

How have different approaches to climate law contributed to responding to climate change in Australia?

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Abstract

Climate change in Australia is a critical issue that impacts ecosystems, water resources, biodiversity, and the economy. The nation faces increasing challenges, including frequent droughts, rising bushfires, and sea-level rise. Australia's reliance on natural resources, particularly in agriculture, amplifies the effects of climate change. To address these concerns, Australia has implemented various strategies, such as introducing climate change legislation, establishing carbon trading markets, and committing to international agreements like the Kyoto Protocol and the Paris Agreement. This paper examines how Australia's climate laws, litigation approach, and market mechanisms work together to mitigate climate change impacts. The paper explores the role of international climate law in shaping domestic policies and emphasizes the growing trend of climate change litigation in Australia, which has had significant effects on environmental law. Additionally, the paper discusses the market mechanisms, including taxation, trading schemes, and subsidies, that drive Australia's efforts to reduce greenhouse gas emissions. In conclusion, a multidisciplinary approach combining legal frameworks, litigation, and market-based policies is essential for addressing climate change, ensuring sustainable development, and enhancing Australia's resilience to future climate impacts.

Keywords: Climate Change,Australia,Market Mechanisms.

Introduction

The Importance of Climate Change in Australia Climate change being an important issue in Australia is underscored by its all-encompassing character. Impacts on ecosystems, water resources, bushfires, sea level rise, the economy and social health. Australia's biodiversity is of exceptional richness, with its different species.

Habitants including various ecosystems, such as the Great Barrier Reef, forests, meadows, deserts, etc. Climate these alterations lead to the disturbance and endangerment of wildlife's living conditions such as the extinction of the species they belong to, habitat loss and changing the

status quo of the environment. Australia is forced to handle yet another long-term water supply challenges implies more frequent occasions of droughts and water scarcity which heightened by the climate change. Among these impacts are shifting of precipitation patterns, evaporation increase, and reduction in the size of reservoirs and rivers.

As the number of new developments, land coverage and water usage increases, global warming has also seen a substantial rise.

The intensity of the bushfires, especially in the bush areas of Australian forests, has caused massive effects on the country. How wildfires correspond bushfires result in a destructive environmental impact by reducing the amount and quality of air cleanliness and the environment. As the world burns up, the ice of Antarctica is melting quickly.

Greenland has also started melting rapidly making the sea level to go up and up. This poses a threat to areas near sea level threaten Australia's coastline, pushing up the likelihood of experiencing any coastal erosion, intense rain and tsunamis. Australia's economy is heavily biased on natural resources and is hugely augmented by agriculture in the region. Climate the inevitable result of this might be a shortfall in crop yields, destruction of fisheries and an unexpected movement of the poles. A major reduction in international tourists this year has placed huge economic pressure on the tourism industry globally.

Propose effective coping strategies for climate change adaptations most of them involve the legislation.

Australia's strategy for combating climate change entails introducing the Climate Change Act by the government, comprising the offsetting of greenhouse gas emissions. The National Framework Climate Change Impact Assessments and preparedness for implementing capacities.

Create a new market of carbon emissions, the Carbon Trading Act has such aim.

If the emission of the pollutants is decreasing by virtue of marketing mechanisms. Meanwhile, Australia on an international stage has taken part in campaigns concerning deforestation, with one of the greatest exploits being the Kyoto Protocol systematically passed a number of directives and laws, such as the Domestic Security of Energy and the Settlement of Energy Sources Within the National Gas Transmission System.

By that will I change in the future to sustainable, green energy sources and reduce greenhouse gas emissions. So no regrets is an important decision. The "no-regrets" policy refers to a series of measures taken by the Australian government to reduce greenhouse gas emissions, which can also bring other economic, social and environmental benefits while tackling climate change. These measures can also bring other economic, social and environmental benefits while tackling

climate change, so they are called "no regrets" policy. ¹

Thesis statement

This paper will analyze how different climate treatment methods can help deal with climate change in Australia in a comparative way from the aspects of Australian climate law, litigation supervision approach and market mechanism in climate law.

International Climate Law in Australia

Australia's participation in international climate change agreements/treaties

Australia is a signatory and participant of many international climate change agreements and treaties. The following are the main international climate change agreements and treaties in which Australia participates: 1. United Nations Framework Convention on Climate Change 2. Kyoto Protocol 3. Paris Agreement 4. International Climate Change Fund: 5. United Nations Climate Change Conference. By participating in these international agreements and treaties, Australia is committed to taking action on climate change at a global scale and striving to achieve the goals of reducing greenhouse gas emissions, promoting sustainable development and adapting to climate change.

