

Who Should Pay for the Climate Crisis?

1 Introduction

1.1 Background

People are already paying for the climate crisis. Arguments can be made that the victims of the devastating flood in Bangladesh in 2022 or of wildfires in Australia in the 2021-22 season should be thought of as currently paying with their homes, health, livelihoods, and lives. Because the causal chain between the release of greenhouse gases (GHGs), global warming, climate change, and weather events like floods or wildfires is difficult to isolate I focus my argument in this essay on rising sea levels, which are much easier to relate to global warming. The residents of the Isle de Jean Charles, members of the Biloxi-Chitimacha-Choctaw and the United Houma Nation tribes, are being forced to relocate due to rising sea levels threatening their homes, which sit just 61cm above sea-level.¹ I will suggest that this means that they are *paying* for the climate crisis. I consider any harm incurred due to the climate crisis or any actions taken to avoid these harms as paying. This means that payment can consist of money, votes, voices, trade embargoes, civil disobedience, or lives and livelihoods lost amongst much more. As hinted at by this list, there are many different types of agent who can pay for the climate crisis. This essay will focus on three in particular: individuals, businesses, and states.

In this essay, I will use two examples of injustice - which I will call *disproportionate burden injustice* and *human rights injustice* - to judge whether specific approaches to payment for the climate crisis are successful answers to the question 'who should pay for the climate crisis?'. Let me introduce them one at a time.

The residents of the Isle de Jean Charles are currently victims of disproportionate burden injustice because they did not pollute an equivalent proportion of GHG emissions compared to the proportion of climate change caused harm that they face, like the rise in sea levels which threatens to submerge their homeland. They are facing the impacts of more climate change than they have caused through GHG emissions: an example of a *disproportionate burden injustice*.

A maintenance of the status-quo would also be a human rights injustice, specifically violating the human right to life, the human right to health, and the human right to subsistence. In this essay, I will follow Caney in using violation of human rights as an example of an injustice.² Thus, a principle will not be a successful answer to the question at hand if it leaves human rights violated. Part of the injustice we feel is being done to the residents of the Isle de Jean Charles is because their human right to subsistence is being threatened: an example of a *human rights injustice*.

To avoid these injustices, there is an imperative that we move as quickly as possible to maximally prevent the emission of GHGs. This is because CO₂ lingers in the atmosphere and the concentration of CO₂ is not naturally decreasing as quickly as we are artificially increasing it, to the extent that it will only be 'in the case of essentially complete elimination of emissions' that the concentration of CO₂ in the atmosphere will stabilize.³ Global warming is occurring already with the levels of CO₂ that are currently in the atmosphere, and so adding more GHGs to the atmosphere is sure to add into the positive feedback loop of global warming even more and accelerate climate change – causing quicker and more disastrous sea level rise (and much

¹ (The Jean Charles Choctaw Nation, 2022)

² (Caney, 2010, p. 166)

³ (Meehl, et al., 2007, pp. 824-825)

more, but we will stick to our easy causal chain). Therefore, I suggest that the following obligation is entailed:

The Full Throttle Obligation (FTO) – All states have an obligation to transition away from the use of fossil fuels *as quickly as possible*.

I have proposed that this obligation falls on states because they are in control of energy grids, and so all states actioning a transition would be the actualization of a global move away from fossil fuels.

1.2 Overview

In this essay, I will propose that we should use what I label ‘the hybrid principle’ to identify who ought to pay for the climate crisis. I come to this conclusion by looking at the options present in the literature and critically assessing them in §2. I propose that we craft a hybrid answer which amalgamates some of the principles in the literature by utilising their best bits and learning from their issues. I present this answer in §3. In §4 I will address some possible criticisms of my model.

2 Looking at the Options

I will now introduce and evaluate three different principles as possible answers, before arguing that none of the three are good answers to the question ‘who should pay for the climate crisis?’ by themselves because none of them avoid both types of injustice. The first possible solution is:

The Flat Rate Principle (FRP) – That every agent should pay the same amount, a flat rate. This rate will be the cost divided by the number of agents.

