmental policy across all levels of government.²⁰

The NSES D provides a framework for policy- and decision-making. Its adoption came largely in response to the 1987 release of *Our Common Future* by the World Commission on Environment and Development (commonly referred to as the Brundtland Commission).²¹ The NSES D thus lays out a cooperative approach to ecologically sustainable development that emphasizes long-term benefits over short-term gains. Taking into account Australia's unique natural environment, the values of the Australian people, and the prevailing patterns of economic production and consumption, the NSES D defined ecologically sustainable development as "using, conserving and enhancing the community's resources so that ecological processes, on which life depends, are

¹⁹ See generally Lee Godden & Jacqueline Peel, *The Environment Protection and Biodiversity Conservation Act 1999: Dark Sides of Virtue*, 31 MELB. U. L. REV. 106, 143 (2007) (positing that despite present impediments, the EPBC should play a prominent role in the future "bring[ing] about lasting changes to the culture of environmental decision-making").

²⁰ Ben Boer, *The Globalisation of Environmental Law*, 76 AUSTRALIAN LAW REFORM COMMISSION 33 (2000).

²¹ World Commission on Environment and Development, *Our Common Future* (Oxford University Press (1987)).

maintained and quality of life for both present and future generations is increased."²²

The NSESD's five principles, announced after consultation with Australia's

manufacturing, mining, agriculture, and fisheries sectors, include:

1. integrating economic and environmental goals in policies and activities;
2. ensuring that environmental assets are properly valued;
3. providing for equity within and between generations;
4. dealing cautiously with risk and irreversibility; and
5. recognizing the global dimension.²³

Although each level of government adopted these principles, they implemented them according to their own needs and priorities.²⁴

Most Australian governments signed off on the IGAE one month before the UN Conference on the Environment and Development in 1992 in Rio, as a direct reflection of Australia's commitment to the environment. In it, the parties acknowledged that environmental concerns and impacts respect neither physical nor political boundaries and thus have inter-jurisdictional, international, and global impacts.²⁵ Similar to the NSESD, the IGAE declares that "ecologically sustainable development . . . provides potential for the integration of environmental and economic considerations in decision making and for balancing the interests of current and future generations."²⁶ Government parties also

²² An Overview of the National Strategy for Ecologically Sustainable Development, Australian Government: Department of the Environment and Water Resources (December 1992), *available at* <http://www.environment.gov.au/esd/national/nsepd/overview/index.html>.

²³ *Id.*

²⁴ For example, the Commonwealth has taken measures to ensure that the precautionary principle, intergenerational equity, and the conservation of biodiversity work themselves into the decision-making process via the EPBC. State and local governments also implement the principles by infusing them into relevant planning and development legislation. *Id.*

²⁵ Intergovernmental Agreement on the Environment, Australian Government: Department of the Environment and Water Resources, *available at* <http://www.environment.gov.au/esd/national/igae/index.html>.

²⁶ IGAE, Section 3.5.2 refers to intergenerational equity by stating 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." *Id.*

agreed that environmental decisions need to take into account the precautionary principle, intergenerational equity, conservation of biological diversity and ecological integrity, and improved valuation, pricing, and incentive mechanisms.²⁷ Importantly, the IGAE sought to harmonize Commonwealth and State approval processes, to promote efficiency and limit duplication. The IGAE report concluded by pointing out the potentially significant impact of greenhouse gas-enhanced climate change on Australia's natural, social, and working environments, as well as on the global community.²⁸

B. The EPBC's Terms

When enacted in 1999, the EPBC set out eight “Objects of Act”:

1. protecting the environment, especially “matters of national environmental significance”;
2. promoting ecologically sustainable development through conservation and sustainable use;
3. conserving biodiversity;
4. protecting and conserving heritage;
5. promoting cooperation among governments, community, landholders, and indigenous peoples;
6. implementing cooperatively Australia’s international environmental responsibilities;
7. recognizing the role of indigenous people; and
8. promoting the use of indigenous peoples’ knowledge.²⁹

To achieve these objects, the EPBC very practically committed to “strengthen[ing] intergovernmental co-operation, and minimi[zing] duplication through bilateral agreements,”³⁰ “adopt[ing] an efficient and timely Commonwealth environmental

²⁷ *Id.*

²⁸ *Id.*

²⁹ Environment Protection and Biodiversity Conservation Act (EPBC), 1999, c. 1, § 3 (1) (a) – (g) (Austl.).

