

IMPACT ASSESSMENT AND JUST SUSTAINABILITY TRANSITION: EXPLORING INTERSECTIONS*

1. Introduction

Climate change impacts are becoming more devastating. The window to take action to avoid the worst outcomes is closing. To stand a chance of keeping global warming to not more than 1.5°C above pre-industrial levels - a goal key to avoiding the worst climate impacts - urgent and ambitious society-wide transformation must occur. This paper refers to this wholesale socio-technical transformation as ‘sustainability transition’. However, even in the increasingly unlikely event that the 1.5°C goal is achieved through radical system-wide decarbonization (mitigation), there are already locked-in climate impacts that must be adjusted to (adaptation) or compensated for (loss and damage). Mitigation, adaptation, and loss and damage are the primary dimensions of climate change responses.

Beyond being an ecological problem, climate change is also a justice issue. Both at the causal and impact levels, justice is squarely implicated. States, communities, and individuals least responsible for climate change are ‘paying’ for it. They pay for it by experiencing the most devastating impacts of climate change.¹ More unjustly, they pay for it by bearing the cost of the transition whether through lost ‘developmental’ opportunities by host communities, lost means of income to provide social welfare with the most vulnerable suffering the most, or lost jobs by workers. Hence, it is unsurprising that climate justice is now clearly situated as an essential ingredient for effective climate responses.²

The need for just, ambitious, and urgent climate actions is recognized in the Paris Agreement and has been committed to by 174 states and the European Union.³ The challenge remains how to translate these commitments into effective policies and project-level actions. Impact assessment (IA) is being increasingly adopted as a planning and decision-making tool for the crafting and implementation of responses to climate change. The scholarship and policies on climate change and impact assessment, however, overwhelmingly focus on the assessment of project emissions, the impact of emissions on states’ ability to meet their commitments under the Paris Agreement (Nationally Determined Contribution), and adaptation-related impacts.

This paper furthers the climate change and impact assessment discourse. It makes a case for IA as a planning and decision-making tool for a just transition. I consider the various spaces within conventional IA modes through which just transition can be catered to. While there are different just transition

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¹ The Intergovernmental Panel on Climate change (IPCC) notes, with high confidence, that climate and weather extremes are increasingly driving displacement with small island states disproportionately affected, and flood and drought-related acute food insecurity and malnutrition have increased in Africa and Central and South America. See Hans-O. Pörtner et al, *Climate Change 2022: impacts, Adaptation and Vulnerability – Summary for Policymakers* (IPCC, 2022) 11.

² The Intergovernmental Panel on Climate change (IPCC) concluded, with high confidence, that “explicit attention to equity and justice is salient to both social acceptance and fair and effective policymaking for mitigation” and “accelerating the transition to sustainability will be enabled by explicit consideration being given to the principles of justice, equality and fairness”. See Jim Skea et al, *Climate Change 2022: Mitigation of Climate Change – Working Group III Contribution to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* (IPCC, 2022) 111, 142.

³ Paris Agreement, preamble, art 2.

orientations, it is framed here as a wellbeing-enriching construct rather than a concept merely focused on the distribution of the costs and benefits of the transition. In part two, I introduce the characteristics of a wellbeing-centric just transition, and in part four I show, in broad strokes, how IA can be deployed to achieve a wellbeing-aligned just transition.

2. The Characteristics of a Wellbeing-centric Just Transition

Julian Argyeman rightly notes that “justice is not a simple concept”.⁴ The numerous and diverse understandings of just transition demonstrate the complexity of justice as a concept. Just transition began as a labour centered and jobs driven movement but has diffused beyond labour and trade unions. Current understandings of just transition have been grouped under various categories. Morena et al, for example, group the various just transition understandings into status quo, managerial reform, structural reform, and transformative approaches.⁵ Status quo and managerial reform approaches to just transition focus on jobs replacement, workers’ re-training and compensation for job loss, and tripartite negotiation between the unions, employers, and labour.⁶ Current international and domestic policies on just transition are heavily status quo and managerial reform based. Such policies have been described elsewhere as ‘reactive’.⁷ Structural reform and transformative approaches look beyond redressing the negatives of the transition. Instead, they emphasize the distribution of benefits with sensitivity towards vulnerable groups, equitable decision-making processes, collective ownership of decarbonized systems, correcting past inequalities, and dismantling interlinked systems of oppression.⁸