Such a principle does not have extensive backing in the literature, but it is one pragmatic way to solve a global issue. The FRP is not concerned with fairness, but simply with pragmatism – it effectively gets rid of the human rights injustices that impact the people of the Isle de Jean Charles by sourcing the relevant materials (in this case either capital or land) and distributing them to facilitate harm-avoidance (in this case through relocation). The wording ‘every agent’ leaves some room for interpretation. I believe that the most intuitive way to think of a flat rate principle is by using humans as agents rather than states as agents. Some states like China consist of around 1.4 billion people whilst others like Tuvalu have fewer than 12,000 citizens. Asking Tuvalu to pay the same as China seems like a disproportionate burden injustice. If governments were to fund this through equal contribution from every citizen, then every citizen of Tuvalu would pay the same as just over a million Chinese citizens combined.

So, we turn to a FRP principle which posits that every *person* should pay an equal amount, but this approach also has issues. The principle entails that there is violation of human rights. Asking everyone to pay an equal amount threatens those who have the fewest resources to start with. Calculations of the total financial cost of the climate crisis are varied: Baer uses the figure of \$50 billion per year, Pearce calculates a figure of between \$40-90 billion per year, and, in the paper Pearce was responding to, Clarkson and Deyes made an estimate for the British Government which put total damages since before the industrial revolution at over \$26 trillion – which being paid off over 20 years puts the bill at \$1.3 trillion a year (not accounting

for the continuing cost of emissions).⁴ Jamieson estimates the damages from just sea-level rise, our simple climate crisis causal chain, at \$2 trillion over the next 50 years.⁵ That is \$40 billion per year over the next 50 years, or roughly \$5 each contributed by every person on the planet each year. For many this could be disastrous. As many as 162 million people survive on less than \$0.50 a day.⁶ To make these people pay \$5 would be to push them further away from their rights to health and subsistence. Thus, the FRP is not a good answer to our question, as it perpetuates current injustices.

Another possible answer to the question is:

The Those Who are Able Principle (TWAP) – That agents should pay proportionately to their capacity to pay.

Or as Shue puts it, ‘among a number of parties, all of whom are bound to contribute to some common endeavour, the parties who have the most resources normally should contribute the most to the endeavour’.⁷

The TWAP is another pragmatic principle which aims to stop the people of the Isle de Jean Charles paying for the climate crisis. This approach also manages to avoid the human rights injustices that plagued our individual approach with the FRP, as those who cannot pay without violating their human rights to subsistence, health, and life are not obligated to pay. However, the TWAP does result in disproportionate burden injustices by asking agents who were not causally responsible to pay. To use the TWAP is simply to replace one injustice with another.

This leads us to our third possible answer:

The Polluter Pays Principle (PPP) – Those who are responsible for polluting the GHGs are responsible for climate change. Agents should pay a proportionate amount to the amount of GHGs they polluted.

This principle is one supported by Baer among many others, who commonly draw their justifications from causal responsibility.⁸ However, the PPP is unable to avoid one of the problems that the FRP fell victim to. Although there is a general trend between those agents who are higher polluters historically and those agents who are richer, it is possible that asking polluters to contribute their fair share of even just the \$2 trillion for sea-level rise would result in violations of human rights to subsistence, and in turn possibly their human rights to health and, in the most extreme circumstances, life.

The FRP, the PPP, and the TWAP all result in either disproportionate burden injustice or human rights injustice, and so are not viable answers to our question. Nonetheless, we can take inspiration from these principles to create something new.

