

ENVIRONMENTAL MIGRATION POLICY IN CANADA

Lessons from Australia, New Zealand, and beyond



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Abstract

Canada has not done enough to address environmental migration policy development in the face of climate change. First, I use moral, economic, and political arguments to explain why Canada should develop an environmental migration policy. Second, I analyze lessons Canada can take away from Australia, New Zealand, and a few international frameworks on developing such a policy. As for moral considerations, Canada is a large, wealthy, and stable nation that has relied on Greenhouse Gas (GHG) emitting industries (Kaduuli, 2021). Canada is also a signatory to multiple climate change and migration initiatives and has been historically receptive to migrants (Government of Canada, 2021a; Friedrich, Ge & Pickens, 2020). Economically, Canada's labour market could benefit from an expansion of the Refugee Act to include environmental migrants as studies show refugees perform well in the Canadian market and contribute to the Canadian economy, while climate change adaptation and mitigation costs continue to increase (UNHCR Canada, 2019; Arora, 2014; Dupraz-Dobias, 2020). As for political motivation, Canada may be pressured by the U.S. and the broader international community to accept environmental migrants as the number of migrants fleeing Latin America and the Caribbean due to unliveable environmental conditions increases (Tower, 2021; Immigration and Refugee Board Canada, 2018). Canadian policymakers have many options to approach environmental migration policy development, including Australia's conservative-restrictive approach, New Zealand's open-liberal approach, or an amalgamation of both. However, I argue that findings show more benefits to a progressive approach to migrant policy. The Canadian state should also consider using international policies to develop a framework with well-thought input from around the globe. These frameworks argue that environmental migration policies should be developed with respect for human rights, migrant inclusion, and long-term

planning and preparation for environmental migrants. Including international counsel within an environmental migration policy could help policymakers address more potential migrant risks and reduce harm. It is time for Canada to develop an environmental migration policy, and to make it effective and efficient, policymakers must look abroad to Australia, New Zealand and beyond.

Key Words

Environmental migration, refugee, immigration policy, climate change, Canada, Australia, New Zealand

1. Introduction

Canada lacks any concrete action in developing a policy addressing environmental migrants¹. Individuals forced to leave their homes due to climate change are met with an insufficient migration policy born from the Canadian Refugee Act of 1951 (Bates-Eamer, 2019). The slow-onset effects of climate change, such as desertification, glacial retreat, increasing temperatures, land degradation, loss of biodiversity, ocean acidification, and sea-level rise are intensifying (Internal Displacement Monitoring Centre, 2021). These effects are causing increasing pressure upon affected populations to move away from hard-hit regions (Internal Displacement Monitoring Centre, 2021). Environmental migrants are expected to make their way to Canada, with many from nearby states in Latin America and the Caribbean. Findings from the Immigration and Refugee Board of Canada (IRBC) (2018) show 23 out of 115 pending asylum claimant countries of citizenship are from the region of Latin America and the Caribbean. Climate change exacerbates environmental degradation that further affects societal and economic

¹ Throughout this MRP, the term ‘environmental migrant’ will be used to address those who have been forced to flee their homes due to the consequences of climate change.

issues causing individuals to migrate (Mezdour et al., 2016). Mezdour et al. (2016) conducted a study interviewing 27 Haitian-born participants who arrived in Canada between 2001 and 2009 (before the 2010 earthquake). They found severe environmental problems such as flooding, overcrowding, and air pollution in urban centres from the influx of rural migration is an indirect yet observable cause for migration (Mezdour et al., 2016). Individuals migrating from rural to urban areas due to unlivable environmental conditions exacerbate poor living conditions in populated areas, leading to increased immigration (Mezdour et al., 2016). Canada must learn lessons in environmental migration policy as situations like these increase in nearby countries.

To provide context and urgency to how new the situation of climate change-induced migration is, the Internal Displacement Monitoring Centre (IDMC) (2021a) only started tracking Internally Displaced Persons (IDPs) specifically displaced by natural disasters in 2019. Although beginning as IDPs, several million individuals will never be able to return to their homes, pushing them towards city centres with the most resources, leading to overcrowding and resource depletion (IDMC, 2021a). Eventually, some of these same IDPs may choose to relocate abroad to search for a home and more resources (IDMC, 2021a). The International Organization for Migration (IOM) predicts the number of permanently displaced environmental migrants could add up to 200 million by the year 2050 (Brown, 2008).

People involuntarily move around the globe every year due to natural disasters creating an unlivable environment at home. In 2020, the IDMC (2021a) recorded nearly half (49% - or 156 million events) of global natural disasters were caused by flooding, while 37 percent (or 119 million events) were caused by storms, with both causes attributed to anthropogenic climate change. In the Americas alone, natural disasters triggered 4.5 million displacement events, the most in the last decade (IDMC, 2021a). Although not every natural disaster requires permanent

relocation, certain instances such as rising sea levels result in migrants having to leave their homes for the foreseeable future. For instance, Climate Central, alongside researchers from Princeton University and the Potsdam Institute for Climate Impact Research in Germany, published a report finding roughly 385 million people currently live on land that will be permanently underwater even with CO₂ reductions (Keefe & Ramirez, 2021). This number jumps to 800 million people if the Earth sees a 3°C increase in temperature (Keefe & Ramirez, 2021). This type of permanency within displacement caused by climate change is a significant way it differs from other forms of displacement, such as war and conflicts, where individuals may return once the conflict is over.

This paper first uses moral, economic, and political arguments to address why Canada must expand its refugee policy to include environmental migrants. Following that argument, this paper gathers lessons Canada can take away from Australia and New Zealand in terms of an environmental migration policy, and how Canada can use these lessons in a Canadian context to develop its environmental migration policy. Lessons to be learned are primarily from Australia and New Zealand. These two countries are similar culturally and economically to Canada while having two very different approaches to environmental migration policy. Additionally, this paper draws on lessons from existing international environmental migration policy recommendations from organizations and small island nations who have developed environmental migrant guidelines as their countries are affected by climate change.

As for moral arguments, Canada is responsible for contributing to the global environmental migrant crisis as it has relied on Greenhouse Gas (GHG) emitting industries to develop itself into a rich and stable nation (Kaduuli, 2021). Canada also remains a signatory of the Paris Agreement, a legally binding commitment addressing climate change (Kaduuli, 2021).