³⁰ *See* EPBC, c. 1, § 3 (2) (b), c. 3, § 47. Bilateral agreements currently exist between the Commonwealth and Queensland, Western Australia, Tasmania, New South Wales, and the Northern Territory. These agreements ensure that state environmental assessments meet the standards of the EPBC, thereby making additional commonwealth assessments superfluous.

assessment and approval process that will ensure activities that are likely to have significant impacts on the environment are properly assessed,”³¹ and “promot[ing] a partnership approach to environmental protection” with states and territories, landholders, and indigenous people.³²

Given the EPBC’s grounding in the NSESD and IGEA, the Act includes a separate section explicitly stating the five principles of ecologically sustainable development:

- (a) decision-making processes should effectively integrate both long-term and short-term economic, environmental, social and equitable considerations;
- (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;
- (c) the principle of intergenerational equity -- 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;
- (d) the conservation of biological diversity and ecological integrity should be a fundamental consideration in decision-making;
- (e) improved valuation, pricing and incentive mechanisms should be promoted.³³

EPBC assessment and approval is required for actions that are likely to have a significant impact on: 1) a matter of national environmental significance; 2) the environment of Commonwealth land (even if taken outside Commonwealth land); and 3) the environment anywhere in the world (if the action is undertaken by the

³¹ EPBC, c. 1, § 3 (2) (d).

³² EPBC, c. 1, § 3 (2) (g).

³³ EPBC, c. 1, § 3A.

Commonwealth).³⁴ The EPBC characterizes "action" broadly to include a project, development, undertaking, activity, or series of activities.³⁵ When a person or commonwealth agency proposes to take an action it believes may be "controlled" under the EPBC, it must refer the proposal to the Commonwealth Minister for the Environment and Water Resources.³⁶ To make this determination, the Minister "must consider all adverse impacts (if any) the action "(i) has or will have; or (ii) is likely to have."³⁷ To apply this language, policy guidelines instruct that:

1. a "significant impact" is an impact which is important, notable, or of consequence, having regard to its context or intensity;
2. whether or not an action is likely to have a significant impact depends on the sensitivity, value, and quality of the environment which is impacted, and on the intensity, duration, magnitude and geographic extent of the impacts; and
3. the significant impact does not need to have a greater than 50% chance of happening. Rather, all that is required is that it has a real and not a simply remote chance or possibility. If there is scientific uncertainty about the impacts of an action but the potential impacts are serious or irreversible, the precautionary principle is applicable.³⁸

II. Climate Change and Intergenerational Rights Case Law

Australian courts have taken the lead in connecting global climate change to domestic environmental planning and economic development. Using the EPBC and its core principle of intergenerational equity, courts have asserted the government's

³⁴ EPBC, c. 2, pt. 3, div. 1. Matters of national environmental significance include: (1) world heritage property; (2) national heritage place; (3) wetlands of international importance; (4) listed threatened species and communities; (5) listed migratory species; (6) nuclear actions; (7) marine environment.

³⁵ EPBC, c. 8, § 523(1).

³⁶ EPBC, c. 4, § 68A.

³⁷ EPBC, c. 4, § 75(2)(a).

³⁸ AUSTL. GOV'T, DEP'T OF THE ENV'T AND HERITAGE, EPBC ACT POLICY STATEMENT: SIGNIFICANT IMPACT GUIDELINES ON MATTERS OF NATIONAL ENVIRONMENTAL SIGNIFICANCE 4 (2006), *available at* <http://www.environment.gov.au/epbc/publications/pubs/nes-guidelines.pdf>.

responsibility to assess even the indirect impacts of coal industry expansion, in light of its greenhouse gas emissions and their contribution to global climate change.