⁴ (Baer, 2010, p. 260), (Pearce, 2003) (Clarkson & Deyes, 2002)

⁵ (Jamieson, 2010, p. 269)

⁶ (Ahmed, 2023)

⁷ (Shue, 2014, p. 186)

⁸ (Baer, 2010, p. 252)

3 My Proposal: A Hybrid Principle

3.1 Motivations and Basics

I propose a hybrid principle of the PPP and the TWAP. This hybrid principle took inspiration from a hybrid proposal of Caney's in 'Cosmopolitan Justice, Responsibility, and Global Climate Change' but also differs in important ways.⁹ Caney's model begins with the PPP and then works to integrate ideas that come from the TWAP to remove the initial injustices that result from the PPP - the ones that we highlighted in section 2.2. I believe Caney was correct to try to formulate a hybrid model but formulated his incorrectly. Instead, he should have utilised the two principles the other way around: beginning with the TWAP and then moving to integrate ideas from the PPP to remove the injustices that result from the TWAP.

To some this may seem like a minor point, after all, either account will be a hybrid account. But, by choosing to start with either the TWAP or the PPP we choose to action an immediate response to one injustice before we action a response to another. Namely, the TWAP-first response I will advocate chooses to prioritize a response to the injustice of human-rights violations and then moves to address disproportionate burden injustices. This is preferable for two reasons.

Firstly, some injustices that result from the PPP are irreversible. There is no way that we can right the wrong of the human right to life being violated retrospectively. If we do not choose to prioritize the human rights violations, then injustices will become apparent that cannot be corrected. We cannot give justice to those who are dead. Implementing the PPP first can result in irreversible injustice in two ways. Either polluters will pay more than they are able in a way that threatens to violate their human-rights, or they will only pay what they are able to without violating their human-rights. The latter would lead to a deficient resource pool for the necessary task, which would fail to successfully prevent the human-rights based injustices that are currently occurring, like those faced by the residents of the Isle de Jean Charles.

As well as the irreversibility of some of the injustices that result from the PPP, the *bearable nature* of any injustices resulting from the TWAP makes it a better starting point. The principle is that those who *are able* pay. These agents will not shoulder burdens which are too heavy for them to lift, and thus we ensure that we reach justice in a way in which agents remain as comfortable as possible. In summary, the TWAP-first model maximally avoids harm: it works to correct pressing injustices without wasting time in a way that Shue would describe as 'deadly delays'.¹⁰

3.2 The First Part of the Hybrid Model: The Those Who are Able Principle

We will apply the TWAP with the Full Throttle Obligation (FTO) in mind so that as much human-rights based injustice as possible is avoided. The FTO is a demanding principle for states, and, based on current track records, it wouldn't be surprising to see non-compliance. Thus, the TWAP entails not only first-order responsibilities, but also second-order responsibilities. Following Caney:

First-order responsibilities, as I employ that term, are responsibilities that certain agents have to perform (or omit) certain actions. In the context of addressing climate change these first-order responsibilities include responsibilities to mitigate climate change (through reducing emissions and

⁹ (Caney, 2010, p. 136)

¹⁰ (Shue, 2010, p. 149)

maintaining greenhouse gas sinks), to enable adaption, and to compensate people for harm done. Second-order responsibilities, by contrast, refer to responsibilities that some have to ensure that agents comply with their first-order responsibilities.¹¹

Second-order responsibility holders are determined in the same way as first-order responsibility holders are determined: one is a responsibility holder if they are able to pay. For these second-order responsibility holders, that is in the form of having influence.¹² Upon real-world application, I will suggest that these responsibilities would obligate all second-order responsibility holders (be they states, businesses, or individuals) to use the influence and resources that they have to create two key entities:

1. The **International Climate Change Fund** – a centralised fund into which those paying deposit and those receiving payment withdraw.
2. A **new legally binding agreement** – an agreement which goes much further than the Kyoto or Paris agreements and holds all states legally accountable for their obligations to make their payments. This would mean that the agreement would have to enter domestic law for all states. Importantly, second-order responsibility holders *must do everything they are able to* ensure that *all* states sign this agreement (whilst not violating any human-rights).