Canada has historically been very receptive to immigrants in times of need, from the Quakers in the 1970s to Syrian refugees in 2015, as well as the country's history of humanitarian aid funding (Government of Canada, 2020). Economically, Canada could benefit financially from the addition of an entirely new migrant category bringing in thousands of working-aged migrants (Arora, 2014). Climate change adaptation and mitigation measures covered through foreign aid are also increasing in cost while becoming less effective, something Canadian policymakers will have to include in their cost-benefit analysis of an environmental migration policy (Dupraz-Dobias, 2020). For political arguments, as the number of environmental migrants coming up from Latin America and the Caribbean increases, Canada may be pressured by the U.S. and the international community to accept environmental migrants within its borders, either on a temporary or permanent basis (Tower, 2021). These arguments highlight the multiple angles in addressing why Canada should develop an environmental migration policy.

In terms of what Canada can learn from the international community on environmental migration policy, Australia and New Zealand make two strong case examples with two very different approaches to environmental migration policies. New Zealand has taken a more liberal and human-rights-centred approach to its policy development (Ministry of Social Development, 2007). In contrast, Australia has taken a more conservative and deterrent stance to its environmental migration policies (Merone & Tait, 2018). There are also lessons to be learned from international organizations such as the United Nations (UN) and the governments of small island states like Vanuatu, Tuvalu, and Fiji. These states have taken very progressive approaches to environmental migration policy over the past few years (The United Nations, n.d.; Vanuatu National Disaster Management Office, 2018; Burch, 2021 & Ministry of Economy, Republic of Fiji, 2018). Canada is even a signatory to an international framework on environmental

migration policy, the Compact for Safe and Orderly Migration (OHCHR, 2018). One of the 23 state objectives in the Compact involves developing migrant policies that address climate and disaster-related displacement (OHCHR, 2018). Regardless, policymakers continue to drag their feet in creating a national policy.

The following addresses the moral, economic, and political arguments as to why Canada should create an environmental migration policy and explores what the country could learn from the South Pacific and a few cases from international organizations in its policy development.

1.1 Terminology and Recognition of Environmental Migrants

Canada should include ‘environmental migrant’ as a specific category of refugee claimant with unique considerations into Canada’s immigration policies. Currently, only refugees who conform to the 1951 United Nations High Commissioner for Refugees (UNHCR) definition of refugee are considered in the Refugee Act (Minister of Justice, 2019). This 71-year-old definition provides no consideration for increasing environmental pressures on a migrant’s country of origin. Canada must consider proper terminology within an environmental migration policy because minor distinctions dictate international law and responsibilities (Bates-Eamer, 2019). The leading body for migration terminology is the International Organization for Migration (IOM). Only recently did the IOM define environmental migrants as individuals who decide willingly or not to leave their homes due to environmental conditions that adversely affect their quality of life (Kaduuli, 2021). These migrants may move within their own country’s borders or internationally; and may relocate temporarily or permanently (Kaduuli, 2021).

There is still an ongoing debate on terminology and whether environmental migrant is the appropriate term to use. Merone & Tait (2018) argue that classifying these individuals as

migrants is flawed because it implies that they voluntarily left their country of origin and may return later. Returning home may be impossible for several individuals, particularly those in low-lying states (Merone & Tate, 2018). At a border, an environmental refugee would be entitled to international protection and the principle of nonrefoulement, meaning they cannot be returned to where they have fled from (Bates-Eamer, 2019). On the other hand, an environmental migrant who moved voluntarily would have no international protection rights at a border (Bates-Eamer, 2019). Additionally, environmental migrant crossings would be overseen by the receiving country's immigration laws and policies (Bates-Eamer, 2019). This shows how minute details in terminology have a great impact on environmental migrants themselves and policy development that Canada must consider.

1.2 The Canadian Context

Canada has not been doing enough to address the environmental migrant crisis in accepting refugees and migrants (Friedrich, Ge & Pickens, 2020). The reasoning for Canada to act in terms of developing an environmental migration policy are high. Canada has the geographic space for more immigration as the second-largest country in the World (Nations Online, 2022). The State is currently experiencing a declining population growth rate that could lead to problems of labour supply without more labour being brought in via immigration (Statistics Canada, 2022). Canada also remains a top ten contributor to greenhouse gas emissions, a leading cause of climate change (Nations Online, 2022). According to data from the World Bank, in 2020, Canada's entire refugee population was 109,264 (2021a). This figure represents only 0.4 percent of the global population of refugees in 2020, while Canada possessed 0.5 percent of the global population of that year (The World Bank, 2021a; Statistics Canada, 2021a). There may be no magic number of refugees Canada should accept however, there is a

large discrepancy between the number of refugees accepted by high-income countries compared to low-income countries already struggling to support their native populations (The World Bank, 2021a). Compare Canada's refugee intake to that of Heavily Indebted Poor Countries (HIPCs) and Fragile and Conflict-Affected Areas (FCAAs), which collectively took in 56 percent of the total population of refugees (The World Bank, 2021a). Given the above reasons, Canada should increase the current number of refugees it allows. Farquhar (2015) warns that if Canada and the rest of the international community were to continue to take so long in developing environmental migrant strategy measures, crises would require significantly higher levels of outward migration, urgency, higher costs, and desperate response measures.

Environmental migration has been on Canada's radar for the last two decades without any significant changes to its immigration policy. In 2008, the Institute of Public Administration of Canada (IPAC) commented that the Canadian government should look to international collaboration to develop a policy for 'climate refugees' (Murray, 2010). However, nothing resulted from the statement. Because permanent immigration channels for environmental migrants to land in Canada are nonexistent, there is no available data on the number of immigrants who have come to Canada because of environmental causes. One instance happened after typhoon Haiyan in 2013, where the Immigration and Refugee Board of Canada (IRB) approved 2100 applications under the Immigration and Refugee Protection Act who were able to prove they were directly and significantly affected by the typhoon (Matias, 2020). The motivation behind the IRB's quick action here was the result of the Canadian public's reaction to the Typhoon (Sas, 2013). Then Immigration Minister Chris Alexander said in a statement to the public after the event that the Canadian government will work with its partners to ensure emergency support is provided to those affected (Sas, 2013). Canada has made allowances to

those who are effectively environmental migrants however, these ‘special allowances’ are few and far between, and there are no concrete policy mechanisms to address environmental migrants.

2. Methodology

The following paper uses a three-pronged methodology to review academic sources. First, a literature review was conducted using a methodological approach to prepare the review, as well a systematic approach to analyze the relevant data within each reading. Lastly, a Comparative Policy Analysis (CPA) was used to evaluate both domestic and foreign immigration policies as they pertain to environmental migration.

2.1 Literature Review

The literature review involved two approaches: a methodological approach used to prepare the literature review, including the design, beginning, and writing the review; as well as a systematic literature review process to analyze the most relevant data involving lessons Canada can learn from New Zealand, Australia and beyond (Snyder, 2019; Khan, Kunz, Kleignen & Antes, 2003). I used a grounded theory approach to qualitative research, combining content analysis and case study research analysis. Using a grounded theory approach enabled the collection of a large amount of specific data on environmental migrant policies from a few countries to establish a theory of what lessons could be learned in a Canadian context (Lingard, Albert, & Levinson, 2008).