The merits and demerits of extending the definition of just transition beyond the traditionally narrow focus on addressing the negative impacts of the transition on workers continue to be debated.⁹ This debate is outside the remit of this paper. The various just transition approaches considered above, however, align to varying extent with well recognized theories of justice – distributive justice, procedural justice, and justice as recognition.¹⁰ While affirming that these justice lenses are crucial, I argue that they are best postured as “means” rather than “ends”. Beyond these important ‘means’, I argue that just transition should ultimately be aimed at human flourishing and wellbeing. This is the focus of the capability approach to justice. The important just transition question therefore transcends the distribution of gains and pains of the transition. As noted by Amartya Sen, “it does make a difference whether we look merely at the means of living rather than directly at the lives that people manage to have”.¹¹ Further distinguishing the capability approach from other notions of justice, Sen argues that:

⁴ Julian Argyeman, *Introducing Just Sustainabilities: Policy, Planning, and Practice* (London: Zed Books, 2013) 38.

⁵ Edouard Morena et al, *Mapping Just Transition(s) to a Low-Carbon World* (United Nations Research Institute for Social Development, 2018) 11 – 15.

⁶ *Ibid.*

⁷ Hadrian Mertins-Kirkwood, *Making Decarbonization Work for Workers: Policies for a Just Transition to a Zero-carbon Economy in Canada* (Canadian Centre for Policy Alternatives, 2018) 8 – 11.

⁸ Morena (n 5).

⁹ Ann Eisenberg, “Just Transitions” (2019) 92:2 *Southern California Law Review* 273 at 286 – 289; Dimitris Stevis et al, “Introduction: The Genealogy and Contemporary Politics of Just Transitions” in Edouard Morena et al eds, *Just Transitions: Social Justice in the Shift towards a Low-carbon World* (London: Pluto Press, 2020) 5.

¹⁰ Ben Cahill & Mary Margaret Allen, *Just Transition Concepts and Relevance for Climate Action: A Preliminary Framework* (Center for Strategic and International Studies & Climate Investment Fund, 2020) 7.

¹¹ Amartya Sen, *The Idea of Justice* (Cambridge, Massachusetts: Harvard University Press, 2009) 227.

... the capability approach focuses on human life, and not just on some detached objects of convenience, such as incomes or commodities that a person may possess, which are often taken, especially in economic analysis, to be the main criteria of human success. Indeed, it proposes a serious departure from concentrating on the means of living to the actual opportunities of living.¹²

A capability-based framing changes both the questions and answers posited in just transition discourse. The provision of replacement-jobs ceases to be an end. The question becomes whether jobs are necessary to meeting capability demands and the extent to which jobs meet such demands. Here, it is not satisfactory that jobs (when deemed necessary) only carry the appellation ‘green’, they must be, in the overall, capability enriching. That a replacement-job could lead to reduction in emissions (e.g., solar farm or hydroelectricity dam) is not satisfactory, equally important is its effect on community integration and ecological integrity.

Again, capability framing takes us back to pre-transition periods and compels us to ask questions including why host communities of fossil fuel extraction projects are often bereft of personal, social, environmental, and relational capabilities despite the availability of jobs as reflected in the 2010 Expert study of the Alberta oil sand industry.¹³ Beyond the jobs, it is important to guard against the repeat of these deprivations post-transition. The metric for adjudging that a transition is just should not be the extent to which the *status quo* is not disrupted (e.g., jobs are retained or replaced, or remuneration levels are maintained), but how the wellbeing of a community is guaranteed.