The TWAP also entails two first-order responsibilities:

3. To **action mitigation** in the form of the FTO.
4. To **facilitate adaptation** in any circumstance where human rights violations are possible due to the climate crisis.

Note that at this stage, the agents who are responsible for fulfilling these responsibilities are those who are able – and thus fulfilling the FTO and adaptation will involve the giving of many resources to the ICCF so that states who, for example, don't have the means to change their energy grids, can fulfil the FTO. Once 1, 2, 3, and 4 have been completed – the Climate Crisis should no longer be threatening human rights (or at least the threat will have been diminished to such an extent that more work to diminish it would be a bad use of resources when there are other, more existential threats), and thus we can turn to address the injustice that we have just created: disproportionate burden injustice.

3.3 The Second Part of the Hybrid Model: The Polluter Pays Principle

Before continuing it will be useful to have a reminder of exactly what the PPP was as I introduced it above:

The Polluter Pays Principle (PPP) – Those who are responsible for producing GHGs are responsible for climate change. Agents should pay a proportionate amount to the amount they polluted.

To answer the question 'who should pay for the climate crisis?', the PPP as it stands above needs to be refined: *amount of GHGs they polluted since when?* There are two prominent

¹¹ (Caney, 2014, pp. 134-135)

¹² (Caney, 2014, pp. 140-141)

options which are defended in the literature here. Firstly, since before the industrial revolution, as defended by Shue.¹³ Secondly, since the year 1990, or occasionally another year from the late 20th century, as defended by Caney.¹⁴ I will choose to side with Caney's conclusion here and use 1990.¹⁵ However, I will motivate this choice through different means and suggest that we should limit the scope of *responsibility* to 1990 and look to utilise *liability* for pre-1990 because we run into issues with identity.

The further we go back in time, the harder it is to assign responsibility. Consider the GHGs emitted in the 1950s. Most people who were adults in the 1950s are dead now. They are incapable of paying and so there is a huge chunk of those who are responsible for the crisis who cannot be held responsible. Thus, to fill this void, we need another way of motivating obligations to pay. Here, I turn to liability, with liability being understood as obligation (or responsibility *to* action) which is motivated even though it is understood that one is not culpable (or responsible *for* this exact element of the wrongdoing). In *Reconsidering Reparations* Olúfẹ̀mi O. Táíwò draws on the idea of liability as an answer for many global issues of justice, including the slave trade. Such a model needs a method of distribution for liability. Táíwò suggests that being a beneficiary of an issue like the climate crisis or the slave trade makes one liable to pay reparations.¹⁶ A full discussion of which agents are beneficiaries of the climate crisis would be extremely constructive, but I do not have space to go into the intricacies. I will instead quickly suggest that this space is one in which oil giants like Shell, who recorded \$39.9 billion of profits in 2022 alone (enough to pay what Jamieson calculated we need to pay every year, see §2), can be held liable on top of their post-1990 responsibilities.¹⁷

Another advantage of this model is that we have not excluded the necessary conversation about reparations from our model of climate justice. At the beginning of his book, Táíwò states 'The goal of *Reconsidering Reparations* is to argue for this perspective: the view that reparation is a construction project'.¹⁸ The just reparations that should be given to those who have suffered harm is to put them back on an equal playing field. This is done by constructing an equal world for the long term. In other words, by working to mitigate against the threats of the climate crisis and adapt to the potential harms which will still occur. This is the work that will be done by the International Climate Change Fund and the new international agreement I advocated for in §3.2.