How international climate law affects Australia's climate change policy and action

International climate law has a significant impact on Australia's climate change policies and actions, mainly reflected in the following aspects: 1. Formulating domestic laws and policies: as a signatory to international climate change agreements, Australia needs to formulate domestic laws and policies to fulfill its commitments and obligations in the agreements. For example, Australia has set domestic emission reduction targets in accordance with the Paris Agreement, and has promoted emission reduction actions through legal and other means. 2. Setting and achieving national emission reduction targets: international climate change agreements require countries to set national contribution targets. 3. Strengthening climate action and sustainable development: international climate law encourages countries to take more active climate action, including promoting renewable energy, improving energy efficiency, strengthening forest protection and other measures. 4. Promoting international cooperation and technology transfer: international climate law advocates countries to strengthen cooperation, including technology transfer, experience sharing and financial support, to promote the capacity of developing countries to address climate change. In a statement, the Australian government announced that the Australian Senate passed the Climate Change Bill on September 8, reaffirming the goal of reducing greenhouse gas emissions by 43%

¹ Lyster, R. (2003). "Common but Differentiated-Australia's Response to Global Climate Change." *Geo. Int'l Envtl. L. Rev.* 16: 561.

from 2005 levels by 2030 and achieving net zero emissions by 2050². The target is more ambitious than the 26-28 per cent promised by the previous government. The administration points out that nearly a decade of policy changes have led to billions of dollars in missed clean energy investments, but now all that has changed. This act puts Australia on a credible path to zero emissions. The bill empowers the Climate Change Authority to provide independent expert advice to the government and requires an annual report to ensure accountability. In addition, several agencies have incorporated the revised targets into their functions to facilitate an effective energy transition. These initiatives demonstrate the guiding and driving role of international climate law in Australia's climate change policies and actions, strengthening Australia's efforts to address climate change and promote domestic low-carbon transition and sustainable development.

Litigation in climate law

The development of climate change litigation in Australia is mainly reflected in the following aspects:

1. Climate change litigation in Australia is gradually becoming a trend, especially in recent judgments, the arguments of environmental applicants have been supported, which indicates that climate change litigation will continue to grow in the next few years.
2. Climate change litigation in Australia may have a significant and long-term positive impact on environmental law, especially in improving the rigor of environmental impact assessment (EIA) and clarifying the obligations of environmental decision makers.
3. Climate change lawsuits could have a significant impact on the policy agenda of governments and companies, prompting them to take stronger regulatory measures to address climate change.
4. Climate change lawsuits could provide incentives for companies and governments to seek clearer government regulation to avoid the legal risks of climate change lawsuits³.

2 Christoff, P. and R. Eckersley (2021). "Convergent evolution: Framework climate legislation in Australia." *Climate Policy* 21 (9): 1190-1204.

3 Nelson, T. and O. Pascoe, et al. (2019). "Efficient integration of climate and energy policy in Australia's National Electricity Market." *Economic Analysis and Policy* 64: 178-193.

Climate-related lawsuits in Australia

(1) climate-related litigation in Australia

In Australia, *Gray v Centennial Hunter Pty LTD*, Minister for Planning of New South Wales, 2006, Gary, the organizer of climate and environmental Protection Action, filed a climate change lawsuit in the New South Wales Land and Environment Court against the New South Wales Minister of Planning, the Director of Planning and Centennial Hunt Limited, asking the court to declare that the environmental assessment of Centennial Hunt Limited's Iron Brick Mountain project was invalid, and requested that the publicity of the project be cancelled. First, the plaintiffs contend that Centennial's environmental assessment failed to include the environmental impact of subsequent coal combustion and failed to comply with the Director of Planning's request to include a greenhouse gas assessment in the environmental impact assessment document. Second, the plaintiff also argues that in reviewing the environmental assessment document, the Secretary for Planning did not take into account the ESD principle of ecological sustainability, which is explicitly required to be considered in the Environmental assessment under the Environmental Planning and Assessment Act. The defendant argued accordingly. But in 2006, Judge Nicola Payne ruled in favour of the plaintiff on the grounds that the planning commissioner had failed to take ecological sustainability into account when approving the EIA. This case is the earliest environmental impact assessment litigation case on climate change, since then, a large number of climate change litigation has focused on the improper environmental impact assessment procedures to bring climate change impact assessment litigation, so as to achieve the purpose of coping with global climate change and environmental protection.⁴