Table 1 - Characteristics of a Wellbeing-centric Just Transition

Objective	a. The realization of combined capabilities and enrichment of wellbeing is the central objective of just transition.
Demands	b. Transitioning communities must have sufficient resources to guarantee the realization of combined capabilities and wellbeing. c. Just transition includes ensuring that existing injustices to the environment, culture, and people are redressed and that sustainability initiatives do not re-invent previous injustices.
Subjects	d. Just transition prioritises the most vulnerable. e. Vulnerability includes social and ecological vulnerability. f. Socially and ecologically vulnerable subjects must be both locally and globally scoped.
Process	g. A multipartite approach should be taken to identify participants for social dialogue. h. Social dialogue should aim to achieve participatory parity and parity-impeding norms and structures should be identified and removed. i. Sustainability processes must entail a strong recognition of diverse forms of rights and holders of rights, and values and identities, particularly those of marginalized and

¹² *Ibid*, 253.

¹³ See Pierre Gosselin et al, *The Royal Society of Canada Expert Panel Report: Environmental and Health Impacts of Canada’s Oil Sands Industry* (Ottawa, Ontario: Royal Society of Canada, 2010) 216.

	<p>vulnerable people. The scope, mode and pace of transition must be diversity sensitive but also responsive to the urgency of far-reaching climate actions.</p> <p>j. A toolbox approach should be taken to determining the aim of a social dialogue process (information, consensus and/or consent).</p>
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Table 1 shows the primary characteristics of a just transition focused on achieving wellbeing-ends. Taking the enrichment of wellbeing as the starting point, the demands of just transition become better refined and aligned, socially and ecologically vulnerable persons and systems become the primary subjects, and participation must be rights-based, meaningfully inclusive, and more diverse than the tripartite involvement of employers, employees, and the state.

3. Impact Assessment as a Tool for a Wellbeing-centric Just Transition

The need for sound planning and decision making is the primary reason impact assessment is vital to achieving a wellbeing-centric notion of just transition. Unplanned transitions are likely to be unjust transitions. While there are other decision-making tools (e.g., cost benefit analysis, risk assessment etc.), IA is a tool of choice as it is, generally, wider in scope, more recognized globally, and its relevance to achieving or ensuring sustainable development is relatively well established.¹⁴ Environmental Impact Assessment (EIA), in the international (transboundary) context, has also been recognized as a requirement under customary international law.¹⁵ Identifying and addressing the impacts of transition decisions and ensuring that preferred transitional pathways are wellbeing-enriching require that just transition be a central part of decision-making processes from the start rather than being an ex-post add-on.

Corporate and state players in the fossil fuel industry are increasingly making decisions in response to the urgent necessity of climate change-related sustainability transition. Whether it is the decision to simply offset emissions from exploration activities, ban the exploration of fossil fuel or put a price on carbon, there are consequential impacts. For example, the use of land use offsets has potential impacts on property rights, Indigenous peoples’ rights, and biodiversity.¹⁶ These impacts, while they exist, are rarely publicized. Also unknown is the process through which most states and companies consider these adverse effects, weigh alternatives, and choose sustainability transition pathways. For example, on what basis and through what process did Canada choose to wind down thermal coal while still allowing the development and exploration of tar sand? What were the factors considered and processes adopted in the United Kingdom’s decision to ban unconventional oil and gas exploration while still greenlighting a new coal project? What considerations go into an upstream oil and gas company’s decision to, in the name of

¹⁴ John Glasson et al, *Introduction to Environmental Impact Assessment* 3rd ed. (Oxon: Routledge, 2005) 7.