A. Reaching the Indirect Effects of Development

To understand the recent flurry in climate change litigation, one first has to understand the *Nathan Dam* precedent,³⁹ for it established the test used to determine the scope of a controlled action under section 75 of the EPBC. In this case, a developer applied to the Commonwealth Environmental Minister for EPBC approval of a dam construction project in Central Queensland. The dam's principal purpose was to supply water to irrigate cotton farms. If constructed, the dam would have significantly affected river flow traveling into the Great Barrier Reef World Heritage Area (GBRWHA). Because the dam would directly impact certain threatened species, the Minister found the dam controlled only in that regard. The dam's indirect impacts on migratory species, for example, and on the GBRWHA, through agricultural runoff, were deemed not controlled under this direct effects test.

In response, the Queensland Conservation Council (QCC) challenged the direct effects test, asking the Minister to do environmental impact assessments for the indirect impacts the dam would have on the downstream Great Barrier Reef and Dawson floodplain.⁴⁰ The federal trial court held that the Minister had erred by refusing to consider the impacts of associated agricultural development and the reviewing court affirmed, concluding that the Minister had wrongfully construed the "all adverse impacts"

³⁹ *Queensland Conservation Council Inc. v. Minister for the Env't & Heritage* (2004) FCAFC 190 (Austl.).

⁴⁰ Increased irrigation practices made possible by damming the river would lead to more pesticide and insecticide runoff. The QCC argued that such chemicals would eventually find their way to the GBRWHA.

language.⁴¹ The Court of Appeals determined that these statutory words include "each consequence which can reasonably be imputed as within the contemplation of the proponent of the action, whether those consequences are within the control of the proponent or not."⁴² Furthermore, "impact" means the influence or effect of an action, which may readily include the indirect consequence of an action – even possibly the results of acts done by persons other than the principal actor.⁴³ The court did put limits on these indirect effects, however: they must be "sufficiently close to the action to allow it to be said, without straining the language, that they are, or would be, the consequences of the action on the protected matter."⁴⁴ Thus, as long as potential impacts do not lie in the "realm of speculation," they are controlled actions.⁴⁵

B. *Regulating Coal Mining and its Indirect Effects on Climate Change*

The decision in *Australian Conservation Foundation v. Minister for Planning* stands as one of the world's first climate change lawsuits resolved in favor of environmentalists.⁴⁶ In this case, the Hazelwood Mine and Power Station and its owner, International Power Hazelwood (IPH), sought to develop an additional coal field to ensure a supply until at least 2031.⁴⁷ Although IPH created an environmental effects

⁴¹ D.E. Fisher, Commentary, *The Meaning of Impacts- the Nathan Dam Case on Appeal*, 21 ENVTL. & PLAN. L.J. 325, 327-28 (2004).

⁴² *Queensland Conservation Council Inc. v. Minister for the Env't & Heritage* (2004) FCAFC ¶61 (Austl.)

⁴³ *Id.* at ¶56.

⁴⁴ *Id.* at ¶53.

⁴⁵ *Id.* at ¶52.

⁴⁶ (2004) VCAT 2029; Joseph Smith & David Shearman, CLIMATE CHANGE LITIGATION 59 (2006).

⁴⁷ Various approvals were required, including an amendment to the Latrobe Planning Scheme, an environmental effects statement (EES), and approvals under the Mineral Resources Development Act (Victoria), the Environmental Protection Act of 1970 (E&P Act) (Victoria), and the Environment Protection and Biodiversity Conservation Act 1999 (Commonwealth). (2004) VCAT 2029 ¶ 8.

statement,⁴⁸ it only addressed the release of greenhouse gases (GHGs) during coal extraction and not from its subsequent burning in IPH's power station.⁴⁹ On July 12, 2004, the Australian Conservation Foundation (ACF) petitioned to have the future release of GHGs from the power station considered. The panel rejected the petition and the ACF referred the matter to the Victorian Civil and Administrative Tribunal (VCAT).