To systematically analyze the literature and extrapolate the data, I followed five steps outlined by Khan et al. (2003) in their derivation of a qualitative systematic literature review. First, I framed the research problem in various ways to target the research question from several

angles. To do this, I focus on the moral, economic, and political arguments to contextualize why Canada should develop an environmental migration policy. I also look at what Canada could learn from Australia, New Zealand, and other international initiatives in policy development. Second, I identified the relevant work in databases (e.g., The University of Ottawa's database - OMNI), institutional publications (e.g., from the Center for Climate and Security), and government websites. Due to the contemporary and dynamic nature of environmental migration policy, I used news from reputable outlets like The New Humanitarian. The data collected is primarily in the form of effects and findings. To assess the quality of the research, I use only data from peer-reviewed sources and news pieces from reputable news sources. Third, when referencing news pieces, I began by determining if the article was biased (does the author have any biases towards the topic, etc.). Then I would ensure that the facts presented in the story have been sourced from peer-reviewed studies using the embedded links provided. Fourth, I did not use information from the news article if I found any bias, and there were no embedded links/citations to the data. Lastly, I organized the collected data with titles and subtitles, APA in-text citations, and a reference list before interpreting the findings.

2.2 Comparative Policy Analysis

To ensure comprehensive results with grounded theory, I used Comparative Policy Analysis (CPA) to dive deeper into foreign and domestic policies to answer the research question. CPA is an amalgamation of public policy analysis and general comparative analysis to broaden the analytical horizon of environmental migration policy research (Cyr & DeLeon, 1975). According to Cyr & DeLeon (1975), "...comparative analysis raises the possibility of much richer insights concerning the influence of cultural milieu, political competition, and governmental structures themselves on the characteristics of public policy (p.7)." CPA facilitated

the analysis of a wide variety of domestic and foreign policies by using multiple facets of each search topic in the literature review analysis stage. For example, when researching New Zealand's approach to environmental migrants I searched for: its past and present policy measures, policy finances, specific taskforces, public opinion, major events, etc., and compared those same categories between Australia and Canada. This allowed for the development of a comprehensive look at what Canada is doing well, and where it needs to improve (lessons to be learned) in comparison to New Zealand and Australia's environmental migration policies. The global nature of climate change and its effects on international migration, coupled with the lack of historical data and resources, made conducting primary qualitative research on the ground unfeasible. However, using a systematic literature review approach and CPA of current research provided an insightful analysis of the research question.

3. Moral, Economic & Political Reasoning for a Canadian

Environmental Migration Policy

Canada lacks a policy plan for environmental migrants. This lack of policy is significant because increasing climate destabilization brings a large and growing population of people migrating away from vulnerable countries (Kaduuli, 2021). The following explains why Canada should develop an environmental migration policy using moral, economic, and political arguments. This paper also examines lessons Canada can learn from Australia and New Zealand's approaches on environmental migrant policies, along with a few policies developed by international organizations and governments.

3.1 Moral Arguments for Canadian Environmental Migration Policy

Schultz et al. (2020) argue two principal reasons for a high-income country like Canada to accept immigrants. First, there is the moralistic humanitarian motivation to admit those seeking refuge (Schultz et al., 2020). Second, there is the economic motivation to fill labour shortages and contribute to the national economy (Schultz et al., 2020). As for moral arguments, Canada is a large, wealthy, and stable nation that has relied on Greenhouse Gas (GHG) emitting industries that have contributed significantly to global climate change (Kaduuli, 2021). Canada contributes 1.5 percent of total world GHG emissions and sits in the top 10 highest emitting countries as of 2020 (Government of Canada, 2021b; Friedrich, Ge & Pickens, 2020). Consequently, the majority of environmental migrants come from small, low emitting and low-income² countries (Internal Displacement Monitoring Centre, 2021). Canada was also one of 167 signatories to the UN's Global Compact for Safe, Orderly and Regular Migration (Mortillaro, 2019). The Compact is a non-legally binding document to identify, develop and strengthen solutions for migrants compelled to leave their countries of origin due to slow-onset natural disasters and the adverse effects of climate change (Mortillaro, 2019). However, even after producing enough GHG emissions to get in the top 10 global emitters and signing onto a Global pact aiming to address environmental migration, Canada has not created an environmental migration policy. Canada has historically been a receptive and liberal country to immigrants from around the globe (Government of Canada, 2020). According to the Migrant Integration Policy Index (MIPEX) (2020), Canada is among the high scorers in the category of favourability among immigrant integration policy factors such as access to nationality,

² Terms such as 'developing vs. developed' have been discontinued in works from some top global humanitarian organizations such as the World Bank (Sandhu, 2016). This article uses the classification terms: high-income, middle-income, and low-income countries.

education, family reunion, and anti-discrimination. The Canadian government should refer to Canada's historical commitment to immigration policy to develop an environmental migration policy.

3.1.1 Moral Considerations of the Paris Agreement

The Paris Agreement on climate change is perhaps the most influential global agreement concerning climate change to date – with over 195 nations, including Canada, signing a legally binding pledge to reduce GHG emissions (Burch, 2021). Signing this treaty signifies Canada's moral stance on anthropogenic climate change causing harm and the need for action against more severe outcomes, such as an increase in environmental migration. Canada's signing of the Paris Agreement indicates the moral direction the country wanted to go in concerning the future and climate change – a direction that is more progressive and compassionate to those affected by climate change (Matias, 2020). In this instance, the Canadian government was more proactive on climate change than many Canadians. At the time the Paris Agreement was introduced in 2015, a survey done by the Pew Research Center found that only 51 percent of the Canadian population believed climate change was a serious problem (Stokes, Wike, & Carle, 2015). This belief was even lower in fellow signatory Australia, with less than half (43%) of the population surveyed believing in the severity of climate change and 17 percent completely denying climate change (Stokes, Wike, & Carle, 2015). In contrast, countries in Latin America had a much higher belief in climate change as a serious problem (e.g., 86 percent of Brazil's population) (Stokes, Wike, & Carle, 2015; Burch, 2021). As of 2020, not only do more Canadians believe in climate change, but 88 percent believe they have been directly impacted by it (Vitello, 2020). With more belief in climate change as a problem with negative effects by the Canadian public, the Canadian

government could be pressured into strengthening its moral commitment to climate change (Vitello, 2020).