(2) The role and achievements of review litigation in the formulation of Australian policies and regulations

The role of review litigation in the formulation of Australian policies and regulations is mainly reflected in the following aspects: 1. Promote the government and enterprises to take responsibility for the impact of climate change: by requiring the government and enterprises to take responsibility for the impact of climate change, review litigation promotes the government and enterprises to take measures to reduce greenhouse gas emissions, thus promoting the formulation of policies and regulations. 2. Promote the improvement of the existing legal system: by challenging the shortcomings in the existing legal system, review litigation promotes the government and enterprises to improve the existing legal system, thus promoting the formulation of policies and regulations. 3. Improve public awareness of climate change issues: by drawing public attention to climate change issues, review litigation promotes the government and enterprises to take measures to reduce greenhouse gas emissions, thus promoting the formulation

⁴ Heesh, N. (2021). "Low carbon policy and market mechanisms to enable carbon capture and storage and decarbonisation in Australia." *International Journal of Greenhouse Gas Control* 105: 103236.

of policies and regulations. The achievements of climate litigation in Australia include: 1. Establish the practical mode of climate change litigation, which provides a basis for future litigation. 2. Promote the government and enterprises to pay attention to climate change issues and improve public awareness of climate change issues. 3. Promote the government and enterprises to respond to climate change issues, including the regulation and restriction of greenhouse gas emissions. 4. Promoted international cooperation on climate change issues, providing reference for global climate change governance.

Limitations and future development of climate litigation in Australia

The limitations of climate litigation in Australia include: 1. Lack of successful federal climate litigation cases: The lack of successful climate litigation cases in the Australian Federal Court may limit the influence of climate litigation in Australia. 2. Lack of landmark cases similar to *Massachusetts v EPA* in the US: Australia has not yet seen a landmark case similar to *Massachusetts v EPA* in the US, which required the EPA to regulate or take better measures on greenhouse gas emissions from motor vehicles. 3. Lack of widespread attention to climate change issues: Despite the emergence of some important climate litigation cases in Australia, the attention of climate change issues in the public, business, professions and government sectors is still not high enough. The future development direction of climate litigation in Australia includes: 1. Continuing with first-generation climate litigation, such as litigation against projects with significant greenhouse gas emissions or potentially affected by climate change. 2. Developing second-generation climate litigation, such as litigation against governments for failing to take sufficient climate action. 3. Developing third-generation climate litigation, such as litigation against companies for failing to take sufficient climate action. These developments can be pursued simultaneously to achieve broader climate action.

Market Policy

(1) What are the market mechanisms in Australia? 1. Taxation and trading schemes:

The Australian government reduces greenhouse gas emissions through carbon tax and emission trading schemes to achieve climate and environmental goals. These schemes coordinate energy and carbon policies through market mechanisms to ensure that the operation of the energy market is consistent with the climate policy goals. 2. Direct regulation: The government limits greenhouse gas emissions through regulations and standards, such as energy efficiency standards and renewable energy targets. These regulatory measures are coordinated with the operation mechanism of the energy market to ensure that the operation of the energy market is consistent with the climate policy goals. 3. Subsidy schemes: The government encourages the development of renewable energy and low-carbon technologies through subsidies, such as renewable energy certificates and low-emission vehicle subsidies. These subsidy schemes are coordinated with the

operation mechanism of the energy market to ensure that the operation of the energy market is consistent with the climate policy goals.

(2) The interaction of Australia's energy market and our climate is very tight.

policy.

The Australian Govt through its initiative, has devised a draft climate policies on various issues affecting the nation on basis of the energy market that is not only based on carbon taxes but also through the trading and regulation approaches either directly or indirectly and subsidy programs, etc. Essentially, these protocols are about reducing GHGs in one way or another through market supporting work and climatic and environmental actions. The one of the frameworks used in the development of Australia energy market is called National Electricity Network.

The brutal masters can use their powers over the senses to demoralize the slaves. defeated it in the end the main player in this field, which governs the Australian energy market. When formulating again and again, we are talking about the need for the recycling bins in the office, actioning the light switches etc, mechanism of the energy market to prevent the misuse and to keep it in tact and relevant to the current requirements policies. Despite the fact that the energy market of Australia alike Australian prices the same with the international ones such people serving exchanged rates also climate policy like as the Kyoto Protocol and the Paris Agreement that are undertaken at the global level and other regional and local countries.

In the final, human-induced environmental change leads to modification of ecosystems (UNFCCC) and countries contribute in different phases like communication, consideration, and action (Paris Agreement). Thus, there is a close a direct link between energy supply from This sentence is hard to be very precise.