The VCAT concluded that GHGs released from power station operation constitute a relevant planning concern when determining whether a coal mine field should expand. Although it looked to several sections of the Victoria's Environment Protection Act when construing the relevancy of panel submissions,⁵⁰ notably section 21(1)'s relatively simple requirement that the submission be "about an amendment," it is the Tribunal's adoption of the indirect test from *Nathan Dam's* EPBC interpretation that stands out. To find a sufficient nexus between the amendment and the effect, the VCAT reasoned that "the approval of [the] Amendment will make it more probable that the Hazelwood Power Station will continue to operate beyond 2009; which, in turn, may make it more likely that the atmosphere will receive greater greenhouse gas emissions than would otherwise be the case; which may be an environmental effect of significance."⁵¹ Thus, the GHG

⁴⁸ An environmental effects statement (EES) is the Victorian equivalent of an environmental impact assessment (EIA) under the EPBC or an environmental assessment (EA) under NSW law, *see* Environmental Planning and Assessment Act 1979, Chapter 2, Part 3A, § 75F.

⁴⁹ The Victorian Government had told IPH that a separate government process would look into this issue. After a panel formed to evaluate the environmental effects statement, the Minister for Planning issued a "terms of reference" explicitly instructing the panel not to consider the station's greenhouse gas emissions. *Id.* at ¶¶ 9, 12.

⁵⁰ For example, the Tribunal looked to Section 6, which broadly states that the scheme should address the planning objectives in Victoria, and section 4(1), which frames these objectives by the principle of ecologically sustainable development, providing for the "maintenance of ecological processes" and the balance of "present and future interests of all Victorians." *Id.* at ¶¶ 37-41.

⁵¹ *Id.* at ¶ 47.

submission is “about” the planning amendment because an indirect effect of expanding coal mine operations is an eventual increase in GHG emissions.⁵²

Although complicated procedurally, this VCAT decision is vitally important climate change jurisprudence in Australia. By deciding that applications for permits or amendments to planning schemes must consider all relevant environmental impacts, both direct and indirect, it paved the way for greenhouse gas emissions produced through future burning of the coal to constitute relevant considerations in the present.

Two years later, another coal mine expansion challenge shifted the judicial discussion to the burden of proving when a project’s local GHG emissions have a significant impact. In *Wildlife Preservation Society of Queensland Proserpine/Whitsunday Branch Inc. v. Minister for Environment & Heritage*, the preservation society argued that two proposed coal mine projects fell under the EPBC’s “controlled action” provision because burning coal from these mines would produce massive amounts of GHGs, which in turn would lead to increased global warming.⁵³ But in this case, the Minister’s environmental impact assessment had already considered the possibility that GHGs might cause climate change and that it, in turn, could adversely affect protected areas. When reviewing this data to determine whether the project amounted to a controlled action, requiring the next level of scrutiny in an environmental impact statement, the Minister saw such future impacts as too speculative and merely theoretically possible. He found no strong evidence suggesting the project would

⁵² By construing “about the amendment” language similarly to the EPBC’s “all adverse impacts,” the Tribunal also standardized the environmental impact assessment across jurisdictional lines.

⁵³ *Wildlife Preservation Society of Queensland Proserpine/Whitsunday Branch Inc. v. Minister for Environment & Heritage* (2006) FCA 736 ¶ ? (Austl.)

increase overall GHG emissions: if the coal did not come from these mines, he reasoned, other mines would feed the power plants.

The Court agreed with the Minister's reasoning, finding that GHGs generated in the extraction, transportation, and burning of coal were not likely to have a "significant impact" on a matter of national environmental significance.⁵⁴ The Court rejected Whitsunday's interpretation that "likely," under §75 of the EPBC, meant "possible."⁵⁵ It consequently concluded that the Minister had lived up to the *Australian Conservation Foundation's* baseline of taking GHGs into account in the environmental assessment phase; having done so procedurally, it could now conclude substantively that the burning of coal was not likely to have a significant impact on a protected area or specie. In this manner, *Whitsunday Branch* established a new focus on the "likely" requirement and on the amount and kind of proof needed to prove it.

