broad architecture for a carbon price. The Committee issued eleven policy principles designed to provide a consistent basis for the deliberations on a carbon price.⁷ The principles were as follows:

Environmental effectiveness Economic efficiency Budget neutrality

transport and agriculture sectors are included in the scope of the scheme, the price signal would be adequate. Thus, considering the low emissions reduction target and limited coverage of the policy, its effectiveness is likely to be rather low.

3.2

planned, and whether prices of permits would remain reasonably stable.³⁴ The fixed carbon price, on the other hand, would levy the same burden on the polluters and provide similar incentives to implement environmentally-friendly technologies regardless of economic boom or decline. The carbon price scheme will provide more certainty over price than the ETS. Considering the criteria of economic efficiency, the certainty associated with a fixed carbon price would have an advantage over a flexible price, even if it is equipped with a price floor and ceiling, as under the future Australian emissions trading scheme.³⁵ From this prospective, the Australian

mechanism.

Another precondition of economic efficiency is the equivalence of the price signal. It is well recognised that economic efficiency can be increased if all polluters face the same carbon price. As discussed above, the proposed policy covers a limited range of GHG sources, accordingly decreasing its cost-effectiveness. Taken as a whole, the design defects of the policy, such as its coverage and GHG reduction target, may significantly influence its efficiency. In addition, the price volatility associated with the future ETS will negatively affect its performance; specifically, reducing the economic efficiency of this policy.

3.3 Budget neutrality

It is preferable to develop a revenue-neutral carbon price mechanism where revenue is used to fund green innovations and to compensate both households and businesses.³⁶ As discussed previously, the revenue from the carbon price policy will be utilised to compensate low-income households and businesses. In addition, the revenue will be used for transition relief for displaced workers (such as miners), supporting energy research and development, and encouraging conservation activities.³⁷

Both the transitional carbon price scheme and future ETS will generate considerable revenue and it is rational to apply the revenue-neutrality principal to the design of the policy.³⁸ A major tax reform involving an increase in the tax-free threshold is essential

³⁴ Professor Brook (2009, above note 16, p. 9), criticising the ACPRS proposed by the Australian g An emissions cap and trade approach provides no certainty in price where emissions will need to be reduced (more than the 5% that might happen with recession anyway). There is a risk that with an artificial price cap, the ceiling might be reached and businesses will run out of permits. At that stage we will face an impossible economic dilemma and the government will need to

closure. The claim that it is difficult for a carbon tax approach to manage uncertainty around future carbon price is by definition untrue because it is far more direct, transparent and can be more easily

³⁵ A price ceiling and floor will apply for the first three years of the flexible price period. The ceiling will be set at \$20 above the expected international price and will rise by 5 per cent in real terms each year. The price floor will be \$15, rising annually by 4 per cent in real terms (Multi-Party Climate Change Committee, above note 7).

³⁶ The Committee suggests that the policy should be budget-neutral but this does not preclude other

to compensate many low-income families who would otherwise be severely affected. However, industry assistance of \$9.2 billion over the period 2014 15 is arguably too generous. Overall, the proposed legislation is not budget neutral because there will be \$3.961 billion gap from 2011 12 to 2014

a retreat

repeal the carbon price legislation if he comes to power.⁶¹ Therefore, it is clear that some element of legislative uncertainty will remain in any case. Overall, the carbon price and the ETS might provide some investment certainty. Nevertheless, the carbon price will be known in advance and would be more stable, while the ETS price stability is highly questionable. The uncertainty in price and emissions caps associated with the ETS decisively diminishes the credibility of this instrument. Thus, it is justifiable to suggest that the policy, particularly future ETS, proposed by the Australian government would not facilitate an adequate level of investment certainty.

3.7 Fairness

Generally, the literature indicates that distributional concerns are deemed to occur when a carbon tax or an ETS are introduced.⁶² The negative distributional impact across households is a major issue for governments introducing climate change policies and the Australian government is no exception.

The impacts of carbon taxes and an ETS significantly depend on the rev utilisation. If the revenue is recycled in a proper way in favour of low-income or disadvantaged groups the adverse distributional effect can be neutralised substantially or completely, or even reversed, depending on the recycling scheme.⁶³ Another aspect of revenue recycling affecting households, especially in long term, is energy efficiency measures and research and development (R&D) funding. If part of the revenue is spent for these purposes, new green technologies and the energy efficiency measures available to households would facilitate a reduction in the distributional burden.⁶⁴

It is compulsory to consider incorporating measures for compensating the unfavourable distributional effects when designing a new GHG reduction policy. As mentioned above, the Australian government is allocating part of the revenue from the carbon price scheme to increase the tax-free threshold and to expand welfare programs for low-income households.⁶⁵ Additionally, a significant part of carbon policy revenue is also dedicated to energy efficiency and R&D measures. Thus, it is reasonable to conclude that the proposed carbon policy is able to address this principal.

⁶¹ Tony Abbott promises to get rid of carbon pricing scheme within six months of being elected to power. Available at: <u>http://www.news.com.au/national-old/tony-abbott-promises-to-get-rid-of-carbon-pricing-</u>scheme-within-six-months-of-being-

3.8 Flexibility

According to the Committee, a carbon price mechanism needs to be flexible to respond to changing international circumstances and new information on climate change. Indeed, the flexibility of the policy is especially vital in the context of climate change. In some areas of policy making, flexibility might not be a critical criterion for effe

Indeed, the market may react faster than the government to the changing situation, but under tax and ETS, the reduction target would need to be adjusted legitimately, which might be equally complicated and time consuming under both regimes.⁷¹ The actual legislative adjustment of a regime would depend on many factors, such as the design of a regime, bureaucracy, and parliamentary acceptance, amongst many others. The regime considered in this paper is theoretically flexible. The ETS emissions caps can be reassessed in the same way as the carbon price may be updated on a regular basis with regard to the latest scientific information. However, legislative adjustment of the regime especially the enhancement of the reduction target is unlikely to be easy.