3.2 Economic Arguments for Canadian Environmental Migration Policy

Economically, Canada could benefit from adding an entirely new migrant category by bringing in thousands of migrants with promising economic value. According to a study by the United Nations High Commissioner for Refugees (UNHCR) Canada, 51 percent of refugees in Canada are employed in high-skilled jobs and create jobs for everyone, with 14 percent of refugees aged 10 to 30 years old becoming entrepreneurs (UNHCR Canada, 2019). Refugee claimants continue to benefit the labour market in the long run. A study by Lu et al. (2020) uses government collected landing and tax data to compare the long-term labour market outcomes of refugee claimants in Canada. Focusing on the largest group, refugee claimants turn permanent residents (RC-PRs), average employment income increased from \$15,413 one year after making their claim in 2003 to \$34,825 in 2016 (Lu et al., 2020). Education levels were also high among that 2003 group of RC-PRs, with 49 percent possessing either a trade or college certificate, bachelor, or graduate degree (Lu et al., 2020). Also worth noting is the highest proportion of RC-PR claimants came from South and Central America (31%) (Lu et al., 2020). This research relies on data that refugees have reported themselves and thus may not reflect the entirety of the refugee population in Canada. One argument against the benefits of including more refugees into Canada is the increase in social assistance collected by more refugees. The same study by Lu et al. (2020) found 71 percent of RC-PRs collected social assistance in their first year. However, that number dropped substantially in their second year in Canada to 46 percent claiming assistance, and finally down to 20 percent by year 6 of landing. The inclusion of more tax-paying individuals into the country like RC-PRs and environmental migrants would be incredibly

beneficial to the Canadian economy. A study by Arora (2014) also found that countries promoting immigration and movement of labour between states have higher GDPs than countries with more restrictive policies, as foreign immigrants diversify the workforce and increase productivity and output.

Canada needs labour; with COVID-19 effects causing labour shortages, a post-COVID-19 economy no longer supported by substantial public government funding, and the Baby Boomer cohort representing 32 percent of the population retiring within the decade (Statistics Canada, 2021a). Expanding the Refugee Act to include environmental migrants can help bring thousands more individuals to the country who can contribute to the labour market. In 2020, Canada took in 1.3 percent (109,264) of the total number of global refugees while still ending the year with 560,200 employment vacancies (The World Bank, 2021a; Statistics Canada, 2021b). Refugees can help relieve short-term labour shortages and improve long-term economic growth (Arora, 2014). Kaida, Hou & Stick (2020) find refugee economic integration outcomes are comparable to other immigrants, despite taking slightly longer to catch up. Refugees are found to reach median immigrant earnings within 12 to 18 years of landing (Kaida et al., 2020). In Canada, the main findings on refugee economic integration are threefold: First, refugees fare less well during the initial resettlement period than economic immigrants, who are admitted to Canada based on their human capital (e.g., education, language skills, occupations), but refugees' economic outcomes are comparable to those of family class immigrants admitted for family reunification (Kaida et al., 2020).

Another economic aspect Canada should consider in allowing for environmental migration is its responsibility for international climate finance. Climate change adaptation and mitigation measures covered through foreign aid are increasing in cost while becoming less

effective (Dupraz-Dobias, 2020). Canada contributes to international climate finance for low-income countries, spending \$2.65 billion CAD from 2015 to 2021 (Government of Canada, 2022). Created in the Cancun Agreement and extended in the Paris Agreement, signatories, including Canada, are responsible for contributing to climate finance going towards climate mitigation efforts in low-income countries (Gifford & Knudson, 2020). Climate finance usually consists of grants, loans, and equity in the form of purchased shares and debt relief (Gifford & Knudson, 2020). While it is important to keep citizens in their homes for as long as possible, Canada could have migrants working to boost the economy while meeting its climate finance obligations. Although Canada would not be liable to fund all of said strategies, Stanley & Williamson (2021) project the cost of global climate adaptation strategies alone will cost \$12-71 billion USD per year by 2100. Canada plans on doubling its climate finance spending from 2021 to 2026 (Government of Canada, 2022). Canada is already contributing more and more to climate finance. The country should look into increasing the number of migrants to the country via environmental migration pathways, adding to the Canadian labour force and boosting the economy. Allowing for environmental migration, Canada could adhere to the Paris Agreement by ensuring foreign migrants have a pathway to residency while also employing migrants to support the Canadian economy and foreign climate change mitigation financing.

3.3 Political Arguments for Canadian Environmental Migration Policy

Politically, Canada may be pressured by the U.S. and the international community to accept environmental migrants on a permanent or temporary basis as the number of migrants fleeing Latin America and the Caribbean increase due to unliveable environmental conditions (Tower, 2021). The U.S. itself noted surging irregular migration flows within the last few years due to climate change and its capacity to compound into additional problems exacerbating

migration (The White House, 2021). From 2008 to 2017, rapid-onset disasters linked to natural hazards have produced 20 million incidents of internal movement by individuals in Latin America and the Caribbean (Cantor, 2018). Although there is presently more internal displacement than external displacement, this is expected to change soon (Tower, 2021). For example, Prime Minister Roosevelt Skerrit declared 95 percent of the country of Dominica was severely impacted by Hurricane Maria in 2017 (Shepherd, 2017). One month after the Hurricane, roughly 15,000 people, or one-fifth of the entire population of Dominica, left the island due to unlivable post-disaster conditions (Ayuso & Boding-Hansen, 2017). It is unknown how much of the population who fled returned to Dominica. However, Canada should consider allowing for temporary environmental migration within its policy for those able to return home. A study conducted by Joarder & Miller (2013) analyzed binary logit models of factors leading to environmental migrants in Bangladesh deciding to move away permanently or temporarily. Joarder & Miller (2013) found that women are more likely to move away temporarily after an environmental crisis as a household survival strategy. The most compelling factor for permanent environmental migration is the occupation of the migrant (Joarder & Miller, 2013). Migrants in agriculture or fishing were significantly more likely to migrate permanently after an environmental crisis (Joarder & Miller, 2013). According to data from the World Bank (2021b), 14 percent of people in Latin America and the Caribbean are employed in agriculture, while the Food and Agriculture Organization (FAO) division of the UN calculates more than 2 million individuals in the region participate in the aquaculture sector (FAO, 2016).

A report on global water security published by the U.S. National Intelligence Council (NIC) finds that several nations between now and 2040 are likely to experience environmental degradation (McFarland, 2019). Environmental degradation could create instability, state failure,

and escalate regional tensions leading to increased migratory pressure (McFarland, 2019). The Canadian government should pay close attention to the U.S. - Mexico border for migrant flows from Latin America and the Caribbean when developing an environmental migration policy. The U.S. detained over 400,000 immigrants fleeing Latin America and the Caribbean in 2016, up from 50,000 the year before (Tower, 2021). A staggering increase as Honduras alone saw a 94 percent increase in out-migration that same year (Tower, 2021). This means that there will likely be more people coming up from Latin America and the Caribbean, potentially making their way to the Canadian border as the effects of climate change continue to worsen. It would be politically unacceptable for Canada to continue its outdated migrant policies, given the expected trajectory of growing numbers of people seeking protection from hostile living environments and pressure from its high-income neighbour.