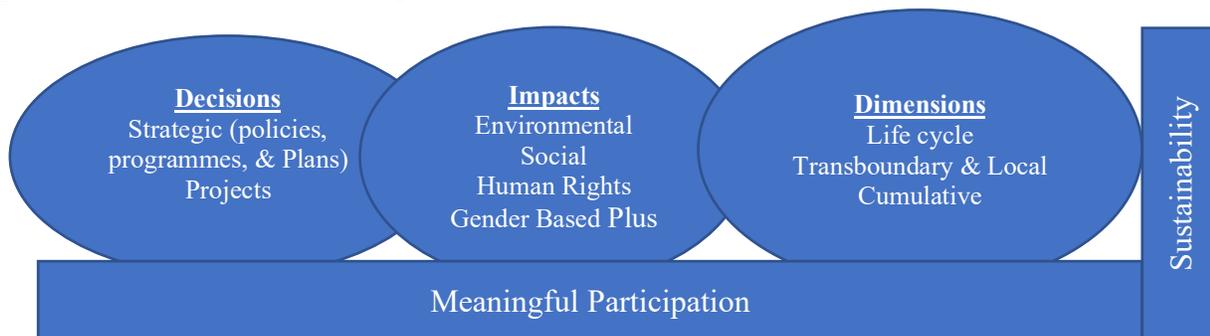
¹⁵ Commenting on the status of IA within international law, the International Court of Justice in the Pulp Mills case held that due to the global acceptance of environmental impact assessment (EIA), “... it may now be considered a requirement under general international law to undertake an environmental impact assessment where there is a risk that the proposed industrial activity may have a significant adverse impact in a transboundary context ... Moreover, due diligence, and the duty of vigilance and prevention which it implies, would not be considered to have been exercised, if a party planning works ... did not undertake an environmental impact assessment on the potential effects of such works”. *Case Concerning Pulp Mills on the River Uruguay (Argentina v Uruguay)*, Judgment, ICJ Reports 2010, p 14 at para 204 (Pulp Mills Case).

¹⁶ Kate Mackenzie, “Big Oil’s Net-Zero Plans Show the Hard Limits of Carbon Offsets” (1 March 2021) Bloomberg Green <<https://www.bloomberg.com/news/articles/2021-03-01/big-oil-s-net-zero-plans-show-the-hard-limits-of-carbon-offsets>>; Alia Al Ghussain, “The Biggest Problem with Carbon Offsetting is that it Doesn’t Really Work” (26 May 2020) Greenpeace <<https://www.greenpeace.org.uk/news/the-biggest-problem-with-carbon-offsetting-is-that-it-doesnt-really-work/>>.

sustainability transition, shut down certain production capacities while investing and commissioning new oil and gas projects? Who are the winners and losers when these decisions are taken? How are they determined?

While I have made a case for a more explicit IA framework for considering just transition impacts, a more incremental approach reveals spaces within conventional IA through which the justice implications of the transition can be catered to. This, however, warrants an integrated application of different IA modes and lenses. Figure 1 provides a snapshot of this mix of IA modes. The IA modes recognized in figure 1 are representative rather than exhaustive. More importantly, the identified modes align with the just transition characteristics in table 1.

Figure 1 – Just Transition and Impact Assessment



In making strategic and project-level transition-relevant decisions, the justice implications of such decisions must be explicitly considered. At the minimum, environmental, social, human rights, and gender-based plus effects of these transition decisions should be considered. An ecologically sensitive just transition assessment does not take ‘green’ transition policies or transition as being positive for the environment by default. It draws a line between climate-friendly projects and sustainability-aligned projects. For example, solar photovoltaic panels could have adverse environmental impacts both in how minerals like silicon are mined, and in their end-of-life management.¹⁷ A similar case can be made in respect of other ‘climate friendly’ projects like wind turbines and hydroelectricity dams. For the transition to be ecologically just, the argument that a ‘green’ project has less ecological impact when compared with a ‘non-green’ alternative (e.g., fossil fuel) cannot be taken as tenable. Transition projects must be weighed holistically on the ecological integrity scale. Transition policies and projects must also be carefully assessed for broad social impacts on population characteristics, community and institutional structures, political and social resources, community and family changes, and political and social resources.¹⁸ To address collective and individual vulnerabilities more specifically, the explicit consideration of transition activities on human rights and other identity-specific concerns (gender based plus impacts) is very vital. Beyond preventing adverse impacts, IA is also useful in assessing the most effective and equitable ways transition projects can be located and implemented to support ecological and human wellbeing.

