

CHAPTER V CONCLUSION

Certainly, one of the biggest threats to humankind is ecological annihilation and environmental destruction (Goklany, 2012). The civilization may constantly live only due to the support of nature. Currently, one of the most pressing issues of humankind is the precipitous occurrence of climate change. The necessity for urgent actions in addressing climate change is indisputable especially if we are to live sustainably on Earth (Sustainable Development Commission, 2011).

In advancing global sustainable development as means to tackle and mitigate climate change effects, global carbon emission should be abridged. Addressing climate change issue requires global commitments and actions. The environment is a common ownership of the world. Any action conducted even only by a country impacts globally. Environmental problems know no border. Canada is one of the countries that has been rigorously vocal in combatting climate change through its carbon emission reduction goals and the promotion of sustainable development particularly under the administration of Justin Trudeau, Canada's 23rd Prime Minister. As Trudeau took office, many progressive changes toward combating climate change was brought including climate finance commitments where Canada pledged to contribute \$2.65 billion over the next five years to help developing countries in combatting climate change, its pledge to reduce 30% GHG emissions by 2030 to 517 Mt, carbon pricing applied in the provinces and territories of Canada as ways to reduce emissions, and introducing climate mitigation policies and frameworks that serves as Canada's guide to achieving its COP21 targets such as the Pan-Canadian Framework on Clean Growth and Climate Change and Canada's Federal Framework on Environment.

In November 2016, Canada made a controversial move that was said to be backlashing in its own words and

commitments on combatting climate change as it approved two contentious pipeline projects. The first controversial project approved is the Kinder Morgan's Trans Mountain Pipeline that will carry oil and bitumen to ports in British Columbia for energy export. The second project is Enbridge Line 3 Pipeline that would transport oil from Alberta to United States, Midwest and beyond. (Struzik, 2017). These pipeline projects that received major oppositions from the First Nations and environmental groups were said to be hazardous for the environment. The main concerns on the above pipeline projects approved by Canada are the hazardous risks oil sands pose to the environment and its potential to deteriorate the ecosystem. It is no doubt that all pipelines will have environmental impacts and the aspects include atmospheric environment, acoustic environment, soils, geology and terrain, vegetation, wildlife, surface water resources, freshwater fish and fish habitat, hydrogeology, and paleontology. The direct environmental impacts of pipelines can be said to be relatively low. However, the biggest concern of pipelines would be on the possibility of leaks and ruptures. On its track record, Kinder Morgan Inc. and its subsidiaries and joint ventures had 213 spills totaling in the leaks of 21,598 barrels of oils that contain hazardous chemicals. Of those spills, 172 were refined petroleum products, 35 were crude oil spills and 6 were highly volatile liquids (HVL). Enbridge is also among the three tar-sands companies that have a serious track record of pipeline spills. Enbridge with its subsidiaries and joint ventures have a total of 147 spills that totals to the spills of 40,794 barrels of hazardous liquids. Half of Enbridge's total oil spills come from its catastrophic diluted bitumen spills in Kalamazoo River in 2010 that totals to 20,082 barrels of diluted bitumen (Greenpeace, 2017).

Another concern for the approval of the projects is the GHG emissions they cause. In its report in 2016, Environment and Climate Change Canada (2016) showed that the estimated GHG emissions associated with the entire Trans Mountain pipeline system that transport approximately 890,00 barrels of oil per day would range from 21 to 26 Mt CO₂ eq

(megatonnes of carbon dioxide equivalent) per year. On the other hand, Enbridge Line 3 Replacement Project that is known to increase the capacity of the pipeline to transport 760,000 barrels of oil per day is estimated to cause GHG emissions between 21 to 27 Mt CO₂ eq per year (megatonnes of carbon dioxide equivalent per year) (Environment and Climate Change Canada, 2016).

Despite the environmental concerns, however, Justin Trudeau's government insisted that the decision was made through rational calculations and that it would be safe to the environment. This is because the decision to approve the pipeline projects are estimated to bring out the best economic interest of Canada. It also maximizes Canada's abundant energy potentials through supporting its transmission and transportation. The Trans Mountain Expansion Project will increase the value of Canadian oil through boosting Canada's potential and ways to world markets where oil is highly paid and will give greater tax revenue to Canada. The project would most likely contribute \$46.7 to the federal government from taxes and royalties starting from the development of the project and over the first 20 years of its operations. These constitute of \$5.7 billion received by British Columbia, On the other hand, for the provincial level, it will contribute \$23.2 million per year to British Columbia and an addition of \$3.4 million per year than its current amount of contribution. In terms of job opportunities, the project would generate approximately 800,000 direct, indirect and induced person-years of employment and higher netbacks (Kinder Morgan Inc., 2017). During the construction of the project, it will create 15,000 new jobs. The project also ensures to provide \$300 million commitment fund to the indigenous group also funding \$64.7 million for Indigenous pipeline environment committee to ensure ongoing monitoring of the project (Natural Resources Canada, 2017). In addition, the L3RP is estimated to contribute significantly to Canada's GDP amounting up to \$2.87 billion through the project's design and construction phases (Enbridge Inc., 2017).

This research analyzed Trudeau's decision to approve the pipeline projects by using the Rational Choice Model brought by Graham T. Allison. From the model, the researcher has sorted out the costs and benefits of the options faced by Canada including the option to either approve or disapprove the projects. The research found out that approving the pipeline projects was a decision that best brings Canada's national interest particularly economic interest and has higher benefits than its costs. These in details can be seen in Table 4.4 where it specifically shows the two alternative options faced by Canada and the consequences of each alternative. The decision of Trudeau's administration in approving the projects brings higher benefits including increasing Canada's economic growth through tax, royalties and export revenues, opening up more jobs for Canadians, increasing Canada's GDP and also serves as Canada's way of showing the world that its economy can go hand in hand with the livelihood of the environment. Meanwhile the costs of this decision which are prompting worldwide criticism and increasing the potential of Canada not achieving its COP21 GHG emission reduction target, the Canadian government have ensured that they already have supporting mechanisms to help to achieve the target and stay within its commitment to combatting climate change. These mechanisms include the NEB's binding, Canada's climate finance commitments, carbon pricing procedures and developing Pan-Canadian Framework on Clean Growth and Climate Change. These mechanisms will ensure Canada's environmental protection are met.

Concluding, the decision of Trudeau's administration to approve the proposed pipeline project is not against Canada's goal and target in the COP21. It will not damage its global commitment to climate change and it brings out the best interest of Canada.