3.9 Administrative simplicity

The Committee suggests that a carbon price mechanism should be designed to minimise compliance costs and implementation risks. Compliance costs are often analysed in conjunction with administrative costs that are borne by the government.⁷² The compliance and administrative costs issue is generally well recognised in various fields of public policy, but since climate change policy is relatively new, there has been little attempt to estimate these costs.⁷³

Generally, analysts are inclined to agree that carbon taxes are likely to be organisationally simpler than an ETS. There is also some literature investigating the

number of businesses, implying lower compliance costs associated with the policy. Pope and Owen estimated that the operating costs of the ACPRS will be around AU\$200 million annually.⁷⁸ They also note that there will be additional start-up costs roughly estimated at about one year of operating costs (AU\$200 million). Pope and Owen suggest that, since the ACPRS will cover about 1,000 emitters, aggregate compliance costs for the participants are likely to be moderate.⁷⁹ Indeed, compliance costs associated with the ACPRS may not seem to be drastic, but if we were to compare it with compliance costs under a carbon tax, the conclusion might be different.⁸⁰

The considered carbon policy is applied upstream and hence the policy minimises compliance costs in this respect. However, the more complex the climate change policy, the more cost it would involve to comply for covered businesses. An ETS, complex-by-nature, entails significant associated costs, such as fees paid to brokers or exchange institutions to find trading partners, negotiating costs, insurance costs and so forth. An ETS requires the creation of a new market mechanism, government body and certain new arrangements from businesses.⁸¹ Overall, compliance costs for businesses under an ETS may be comparably high.

Resembling the logic of compliance costs, the simplicity of the policy is significant for the minimisation of administrative costs. Pope and Owen, analysing the potential operating costs, suggested that the government should establish a new independent body to manage ACPRS. However, their estimation appears to be too optimistic.⁸² The government has established a range of bodies to manage various climate policy related issues.⁸³ For example:

The Climate Change Authority established as an independent body to review

change mitigation initiatives.

 ⁷⁸ Pope and Owen 2009, above note 72, p. 16.
⁷⁹ Ibid.

⁸⁰ Tax is not as novel an instrument as an

An independent regulator (the Clean Energy Regulator) established to administer the carbon price mechanism within a limited and legislatively prescribed discretion.

The Clean Energy Finance Corporation (CEFC) established to support projects using a range of funding tools: loans on commercial or concessional terms, loan guarantees or equity investments (\$10 billion).

The Australian Renewable Energy Agency (ARENA) is a Commonwealth Authority established under the Commonwealth Authorities and Companies Act (CAC Act). ARENA will have independent governance of \$3.2 billion in existing government support for R&D, demonstration and commercialisation of renewable energy technologies.

An independent Land Sector Carbon and Biodiversity Advisory Board established by legislation to review and oversee land sector initiatives, including those related to abatement and biodiversity.

In this light, it seems that the administrative and compliance costs of the carbon pricing regime might be relatively high. Overall, this implies a number of new arrangements and complex rules which increase the administrative complexity of the policy.

3.10 Clear accountabilities

The Committee suggested that a carbon price mechanism should have transparent rules and clear accountabilities to promote business and community confidence. The transparency and accountability principle is often undermined by policy makers. The transparency of a policy is vital to support environmentally effective objectives, lower the overall costs of GHG reduction and to build a reliable foundation for decision-making. Transparency plays a key role in many aspects of climate change policy⁸⁴ and is often cited as the primary argument for a carbon tax.⁸⁵ Transparency of the policy can strengthen democracy, increase trust in government, lead to legitimacy, credibility, and enhance public education, all of which is important.⁸⁶

comprehend for the public and businesses. Professor Mann

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lower.91

influence of international trends in climate change policy is another factor in favour of the ETS. Overall, a large amount of theoretical literature as well as the above discussion gives priority to the ETS in respect of international harmonisation. Therefore, the considered carbon policy, especially future ETS, implies a strong case

4. OVERALL ASSESSMENT

On the whole, the examination of the Australian carbon policy capability implies the following results:

Principles (criteria)	Comments	Provisional Assessment
Environmental effectiveness	Under present settings it is unlikely that the proposed carbon policy would address this criterion.	Fundamentally flawed
Economic efficiency	The design defects of the considered policy may significantly reduce its economic efficiency.	Flawed
Budget neutrality	In its present status, the introduced policy is unlikely to be budget neutral.	Flawed
Competitiveness of Australian industries	The carbon policy renders an extensive assistance package to affected industries and, in three years, will provide generous international linkage, thus considerably reducing competitiveness concerns.	Supported
Energy security	Supplementary measures included in the carbon policy package are likely to increase Australian energy security.	Supported
Investment certainty	The price uncertainty associated with the ETS as well as general legislative volatility significantly reduces investment certainty of the carbon policy.	Flawed

a retreat from core principles

Fairness Since a significant part of

5. CONCLUSION

This article has assessed the recently introduced Australian carbon policy on the basis of the principles outlined by the Multi-Party Climate Change Committee. The policy was examined with particular reference to the relevant contemporary literature, existing practices and empirical studies. Generally, the introduced carbon policy mechanism is capable of providing a carbon price signal. On the other hand, it is an obscure and complicated policy that is characteristic for an ETS. The policy nonetheless has some advantages specifically, support for international action, which is being constantly delayed.

ly revised, intimately addressing the critical principles distinguished by the Multi-Party Climate Change Committee that would allow Australia to develop a more effective and sustained carbon policy solution.