With the courts having established both a GHG accounting baseline and a tighter nexus between these emissions and their specific impact on the Australian environment, a third case decided in neighboring New South Wales (NSW) staked out new territory by bringing ESD principles to the fore. In *Gray v. The Minister for Planning*,⁵⁶ Centennial Hunter Party Limited applied for approval to construct and operate a large, open cut, coal mine at Anvil Hill under the New South Wales Environment Planning and Assessment Act of 1979 (EPA Act). The mine would have an estimated production capacity of 105

⁵⁴ *Id.* at ¶ 44. Judge Dowsett stated "I am far from satisfied that the burning of coal at some unidentified place in the world, the production of greenhouse gases from such combustion, its contribution towards global warming and the impact of global warming upon a protected matter, can be so described." *Id.* at ¶ 72.

⁵⁵ *Id.* at ¶47.

⁵⁶ (2006) NSWLEC 720.

million tons of coal per year and an estimated 21-year life span. Gray, a law student, challenged the Director-General of the Department of Planning's acceptance of the company's proposed environmental assessment because it ignored the indirect effects of greenhouse gas emissions released from burning Anvil Hill coal at power stations.

The *Gray* Court began with the principle that EIAs extend to the "whole, cumulated and continuing effect" of an activity so long as it is relevant and reasonable.⁵⁷ The Court reasoned that because a sufficiently proximate link exists between the mining of thermal coal in NSW and global warming, an assessment would enable the decision-maker to make an informed decision regarding potential environmental consequences.

Climate change/global warming is widely recognized as a significant environmental impact to which there are many contributors worldwide but the extent of the change is not yet certain and is a matter of dispute. The fact there are many contributors globally does not mean the contribution from a single large source such as the Anvil Hill Project . . . should be ignored in the environmental assessment process. . . . That the impact from burning the coal will be experienced globally as well as in NSW, but in a way that is currently not able to be accurately measured, does not suggest that the link to causation of an environmental impact is insufficient.⁵⁸

In reaching its decision, the Court relied explicitly on ESD principles, particularly intergenerational equity and the precautionary principle.⁵⁹ It reasoned that environmental impact assessments are key considerations because they include the public interest and they enable the "present generation to meet its obligation of intergenerational equity by ensuring the health, diversity and productivity of the environment is maintained and

⁵⁷ *Id.* at ¶87 (quoting *Kivi v. Forestry Commission of NSW* (1982) 47 LGRA 38).

⁵⁸ *Id.* at ¶98.

⁵⁹ This invocation of the precautionary principle was long anticipated. See, e.g., Fraser K. Cameron, *The Greenhouse Effect: Proposed Reforms for the Australian Environmental Regulatory Regime*, 25 COLUM. J. ENVTL. L. 347, 367 (2000) (arguing for the strengthening of the precautionary principle by requiring its enforcement as a legal rule, rather than as a general principle of statutory interpretation).

enhanced for the benefit of future generations."⁶⁰ The Court observed how cumulative impact determinations help a decision maker to more accurately predict future environmental effects, while viewing impacts in a piecemeal fashion undermines the planning process. Notably, the Court read the ESD principles set out in the Act's objectives section to apply to all of its parts, including Part 3A's environmental assessment requirements.⁶¹ Based on these principles, the Court held that a decision maker is legally required to consider intergenerational equity during the environmental assessment process⁶² and specifically rejected the argument that a GHG assessment without coal burning emissions appropriately took into account ESD principles.⁶³

The Anvil Hill project is under a new round of judicial scrutiny, following amendment to its EIA to account for the impact of burning its coal. The Minister for the Environment and Water Resources decided in early 2007 that the Anvil Hill Project is not a controlled action under the EPBC, because the action is not likely to have a significant impact on any of the matters protected under the Act.⁶⁴ After examining the assessment

⁶⁰ 2006 NSWLEC 720, ¶ 116 (quoting *Bentley v. BGP Properties* (2006) NSWLEC 34, 67-70). When discussing intergenerational equity, the court relied heavily on three conservation principles that Edith Brown Weiss explored in *In Fairness to Future Generations*: 1) options (requiring each generation to conserve the natural and cultural diversity to make development options available to future generations); 2) quality (requiring each generation to maintain the quality of the earth to pass it on in no worse condition than it was received); and 3) access (ensuring that each generation has a reasonable and equitable right of access to the earth's natural and cultural resources). 2006 NSWLEC 720, ¶ 119.