Having now justified our understanding of *since when*, the PPP entails our first-order responsibility holders. The process of working out exactly who these agents are is difficult, but Baer offers a point of departure. His work focusses on the distribution of responsibility both at the level of states and at the level of individuals. His work shows that lots of the global north bears much of the responsibility, but that the poorest 20% of the global north only bear a small amount of this responsibility, that the richest 10% of the global south has a small amount of responsibility, and that beyond that the global south bears very little responsibility.¹⁹ I propose that individuals could be responsible to pay their state, which is responsible for paying the ICCF. The ICCF can then not only use the resources to deal with mitigation and adaptation but can also redistribute back to any second-order duty bearers who have paid more than their fair share as according to the PPP. It is once this point has been reached that the disproportionate burden injustice has been eradicated – and neither human rights injustice nor disproportionate burden injustice remain.

¹³ (Shue, 2010, p. 104)

¹⁴ (Caney, 2010, p. 136)

¹⁵ See (Caney, 2010, pp. 131-132) and (Shue, 2010, p. 104).

¹⁶ (Táíwò, 2022, pp. 122-124)

¹⁷ See (Jack & Edser, 2023) and (Jamieson, 2010, p. 269)

¹⁸ (Táíwò, 2022, p. 4)

¹⁹ (Baer, 2010, p. 256)

4 Objections and Replies

There are two major objections that I will pre-empt: worries about the choice of the year 1990 in my interpretation of the PPP and worries about non-compliance.

My choice of the year 1990 may seem odd considering that there are many agents whose actions have contributed to climate change in 1989 who are alive now and could be held responsible. This observation is fair. I chose 1990 for two reasons. Firstly, with the issue of identity in mind, we must choose *some* year. Secondly, 1990 is a good choice because it aligns with the year that those convinced by Caney's argument from ignorance will support. The hope is that choosing 1990 will allow more support for my theory, which, in turn, should help it gain traction quicker, and come into effect quicker. In effect, the choice of 1990 is a pragmatic choice which has no precise philosophical backing other than aiming to make the theory more agreeable, which in turn will help with harm-avoidance in the face of any more of Shue's 'deadly delays'.²⁰

Let us now turn to worries of non-compliance. Will countries sign up? What if the polluters don't or can't afford to pay? Will we be able to hold countries accountable if they don't comply? Will second-order responsibility holders financially contribute if they are worried about non-compliance from first-order responsibility holders? These worries are understandable. The current situation when it comes to agreements about climate change is one fraught with non-compliance and a lack of participation and the model I am proposing is *much* more demanding, so why would it work? *Because we have already built in a system to deal with this problem.* The role of second-order responsibility holders is to prevent non-compliance. If there is non-compliance, then second-order responsibility holders simply have a larger obligation. The current non-compliance that we witness on the global stage can countered by speeches, referendums, protest, civil disobedience, strikes, foreign policy, and trade embargoes. This may be a large obligation, but it is one to counter a large injustice. In response to the worry about polluters not being able to pay their due, I propose that this does not counter their obligation, but simply delays it. They will be indebted to the ICCF, and when they are able to pay, they will. On the exceptional circumstance that agents never become able to pay what they are obliged to, then there will be some disproportionate burden injustice, but that injustice is, at that point, unavoidable, and preferable to human rights injustice.

5 Conclusion

I have argued for a hybrid account answer which pulls together parts of the Polluter Pays Principle and the Those Who are Able Principle, creating obligations first for those who are able to pay as second-order responsibility holders. Focussing first on TWAP means that we can avoid as much human rights-based injustice as possible, and that the people of the Isle de Jean Charles will be able to relocate. This will cause disproportionate burden injustice, which will then be properly addressed by the PPP through the creation of the International Climate Change Fund to mediate and organise the relief and a new legally binding agreement in order to create obligations that states cannot shirk from. Polluters will be held responsible for their fair share from the year 1990, and the total responsibility of GHG emissions prior to 1990 will be divided between beneficiaries, like oil giants, as motivated by a principle of liability. This is a demanding answer to the question 'who should pay for the climate crisis?', especially for

²⁰ (Shue, 2010)

those who will turn out to be second-order responsibility holders, but there is no requirement that justice ought to be easy.