¹⁷ Atalay Atasu et al, “The Dark Side of Solar Power” (18 June 2021) Harvard Business Review <<https://hbr.org/2021/06/the-dark-side-of-solar-power>>.

¹⁸ These impacts mirror the social impact variables list compiled by the Interorganizational Committee on Guidelines and Principles for SIA. See The Interorganizational Committee on Guidelines and Principles for SIA, “Principles and Guidelines for SIA in the USA” (2003) 21:3 Impact Assessment and Project Appraisal 231 at 232.

Climate change is inherently boundless; it is caused by global-wide emission sources and impacts can neither be traced to specific origins nor constricted to geographical boundaries. Similarly, the impacts of measures designed to address climate change are broad and far-reaching. For example, the assessment of a proposed solar farm project is most likely to be restricted to the localized impacts.¹⁹ There are, however, impacts throughout the lifecycle of the solar farm with transboundary implications. These impacts are also cumulative in the sense that they are a product of historical and current stressors. Agbogbloshie in Ghana, one of the world's largest dumpsites for e-waste including solar panels from Europe and North America, exemplifies this. Sovacool et al note how the carbon transitions in developed countries lead to toxic pollution, biodiversity loss, exacerbation of gender inequality, exploration of child labor, and subjugation of ethnic minorities in places like Agbogbloshie.²⁰ Lifecycle, transboundary, and cumulative assessment sensitive to just transition in its global sense could be useful in ensuring that a wellbeing sensitive transition is achieved.

Meaningful participation which, as noted in table 1, must necessarily entail the removal of parity impeding norms and structures and the recognition of the broad category of right holders and stakeholders, particularly the most vulnerable, underpins the various layers of the application of impact assessment to just transition. Importantly, sustainability serves as the organizing principle of the different IA modes. Hence, rather than seeking to balance and trade-off the various components (modes), emphasis is placed on achieving mutually reinforcing and durable gains.²¹

4. Conclusion

To achieve the vision of just sustainability transition described above, we need “a little more vigour, humility and foresight in our decision making”.²² It is easy to make an argument for replacing a fossil fuel guzzling car for one which runs on electricity or retiring a coal power plant for wind turbines. But such transition will, however, not be automatically sustainability enhancing or just. With a little more vigour, we can pay attention to blind-spots and dark edges, with more humility we can design, consider, and choose interventions more carefully, and with more foresight we can discern the justice-related consequences of our decisions for this generation and those to come.

¹⁹ See for example the assessment and notice of determination of MEDA 324 kW solar farm. In deciding that the project is not likely to cause significant adverse environmental effects, Indigenous Services Canada considered among other things revenues that will benefit the First Nation and outlined mitigation measures to address vegetation clearing and monthly visual observation to ensure no effects on birds or SAR. See Impact Assessment Agency of Canada, “MEDA 324 kW Solar Farm” (2020) <<https://iaac-aeic.gc.ca/050/evaluations/document/136369>>.

²⁰ Benjamin Sovacool et al, “The Decarbonization Divide: Contextualizing Landscapes of Low-carbon Exploitation and Toxicity in Africa” (2020) 60: 102028 *Global Environmental Change* 1 – 19.

²¹ Robert Gibson, “Sustainability Assessment: Basic Components of a Practical Approach” (2006) 24:3 *Impact Assessment and Project Appraisal* 170 at 172.

²² Robert Gibson, “Foundations: Sustainability and the Requirements for Getting There” in Robert Gibson ed., *Sustainability Assessment: Applications and Opportunities* (London: Earthscan, 2016) at 1.