3.3.1 Environmental Migrants to Canada from Latin America and the Caribbean

Given its geography, Canada is likely to see many environmental migrants from Latin America and the Caribbean. The Immigration and Refugee Board Canada (IRBC) (2018) tracked pending asylum claimants in 2018 and their country of original citizenship. Findings from the IRBC (2018) show 23 out of 115 pending asylum claimant countries of citizenship belonged to countries in Latin America and the Caribbean while pending asylum claimants from the region made up a quarter (25% - or 18,221 out of 71,675) of total pending claimants. Table 1 shows the countries of citizenship belonging to the top 5 pending asylum claimants in 2018 (Immigration and Refugee Board Canada, 2018). The majority (3 out of the 5) countries of citizenship are in Latin America and the Caribbean, highlighted in yellow (Immigration and Refugee Board Canada, 2018).

Table 1: *Pending asylum claimants 2018: Top 5 countries of citizenship*

Country	Number of pending asylum claimants
1. Nigeria	12,318
2. Haiti	6,811
3. India	5,175
4. Mexico	3,525
5. Colombia	3,056

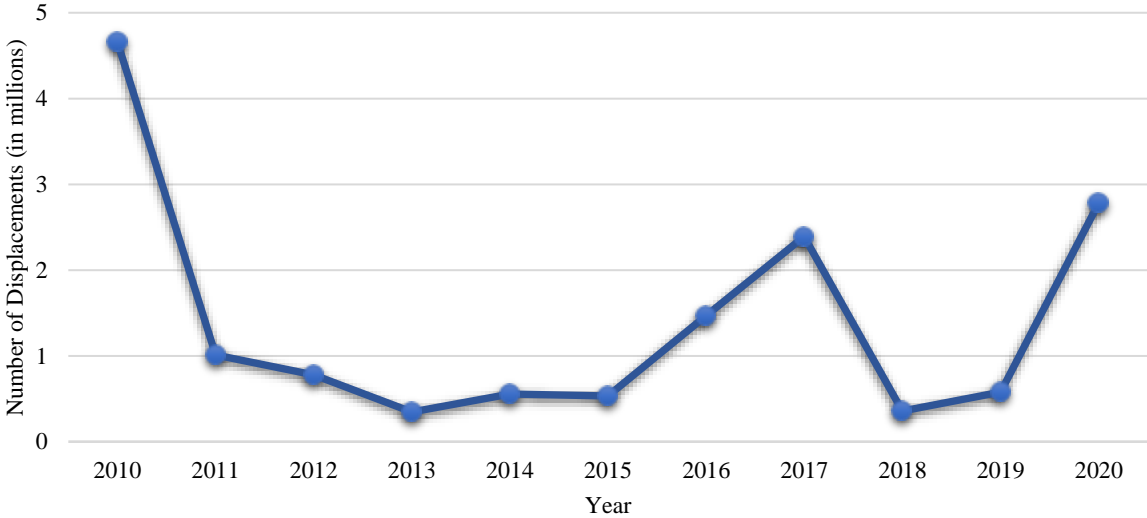
Source: Immigration and Refugee Board Canada, 2018.

More data is being released on the impact climate change has on migration throughout Latin America and the Caribbean that is relevant to Canadian policymakers. Research from the Migration Data Portal (2021) tracked 9.14 million new displacements related to natural disasters in the Caribbean between 2010 and 2020, with almost 100,000 individuals still unable to resettle by the end of 2020. Countries that recorded the highest number of new displacements were Cuba (6.60 million), Haiti (2.04 million), the Dominican Republic (305,800), Puerto Rico (97,640) and Dominica (36,174) (Migration Data Portal, 2021). In November 2020, Hurricanes Eta and Iota, category 4 and 5 respectively, struck parts of Central America and the Caribbean, damaging areas of subsistence agriculture that 4 million people rely on, exacerbating food insecurity caused by years of drought in the area (Tower, 2021). Instances like these have a reverberating long-term regional impact as 40 percent of individuals in Central America live below the poverty line (Tower, 2021).

The U.S. acts as a divider between Canada and Latin America and is seeing an influx of migrants seeking asylum, particularly from climate change (The White House, 2021). The U.S. sees migrants coming to their southern border primarily from Central America’s Dry Corridor (CADC), the most densely populated region and most prone to extreme climatic events (Tower,

2021). The United Nations Development Program (UNDP) estimates 265,000 migrants from El Salvador, Guatemala and Honduras have left for the United States since 2014 (Tower, 2021). Following Hurricane Maria in 2017, an estimated 135,000 Puerto Ricans migrated to the U.S. and of these 50,000-70,000 are predicted to have permanently settled in Florida alone (Cantor, 2018). The World Bank (2018) estimates Latin America could see up to 10.6 million environmental migrants by 2050, with several making their way up north with the increasing frequency of natural disasters. Figures 1 and 2 use data from the IDMC (2021b) that tracks the number of displacements caused by natural disasters in 33 countries within Latin America and the Caribbean between 2010 to 2020. Although nothing in the period matches the 4.66 million displacements caused by natural disasters in 2010, Figure 1 shows peaks of high numbers of displacements occurring more often as the decade progresses (IDMC, 2021b).

Figure 1
New Displacements from Natural Disasters in Latin America and the Caribbean from 2010 to 2020