Bibliography

- Ahmed, A. (2023, January 24th). *UN Chronicle: the United Nations*. Retrieved from The United Nations Web Site: <https://www.un.org/en/chronicle/article/surviving-pennies-we-must-help-worlds-most-deprived>
- Baer, P. (2010). Adaptation to Climate Change: Who Pays Whom? In S. Caney, H. Shue, S. M. Gardiner, & D. Jamieson, *Climate Ethics: Essential Readings* (pp. 247–262). Oxford: Oxford University Press.
- Caney, S. (2010). Climate Change, Human Rights, and Moral Thresholds. In S. Caney, H. Shue, S. M. Gardiner, & D. Jamieson, *Climate Ethics: Essential Readings* (pp. 163–177). Oxford: Oxford University Press.
- Caney, S. (2010). Cosmopolitan Justice, Responsibility, and Global Climate Change. In S. Caney, H. Shue, S. M. Gardiner, & D. Jamieson, *Climate Ethics: Essential Readings* (pp. 122–145). Oxford: Oxford University Press.
- Caney, S. (2014). Two Kinds of Climate Justice: Avoiding Harm and Sharing Burdens. *The Journal of Political Philosophy*, 22(2), 125–129.
- Clarkson, R., & Deyes, K. (2002). *Estimating the Social Cost of Carbon Emissions*. *GES Working Paper 140*. London: H.M. Treasury .
- Jack, S., & Edser, N. (2023, February 2nd). *Shell reports highest profits in 115 years*. Retrieved from BBC News: <https://www.bbc.co.uk/news/uk-64489147>
- Jamieson, D. (2010). Adaptation, Mitigation, and Justice. In S. Caney, H. Shue, S. M. Gardiner, & D. Jamieson, *Climate Ethics: Essential Readings* (pp. 263–283). Oxford: Oxford University Press.
- Meehl, G., Stocker, T., Collins, W., Friedlingstein, P., Gaye, A., Gregory, J., . . . Zhao, Z.-C. (2007). Global Climate Projections. In *Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change* (pp. 747–845). Cambridge UK; New York City, USA: Cambridge University Press.
- Parfit, D. (2010). Energy Policy and the Further Future: The Identity Problem. In S. Caney, H. Shue, S. M. Gardiner, & D. Jamieson, *Climate Ethics: Essential Readings* (pp. 112–121). Oxford: Oxford University Press.
- Pearce, D. (2003). The social cost of carbon and its policy implications. *Oxford Review of Economic Policy*, 19, 362–384.
- Shue, H. (2010). Deadly Delays, Saving Opportunities: Creating a More Dangerous World? In S. Caney, H. Shue, S. M. Gardiner, & D. Jamieson, *Climate Ethics: Essential Readings* (pp. 146–162). Oxford: Oxford University Press.
- Shue, H. (2010). Global Environment and International Inequality. In S. Caney, H. Shue, S. M. Gardiner, & D. Jamieson, *Climate Justice: Essential Readings* (pp. 101–111). Oxford: Oxford University Press.
- Shue, H. (2014). *Climate Justice: Vulnerability and Protection*. New York: Oxford University Press.

Sinnott-Armstrong, W. (2010). It's Not My Fault: Global Warming and Individual Moral Obligations. In S. Caney, H. Shue, S. M. Gardiner, & D. Jamieson, *Climate Ethics: Essential Readings* (pp. 332–346). Oxford: Oxford University Press.

Táíwò, O. O. (2022). *Reconsidering Reparations*. New York City: Oxford University Press.

The Jean Charles Choctaw Nation. (2022, August 22). *The Jean Charles Choctaw Nation: Tribal-guided and led, whole community resettlement and cultural preservation*. Retrieved from Isle de Jean Charles:
https://static1.squarespace.com/static/5672cfb1d82d5e366e753691/t/63066872adf17070b316c9b1/1661364339115/JCCN_ongoing+resettlement+%281%29.pdf