CHAPTER I
INTRODUCTION

This chapter consists of the background of the issue, the research question. The objective of the research is to address Canada's climate commitments under Trudeau's Administration. The research will respond to the research question by formulating a hypothesis based on theoretical frameworks selected. This proposal also includes the method of research applied and the research outline.

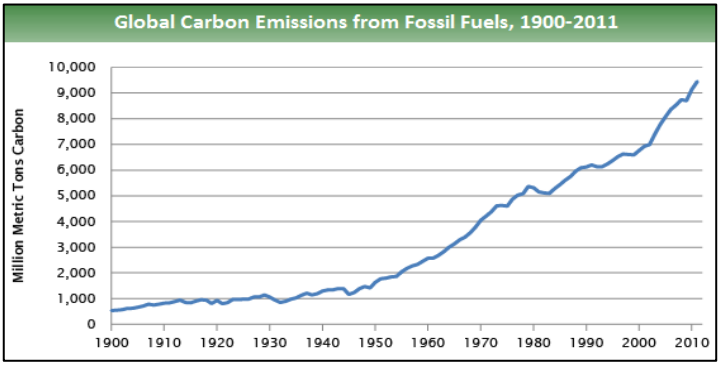
A. Background

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 consequence of climate change is massive especially to the sustainability of life on Earth (Mann, 2009). The rapid and uncertain change of climate will extremely affect the basic elements of life ranging from the jeopardy of agriculture – which will impact to the shortage of food production, lack access to natural resources, dangers of natural disaster due to the extreme weather patterns to the threat of epidemic diseases worldwide. Most climate scientists agree that the key factor causing climate change is greenhouse effect due to manmade activities such as the burning of fossil fuels. The greenhouse effect is warming of Earth temperature that is the result of the great amount of carbon trapped in the atmosphere (The United States Environmental Protection Agency, 2015).

The necessity for urgent actions in addressing climate change is indisputable especially if we are to live sustainably on Earth. In 1992, the world first began to put their concern on Earth. The United Nations Conference on Environment and Development held in Rio de Janeiro in 1992 marked the first international attempt by states related to solving environmental

degradation. In the conference, the concept of *"global sustainable development"* was introduced as a way to tackle and mitigate the impacts of climate change (Sustainable Development Commission, 2011). Sustainable development is a concept, which argues that development and growth in the present shall not compromise the ability of future generations to meet their own needs. Meaning that social and economic development shall be sensible to the ecosystem's preservation (Kates, Parris, & Leiserowitz, 2005).

Graphic 1 1.1 Global Carbon Emissions from Fossil Fuels from 1900 - 2011



Source:
http://cdiac.ornl.gov/trends/emis/tre_glob_2011.html.
Retrieved March 19th, 2017.

In advancing global sustainable development as means to tackle and mitigate climate change effects, global carbon emission should be abridged. As inferred from the graphic above, since 1900, the carbon emission mainly from fossil fuels remain significant in its upsurge. Carbon emission from fossil fuels is the first largest contributors of carbon emitted to the atmosphere contributing approximately 78% of total greenhouse gas emissions increase from 1970 to 2011 (Environmental Protection Agency, 2016).

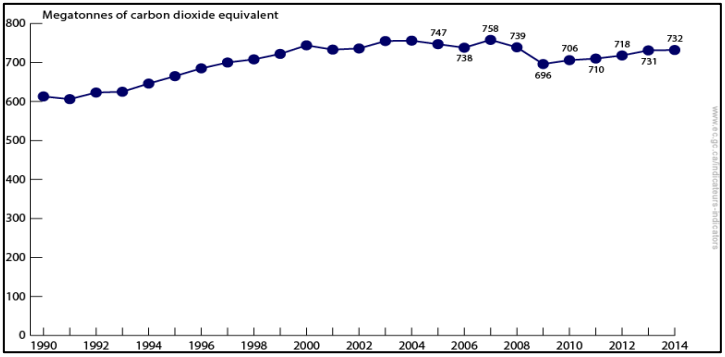
Addressing climate change issue requires global commitments and actions. The environment is a common ownership of the world. Any action conducted even only by a country impacts globally. Environmental problems know no border. Thus, each country's actions matters. Meanwhile, in the case of Canada, the country 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 it is one of the parties of the Paris Agreement, Canada has committed to cut the country's 524 million tonnes annual carbon emissions by 2030 or cutting about 30% of its carbon emissions. The Paris Agreement in 2016 was monumental for Canada as it is when Canada publicly vows to the world that Canada is committed to giving its efforts to combat climate change and will harness the power of renewable energy as a way of reducing greenhouse gas emissions. Furthermore, Trudeau also pledged that Canada will support developing countries fight climate change by investing $2.65 billion over the next five years (Mas & Cullen, 2016). In addition to its commitment to sustainable development, Trudeau's administration has agreed to put a price on carbon through a national carbon tax (Zimonjic & McDiarmid, 2016). Canada has set an "ambitious and achievable" strategy in combatting climate change according to Trudeau. It also firmly claims to be the global climate leader in which it has committed to support in leading the global transition to a low-carbon economy (Suzanne, 2016).