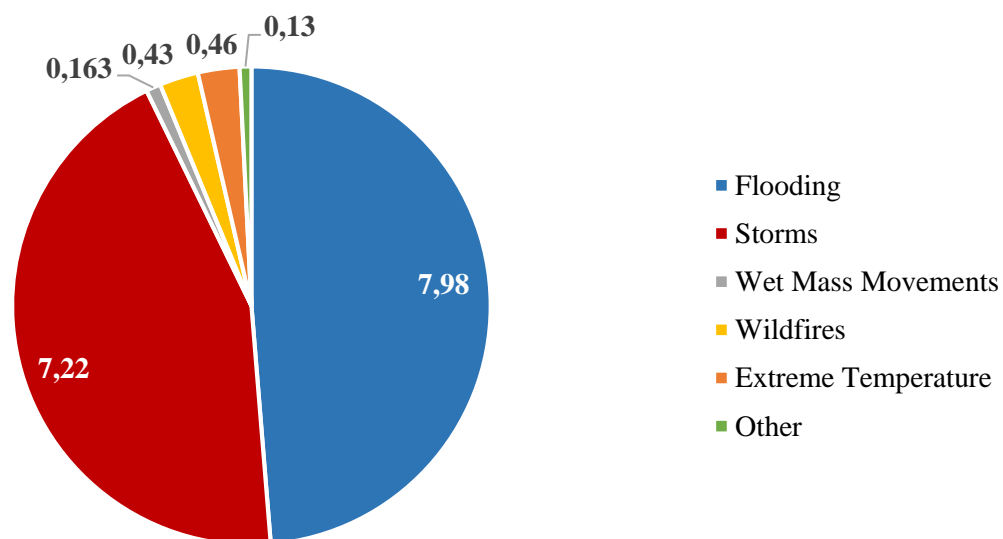


Source: IDMC, 2021b

Figure 2 highlights the propensity of specific types of natural disasters (in millions) leading to displacements during the same period of 2010 to 2020 and the same 33 countries in Latin America and the Caribbean. Flooding and storms made up 93 percent of all displacements, with over 15 million flooding and storm-related displacement events in the region (IDMC, 2021b).

Figure 2

Number of Displacements from Specific Natural Disasters in Latin America and the Caribbean from 2010 to 2020 (in millions)



Source: IDMC, 2021b

The Central American Integration System (SICA) is an organization promoting the economic and political integration of its member states (Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, and Panama) (Tower, 2021). SICA has articulated the need for high-income states like Canada to move away from the traditional security and nationalistic approach

to migration and immigration, instead urging everyone to shift to a human security and development lens (Tower, 2021). SICA, similarly to nations in the South Pacific, also advises that high-income states like Canada should use coordinated regional responses when it comes to developing environmental migration policies (Tower, 2021; Vanuatu National Disaster Management Office, 2018).

4. Environmental Migration Policies of the South Pacific

New Zealand and Australia are important actors in environmental migration policy development, primarily due to their geographic location in the South Pacific (Farquhar, 2015). These two high-income countries have had to develop some of the world's first policies addressing environmental migrants as they are both surrounded by several small oceanic states that are highly susceptible to climate change (IDMC, 2021a; Farquhar, 2015). The IDMC (2021a) calculated that most displacement events due to natural disasters in 2020 (12,063,000) occurred within East Asia and the Pacific, with several thousand individuals emigrating from their homes. Australia and New Zealand also possess economies similar to Canada in size and set up (Canadian Institute for Health Information, 2018).

New Zealand has had a progressive and human-rights-centred approach to environmental migration policy (Dempster & Ober, 2017). In 2017 they announced that the country was developing a climate migrant category for Pacific Islanders displaced by the effects of climate change (Dempster & Ober, 2020). On the contrary, Australia has taken a conservative and deterrent approach to migrants from surrounding island states (Merone & Tait, 2018). These two different approaches to refugee and migration policy (human-rights focused and deterrence focused) make New Zealand and Australia opportune exemplars for Canada to consider in

developing its environmental migration policy (Ministry of Social Development, 2007; Merone & Tait, 2018). Given their similarities to Canada, as well as their experience with environmental migrants, I look at each country's approach to environmental migrants and environmental migration policy to draw out lessons to be learned for Canada.

4.1 Australia's Environmental Migration Policy

Australia is comparable to Canada as they are both large landmasses with relatively small populations, parliamentary democracies, resource-heavy and similarly sized economies, and they both identify with 'Western' culture. However, Australia has one of the most restrictive immigration systems worldwide (Merone & Tait, 2018). Gammeltoft-Hansen & Tan (2017) categorizes Australia's deterrence policies into five primary categories:

1. Non-admission policies that limit access to asylum procedures.
2. Non-arrival measures that aim to prevent access to the mainland.
3. Offshore asylum processing and relocation.
4. Criminalization of irregular migration.
5. Indirect deterrence measures that intend to make Australia less attractive as a host country to certain categories of migrants.

Canadian policymakers may want to limit the number of temporary or permanent refugee claimants in Canada. A deterrent approach to migration would limit the number of asylum seekers to Canada if policymakers decided to create an environmental migration policy following Australia's lead. However, deterrent policies badly affect more than just the final destination host country and the migrants. Gammeltoft-Hansen & Tan (2017) argue that an approach that deters or blocks the movement of refugees has negative consequences for interim host countries, native

countries, and the migrants themselves. Preventing the onward movement of refugees places more of a burden on the current host country and native home as migrants collect in certain spots, unable to move on and exhausting local resources (Gammeltoft-Hansen & Tan, 2017). The situation is worse for asylum seekers themselves, who are already more vulnerable to various forms of violence, exploitation, and abuse during the migratory process (Gammeltoft-Hansen & Tan, 2017). Gammeltoft-Hansen & Tan (2017) find the levels of irregular migration have grown over the last few years, and with that, so have the legal and illegal industries aiding migrants. These illegal industries and organizations can involve attempts to capitalize on migrants and refugees by smugglers, criminal networks, local governments, and community members (Gammeltoft-Hansen & Tan, 2017). If Canada were to shift its refugee policy from one based on protection and facilitation to a policy based on security, deterrence, and enforcement, it would create and reinforce the vulnerability of environmental migrants (Bates-Eamer, 2019).

Current Australian immigration policy has garnered some negative attention from abroad. Conservative and deterrent policies, particularly towards refugees and migrants seeking asylum, have been flagged as a violation of human rights by the UNHCR (Merone & Tait, 2018). In July 2018, the UNHCR reported Australia had forcibly transferred 3172 refugees and asylum seekers to their off-shore processing facilities in Papua New Guinea and Nauru, with which they have long-standing agreements to intercept asylum seekers before they arrive on Australian shores (Bates-Eamer, 2019). This act of off-shore processing is not only inhumane, but it also contravenes the international protection principle of nonrefoulement and the right to non-arbitrary detention (Bates-Eamer, 2019). Merone & Tait (2018) have argued that with climate change severely affecting nearby Pacific islands, Australia should be pressured to not only

improve asylum policy but to expand their definition of refugee to include environmental migrants.

Australia does have better migrant policies when it comes to skilled migrants, particularly those applying under the family reunification category (Migration Integration Policy Index, 2020). The country also has immigration agreements with Pacific Islanders under institutions like the Australia Pacific Training Coalition (APTC) that provides Australian-recognized skill qualifications needed in both Australia in the home country (Dempster & Ober, 2020). Further, Australia had an agreement with Kiribati directly, titled the Kiribati-Australia Nurses Initiative (KANI) that ran from 2007-2013 where Australia committed \$6 million AUD to nursing scholarships for i-Kiribati[1] students who could then apply for Australian permanent residency once their education was completed (Farbotko, Stratford, & Lazrus, 2016). Creating labour agreements with nearby countries that are vulnerable to climate change could be a possibility for Canada. However, it is important to avoid a ‘brain drain’ scenario as Canada, Australia, and New Zealand have successful high-skilled immigration policies that attract well-educated professionals but could threaten to widen the gap in skilled labour in home countries (Boeri, Brücker, Docquier, & Rapoport, 2012).