How the effectiveness of market mechanisms is reasoned? Arguably, of great significance for the green house gas reduction is the market-based approaches.

(3) Market mechanisms are crucial to Australia's climate response in the following ways

1. Incentives to reduce emissions: Market mechanisms minimize externalities seen by firms and small groups, and at the same time can be provide economical acknowledgments to the companies and individuals both for stopping the greenhouse gas emissions.
2. Promote innovation and technological development: A market mechanism that offers economic returns for rectifying the greenhouse gas discharges and also the creation of a positive context for the development of clean energy sources and carbon reduction technologies.
3. Efficient allocation of resources: Enhanced by market mechanism, the price signals will bring

more resources for efficient emission-reduction projects and technologies.

4. Provide flexibility and cost-effectiveness: In addition, price of carbon credit and amount of required carbon-credits certificates can be adjusted instantaneously by the market according to new demands or supplies, which allow different industries or enterprises to adapt to such variations. These two strategies might help to lower the total cost of emitting reductions and make the emissions control more effective and efficient..⁶

5. Establish long-term sustainable emission reduction mechanisms: Market mechanisms create the requirement for the industries to meet long-term carbon emission reduction goals and through this encourage long-term business decisions and push the economy to an emission-free economy pathway.

So in this scene, the market mechanism becomes the primary lever in Australia's climate ecological adjustment, which can re-orient the economy in a low-carbon direction, contribute to sustainable development, and reach out a goal of both economy expanding and environmental protection. Market mechanisms are crucial to Australia's climate response in the following ways: Market mechanisms are crucial to Australia's climate response in the following ways:

Using market mechanisms to reduce greenhouse gas emissions can have several implications: Using market mechanisms to reduce greenhouse gas emissions can have several implications:

Market models become yearning situations for reducing emission efficiently and driving innovation as a result but connecting the dots by designing, implanting its due responsibility and the social and economic tradeoffs need to be considered.

Thus, the market mechanism assumes a special role in solving climate problems, which may cause the economy to move to a low carbon path, factor in a sustainable development, and bring about a triumph situation of economic growth and environmental protection..⁷

Conclusion

Finally a multidisciplinary strategy addressing the various climate change aspects such as emission cuts, renewable energy introduction, ecosystems protection, resilience and international cooperation is the key to tackling all the relevant reduction and prevention issues complementing each other, these approaches can address more of climate change, this approach would favor the

6 Peel, J. (2007). "The role of climate change litigation in Australia's response to global warming." *Environmental and Planning Law Journal* 24 (2): 90-105.

7 Griffiths, A. and N. Haigh, et al. (2007). "A Framework for Understanding Institutional Governance Systems and Climate Change: The Case of Australia." *European Management Journal* 25 (6): 415-427.

economic growth, the environment protection and development and will lead to more resistant society and economy to disasters.

References

- Christoff, P. and R. Eckersley (2021). "Convergent evolution: Framework climate legislation in Australia." *Climate Policy* 21 (9): 1190-1204.
- Fan Gang and Su Ming et al. (2010). "Economic Analysis of final consumption and carbon emission reduction responsibility." *Economic Research* 1 (4): 4-14.
- Griffiths, A. and N. Haigh, et al. (2007). "A Framework for Understanding Institutional Governance Systems and Climate Change:: The Case of Australia." *European Management Journal* 25 (6): 415-427.
- Heesh, N. (2021). "Low carbon policy and market mechanisms to enable carbon capture and storage and decarbonisation in Australia." *International Journal of Greenhouse Gas Control* 105: 103236.
- Lyster, R. (2003). "Common but Differentiated-Australia's Response to Global Climate Change." *Geo. Int'l Env'tl. L. Rev.* 16: 561.
- Nelson, T. (2015). "Australian climate change policy—where to from here?" *Economic Papers: A journal of applied economics and policy* 34 (4): 257-272.
- Nelson, T. and O. Pascoe, et al. (2019). "Efficient integration of climate and energy policy in Australia's National Electricity Market." *Economic Analysis and Policy* 64: 178-193.
- Pearse, R. (2017). *Pricing carbon in Australia: Contestation, the state and market failure*, Routledge.
- Peel, J. (2007). "The role of climate change litigation in Australia's response to global warming." *Environmental and Planning Law Journal* 24 (2): 90-105.
- Tang Yingxia (2015). *International climate change governance: Systems and approaches*, BEIJING BOOK CO. INC.