⁶¹ 2006 NSWLEC 720, ¶ 117.

⁶² *Id.* at ¶ 126. See also *Taralga Landscape Guardians Inc. v. Minister for Planning* (2007) NSWLEC 59 (in upholding a permit for a wind farm development project, the Court looked to two requirements of intergenerational equity in the energy sector, namely 1) mining of fossil fuel resources in a sustainable manner and 2) substituting energy sources that result in less greenhouse gas emissions for energy sources that result in more greenhouse gas emissions).

⁶³ *But see Thornton v. Adelaide Hills Council* (2006) SAERDC 41 (in ruling on an application to put in a 4 megawatt capacity coal-fired boiler on a flower farm, the Environmental Court in South Australia considered principles of ecologically sustainable development but because neighbors opposing the application offered no evidence supporting a likely increase overall in GHG emissions, ESD principles were not applicable and the economic growth argument prevailed).

⁶⁴ Statement of Reasons for Decision on Not Controlled Action under the EPBC (April 18, 2007) ¶ 9, available at <http://www.envlaw.com.au/anvil11.pdf>.

reports submitted by the Anvil Hill Project Watch Association (AHPWA) and taking into account the precautionary principle and public comments, the Minister found that “a possible link between the additional greenhouse gases arising from the proposed action and a measurable or identifiable increase in global atmospheric temperature or other greenhouse gas impacts is not likely to be identifiable.”⁶⁵ “The climate system is complex,” it reasoned, and connecting specific sources of GHG to potential impacts on protected matters is “uncertain and conjectural.”⁶⁶

On appeal, the AHPWA challenged the Minister’s interpretation of §75(2)’s “likely” language, arguing that he erroneously required a “measurable or identifiable increase in the global atmospheric temperature or other greenhouse gas impacts”⁶⁷ and thus misconstrued the causal relationship necessary for legal responsibility.⁶⁸ The correct test, according to the AHPWA, is whether the proposed action is likely to have an impact on a matter protected under Part 3 that is “important, notable, or of consequence having regard to its context or intensity.”⁶⁹ A single judge of the Federal Court rejected AHPWA’s contextual argument, finding that the relatively small contribution of Anvil

⁶⁵ *Id.* at ¶ 32. The Minister concluded that Anvil Hill’s impact was so small after calculating the average GHG emissions per year and finding it equivalent to about .04% of current GHG emissions. *Id.* at ¶ 28.

⁶⁶ *Id.* at ¶ 32.

⁶⁷ Anvil Hill Project Watch Association Inc. v. Minister for the Environment & Water Resources (2007) FCA 1480, ¶ 32, available at http://www.austlii.edu.au/au/cases/cth/federal_ct/2007/1480.html.

⁶⁸ Applicant’s Outline of Argument at 22 (¶ 75), Anvil Hill Project Watch Association Inc. v. Minister for the Environment & Water Resources (2007) FCA 1480 (No. NSD870), available at <http://www.envlaw.com.au/anvil11.pdf>.

⁶⁹ *Id.* (arguing that context includes not only total Australian and global emissions of greenhouse gases, but also a comparison to other actions reasonably assessed under the EPBC); see also EPBC Policy Statement, *supra* note 36, at 4.

Hill's proposed emissions to total global emissions fell short of a significant impact.⁷⁰

AHPWA appealed to the full Federal Court on October 11, 2007.⁷¹

The most recent coal mine expansion case, *Xstrata Coal Queensland Pty Ltd. v. Queensland Conservation Council*, recites familiar facts but adds a new twist in its remedy request: the QCC argued for a conditional permit as long as the company could "avoid, reduce or offset the emissions of greenhouse gases that are likely to result from the mining, transport and use of the coal from the mine."⁷² The proposed mine would produce up to 2.5 million tons of black coal a year for fifteen years, which would be used in domestic and/or export markets for electricity production. The QCC relied heavily on evidence that GHG emissions from human activities (particularly energy production) cause climate change, which in turn levies significant economic, social, and environmental costs on Australia and the world. But cross examination of their experts brought out that the mine's annual contribution to GHG emissions was minimal and that substantial scientific challenges to the IPCC report and the Stern Review exist.⁷³