In practice, Canada must ensure its environmental migration policy includes efficient methods to integrate more lower-skilled migrants to avoid a ‘brain drain’ scenario and facilitate immigration to the country. A recent 2021 study by Ryerson University argues Canada has not done enough in providing adequate pathways for lower-skilled workers to transition from temporary to permanent residents (Banerjee & Hiebert, 2021). Canada does have a few small-scale programs for lower-skilled workers to transition to permanent residents, typically involving partnerships between the IRCC and other stakeholders and a patchwork of rules and regulations

(Banerjee & Hiebert, 2021). One example is the Agri-Food Pilot program, which offers up to 2,750 individuals a pathway to permanent residence per year, running from 2020 to 2023 (Banerjee & Hiebert, 2021). One argument against introducing more lower-skilled permanent immigrants to Canada is that it may threaten employment prospects for lower-skilled Canadian workers or existing immigrants. However, a study on the effects of immigration on native wages in the United Kingdom by Dustmann et al. (2013) finds immigration leads to an overall slight increase in average wages. In another study, Fogel & Peri (2016) used longitudinal data to analyze the effects of lower-skilled immigrants on lower-skilled native workers in Denmark and found the lower-skilled native workers responded by moving away from more difficult manual labour jobs without a decrease in employment.

4.2 New Zealand's Environmental Migration Policy

New Zealand is also comparable to Canada in terms of economic and legislative setup and similarly favourable conditions for migrant integration - including access to nationality and anti-discrimination (both consistently higher than in Australia) (Migrant Integration Policy Index, 2020). New Zealand's migration policy differs substantially from its Australian counterpart with an open, progressive approach to migration (Dempster & Ober, 2020; Farquhar, 2015). In 2017, New Zealand became the first high-income country to have considered a 'climate refugee' visa specially targeted towards Pacific Islanders displaced by climate change (Dempster & Ober, 2020).

To the dismay of liberal policymakers, New Zealand's rendition of a climate refugee visa was unsuccessful (Dempster & Ober, 2020). Pacific Islanders told policymakers they did not want to be classified as 'refugees' and would prefer that countries reduce emissions, support adaptation efforts and foreign assistance and provide alternative migration pathways such as

migration under humanitarian visas (Dempster & Ober, 2020). However, with Pacific Islander requests considered, New Zealand, Canada and the rest of the World have consistently come up short in terms of climate change initiatives. Despite initiatives like the United Nations Framework Convention on Climate Change and the Paris Agreement, CO2 emissions from energy and industry have increased 60 percent since the creation of those agreements (International Energy Agency, 2021). Additionally, countries including Canada only make small contributions to foreign adaptation and mitigation measures, while the effects of ongoing climate change continue to worsen and costs increase (Burch, 2021; CanWach, 2021). Despite New Zealand's unsuccessful attempt at an environmental migrant visa, an analysis by Farquhar (2015) still found that migrants to New Zealand who can relocate under voluntary measures have a much greater chance of successful resettlement in the country. Farquhar (2015) argues that having an environmental migration policy scheme in high-income countries like New Zealand and Canada would ease the gradual and sustained immigration process from migrants at greatest risk for permanent displacement caused by climate change (Farquhar, 2015). Thus, five years after New Zealand's failed climate refugee visa, countries like the United States are still working on improving immigration resettlement policies for those affected by climate change (The White House, 2021). Canada has the opportunity to learn from New Zealand's past visa initiative and to insert these lessons into an improved policy.

New Zealand has special measures to encourage migration from Pacific Islands, such as the New Zealand Pacific Access Category that permits 75 citizens from Kiribati and 75 from Tuvalu annually on a lottery basis (Stanley & Williamson, 2021). However, selected applicants must hold an offer of permanent employment in New Zealand, adding another barrier to citizenship through this route (Stanley & Williamson, 2021). New Zealand also issues a visa

similar to Canada's Temporary Foreign Worker visa titled the Recognised Seasonal Employer limited visa, granting temporary work visas in horticulture (Stanley & Williamson, 2021). Stanley & Williamson (2021) suggests New Zealand should broaden this particular visa category to facilitate the transition to residency for Pacific Islanders taking advantage of the program, something Canada may also consider. Although it is not immense, New Zealand has a progressive foreign aid program with targeted climate change funding. The government committed \$300 million NZD to climate-related support from 2019 to 2022, with most of the funds specifically supporting climate change adaptation measures in the Pacific Islands (Government of New Zealand, 2020). Such targeted climate change support to nearby low-income countries is something Canada could consider in its foreign environmental aid scheme. New Zealand also contributed \$15 million NZD to the Green Climate Fund, which the government uses to signal the nation's commitment to climate change action (Government of New Zealand, 2020). In total, New Zealand has budgeted approximately \$1.46 billion USD in total humanitarian aid for 2021-22 (New Zealand Foreign Affairs and Trade, n.d.).

4.3 Other International Examples of Environmental Migration Policy

The rest of the world, in particular the UN and small island states in the Pacific, have been busy formulating environmental migration policy frameworks within the last decade. Some frameworks include the Global Compact for Safe, Orderly and Regular Migration, Resolution 2307, and the Sendai Framework for Disaster Risk Reduction 2015-2030 (The United Nations, n.d.; Fornale, 2020; Vanuatu National Disaster Management Office, 2018). The UN's Global Compact for Safe, Orderly and Regular Migration, to which Canada is one of 167 signatories, is a non-legally binding document to identify, develop and strengthen solutions for migrants compelled to leave their countries of origin due to slow-onset natural disasters and the adverse

effects of climate change (Mortillaro, 2019). Resolution 2307 was endorsed at the Parliamentary Assembly of the Council of Europe in 2019 as a non-legally binding resolution recognizing European states as having a particular responsibility to countries, particularly in low-income countries, affected by anthropogenic climate change (Fornale, 2020). The Sendai Framework for Disaster Risk Reduction 2015-2030 was created by the Government of Vanuatu, a small island nation already severely impacted by climate change (Vanuatu National Disaster Management Office, 2018). It aims to minimize loss of life, as well as the social and economic impacts from natural disasters through enhancing cooperation between countries and developing displacement policies (Vanuatu National Disaster Management Office, 2018). Canada is seeing how the rest of the world is making progress with regard to environmental migration policy development, and now policymakers must decide what a Canadian environmental migration policy should look like.