While the Court considered ESD principles, it was not satisfied that QCC had established a demonstrable causal link between the proposed mine's GHG emissions and any discernable harm.⁷⁴ The only sure impact the Court saw was the adverse economic

⁷⁰ Anvil Hill Project Watch Association Inc. v. Minister for the Environment & Water Resources (2007) FCA 1480, ¶ 40.

⁷¹ Notice of Appeal, available at <http://www.envlaw.com.au/anvil13.pdf>. A decision is expected in early 2008.

⁷² *Xstrata Coal Queensland Pty Ltd. v. Queensland Conservation Council* (2007) QLRT 33, ¶8.

⁷³ Based on scientific testimony and evidence, the Court found it surprising that a 0.45 degree Celsius increase over fifty-five years was causing so much climate system concern.

⁷⁴ *Id.* at ¶21.

consequences of restrictive growth; absent universally applied policies for GHG reduction, it concluded that requiring this mine to limit or reduce its GHG emissions would be arbitrary and unfair.⁷⁵ Thus, the Court recommended that the Minister for Mines and Energy grant Xstrata's additional surface area application as well as approve the environmental authority application under the Environmental Protection Act. The QCC appealed and the Queensland Court of Appeal remitted the matter to the Land Court for rehearing, based on procedural grounds.⁷⁶ Now the Land Court must re-evaluate the climate change science to determine if coal companies will not only have to assess their contribution to climate change, but initiate programs in order to avoid, reduce, or offset greenhouse gas emissions.

III. Next Steps in Climate Change Litigation Down Under

At one level, the victories experienced by climate change advocates seeking to use EIAs to make explicit the link between coal mining, coal burning, greenhouse gas emission, and global warming are real ones. The language in the EPBC and related state environmental statutes has been interpreted broadly, in light of overarching principles of ecologically sustainable development. Importantly, this application to climate change has resulted in EIAs having to account for the indirect effects of burning coal. Yet at another level, it would be relatively easy to see these requirements as pyrrhic victories, for no coal expansion project has been stopped in its tracks. Each was slowed down, admittedly, by the litigation and resulting requirements of more careful analysis and

⁷⁵ *Id.* at ¶23.

⁷⁶ *Queensland Conservation Council v. Xstrata Coal Queensland Pty Ltd.* (2007) QCA 338. The Court of Appeal found that the Land and Resources Tribunal should have allowed QCC to respond to the Tribunal's climate change doubts as well as amend the amount of offsets it sought from Xstrata.

documentation of GHG emissions. But even the robust statutory language enshrining the precautionary principle and intergenerational equity did not keep an Australian coal mine from expanding.⁷⁷

Nonetheless, these recent Australian climate change decisions have pointed a way. As the Australian government undergoes major changes in the wake of Rudd's election, the international community fashions an agreement to succeed the Kyoto Protocol, and the IPCC continues to refine its data, the questions of causation, burdens of proof, and evidentiary requirements that made Australian courts pause before holding individual coal mines accountable for their contribution to climate change will likely find answers – soon. Thus via case-by-case judicial interpretation of statutory intent, which provoked and refined this analysis of ecologically sustainable development in practice, Australian climate change litigation has played an important role in showing how individual countries might grapple with issues like climate change which cross temporal and spatial boundaries.

⁷⁷ Cf. Andrew Macintosh, *Why the Environment Protection and Biodiversity Conservation Act's Referral, Assessment, and Approval Process is Failing to Achieve its Environmental Objectives*, 21 ENVTL. & PLAN. L.J. 288, 309 (2004) (arguing that the EPBC fails to promote the ecologically sustainable use of natural resources because the EPBC is “based on the nature and extent of the potential impact of the relevant action, rather than the nature of the action.”).