One of the most prevalent arguments against international environmental migration policies is that any relocation of would-be environmental migrants creates risks and puts individuals forced to move in very vulnerable positions (The White House, 2021; Vanuatu National Disaster Management Office, 2018; Ministry of Economy, Republic of Fiji, 2018). Throughout the journey from home country to destination country, or in terms of migrant well-being adjusting to their new communities, environmental migrants are increasingly vulnerable (The White House, 2021; Vanuatu National Disaster Management Office, 2018; Ministry of Economy, Republic of Fiji, 2018). However, to help mediate the negative effects of environmental migrant relocation policy, the governments of Vanuatu and Fiji (2021; 2018; 2018) argue environmental migration policies should be created with respect for human rights,

migrant inclusion, and long-term planning and preparation. These measures would support the socio-economic and cultural well-being of those forced to relocate due to climate change.

4.3.1 The Sydney Declaration of Principles on the Protection of Persons Displaced in the Context of Sea Level Rise

Although Australia is home to rather restrictive migrant policies, it is also home to the Sydney Declaration of Principles on the Protection of Persons Displaced in the Context of Sea Level Rise (the Declaration) (International Law Association, 2018). The Declaration is a contemporary piece of international law intended to provide legal guidance on averting, mitigating, and handling the displacement of individuals specifically from sea level rise to countries such as Canada (International Law Association, 2018). As flooding comprises the majority of displacements caused by natural disasters in Latin America and the Caribbean, Canada could learn several lessons on environmental migration policy options from the principles outlined in the Declaration (IDMC, 2021). In particular, Principle 2 outlines the fact that states of migrant origin, transit and destination have to respect the human rights of any person who crosses their borders on the grounds of sea-level rise, preventing them from living in their original home (International Law Association, 2018). Principle 3.1 states that countries must use their capabilities and resources under their international human rights obligations to ensure appropriate and effective measures are taken in the context of environmental migration caused by sea-level rise (International Law Association, 2018). According to the International Law Association (ILA) (2018), these state measures should:

1. Reduce disaster risks and help countries adapt to the adverse effects of climate change.
2. Protect lives and ensure the safety of those living in low-lying areas at high risk of sea-level rise.

3. Prevent displacement from happening.
4. Protect and assist individuals if they must be displaced.

The Declaration urges both states of origin and destination states to review existing domestic laws around environmental migration, and to consider developing new laws and agreements to facilitate increasing numbers of individuals migrating due to sea level rise (International Law Association, 2018).

5. Discussion & Conclusion

Canada has not done enough to address environmental migration policy development in light of climate change. The preceding paper has two facets: First, I use moral, economic, and political arguments to address why Canada should develop an environmental migration policy. Second, I extrapolate lessons that Canada can take away from Australia, New Zealand, and a few international frameworks in how to develop such a policy.

In terms of moral considerations, Canada is a large, wealthy, and stable nation that has relied on Greenhouse Gas (GHG) emitting industries that have contributed 1.5 percent to global emissions (Kaduuli, 2021). Canada is also a signatory to multiple climate change and migration initiatives and has been historically receptive to migrants (Government of Canada, 2021a; Friedrich, Ge & Pickens, 2020). Economically speaking, Canada's labour market could benefit from an expansion of the Refugee Act to include environmental migrants as studies show refugees perform well in the Canadian market and contribute to the Canadian economy, while climate change adaptation and mitigation costs continue to increase (UNHCR Canada, 2019; Arora, 2014; Dupraz-Dobias, 2020). As for political motivations for developing an environmental migration policy, Canada may be pressured by the U.S. and the greater

international community to accept environmental migrants as the number of migrants fleeing Latin America and the Caribbean due to unliveable environmental conditions increases (Tower, 2021; Immigration and Refugee Board Canada, 2018).

To develop an efficient and effective environmental migration policy, Canada should look abroad and learn from the experience of others. Canada can learn many lessons from Australia's environmental migration policies and approach. First, Canada should not take a deterrence approach to environmental migration as it creates a highly vulnerable and dangerous situation for migrants. Second, Canada must ensure it designs admission policies that focus on including both higher-skilled and lower-skilled environmental migrants on either a temporary or permanent basis. Lastly, Canadian policymakers should establish Canada as an attractive host country for environmental migrants.

Canada now has the opportunity to learn from New Zealand's attempted climate refugee visa and the country's approach to environmental migration. First, Canada should commit to a progressive and humanitarian approach to environmental migration policy. Second, Canada must continue to transform into a more environmentally conscious economy and society and target foreign adaptation and mitigation supports to nearby regions, as per Pacific Islander concerns. Lastly, Canadian policymakers should consider long-term measures for environmental migrants, particularly those in Latin America and the Caribbean, to work in Canada. However, these measures should have fewer barriers to entry than New Zealand's Pacific Access Category.

In addition to Australia and New Zealand's environmental migrant policies, the Canadian state should use international frameworks like the Global Compact for Safe, Orderly and Regular Migration, Resolution 2307, the Sendai Framework for Disaster Risk Reduction 2015-2030, and the Sydney Declaration of Principles on the Protection of Persons Displaced in the Context of

Sea Level Rise to develop a framework with well-thought input from around the Globe. These frameworks argue that environmental migration policies should be developed with respect for human rights, migrant inclusion, and long-term planning and preparation for environmental migrants. Including international counsel within an environmental migration policy could help policymakers address more potential migrant risks and reduce harm.

There were a few limitations to the research. First, the contemporary nature of climate change and environmental migration means that research is still being conducted, and relevant information continues to be released as this paper was being written. In this light, I may have missed some developments towards the end of the writing process. Second, climate change is global in scale; thus, attempting to consider lessons from each country affected was impractical for the length of this paper. Instead, I chose countries with the most documented first-hand experience with environmental migration. Lastly, some international environmental policy lessons may not be fully applicable to the Canadian context due to different geographical, political, economic, and cultural contexts. However, I framed each lesson to suit the Canadian context as much as possible.

Climate change and its effects have been steady and ongoing, providing a unique opportunity for Canada to develop a strategy for environmental migration before the need for appropriate policies intensifies and more violent natural disasters arise (Farquhar, 2015). Waiting for natural disasters to create humanitarian crises would produce more situations with increased urgency, costs, and emergency capacity the Canadian government and society would have to mitigate (Farquhar, 2015). Canada has some options with how to approach an environmental migration policy, including a conservative-restrictive approach, an open-liberal approach, or an amalgamation of both. However, findings suggest Canada is better off developing a progressive

environmental migration policy for the benefit of the country, interim host countries, and the migrants themselves. What is not an option is the need for Canada to develop an environmental migration policy.

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