On the other hand, according to environmentalists, Canada's strong climate commitment is vulnerable and fragile to clash on its economic interest (Mascher, 2015). Canada's commitments are questioned along with its country's economic dependencies to energy transmission pipelines. Although it has strong rhetoric in combatting climate change, Canada may also be climate villains. In November 2016, Canada made a major turn from its pledges to solving climate change as it officially approved two contentious pipeline projects that will transport Alberta tar sands oil, a project that

is said to be highly hazardous to the environment. 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).

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. The exploitation of oil sands has a significant contribution to the global increase of carbon emissions especially when tar sands oil result in 81% higher carbon emission than the conventional oil (Nuccitelli, 2011). As a result of rapid oil and gas development, from between 1990 to 2011, the greenhouse gas emissions in Canada has increased by 18.8% (Carlson & Mendelsohn, 2013). According to Kathryn Harrison, a climate change policy analyst at the University of British Columbia, Canada might find it difficult to meet its greenhouse reduction targets as committed in Paris Agreement given the increase of tar sands pipelines projects being approved. She argued that the increasing production of bitumen particularly from Kinder Morgan Trans Mountain Project would result in 30 -35 million tons per year of carbon emissions (Struzik, 2017). As shown from the graphic 1.2 as follows, there has been a rather stable increase of Canada's greenhouse gas emissions, which is primarily caused by oil and gas production transmission.

Graphic 2 1.2 Canada's Carbon Emission from 1990 - 2014



Source: https://www.ec.gc.ca/indicateurs-indicators/?lang=en&n=FBF8455E-1 Retrieved March 20th, 2017

Not only that pipeline project constructions impact to the vast increase of carbon emissions but oil sands operations also involves clearing trees and forests from the construction site whereas forests are immensely important to absorb carbon. The oil sands pose threat to the aquatic life nearby the sites. The industry of oil sands also produces secondary organic aerosols (SOA) that are extremely harmful air pollutants (Chung, 2016). Moreover, the potential oil spills and leaks are also environmental concerns for the pipeline constructions. The present pipeline by Enbridge which was constructed in the 1960s has been a source of spills in the past which makes the refusals to Enbridge Line 3 Pipeline Project legitimate (Paul, 2016).

Canada's rigorous climate commitments especially its vocal positive stance on the realization of Paris Agreement and global sustainable development become questionable with its high dependency of oil and gas industries especially after the approval of several projects of oil and gas pipeline transmission that are said to pose detrimental risks to the environment.

B. Research Question

Based on the background of the research, the thesis is going to focus on addressing research question as follows: "Why Canada under Justin Trudeau's administration, adopts controversial energy export policies despite its recent high climate commitment?"

C. Theoretical Framework

In regards to the thesis, the researcher has selected a concept and model to help address the research question proposed:

1. The concept of Foreign Policy

Foreign policy is a concept that refers to the external affairs, particularly the decisions and actions taken by states in their dealings with other states or such "external" actors as international organizations, multinational corporations, and other transnational and non-state actors (Viotti & Kauppi, 2010). Padelford and Lincoln (1997) described foreign policy as the key component in the process by which a state interprets its broadly conceived objectives and interests into concrete courses of action to accomplish these goals and weigh its interests. In the words of Hugh Gibson (1944), foreign policy is described as *"a well-rounded, comprehensive plan, based on knowledge and experience, for conducting the business of government with the rest of the world. It is aimed at promoting and protecting the national interests of the nation"*. Based on the above description by scholars, we may conceive that states formulate their foreign policy through taking account of its interests and conceived goals.

The concept of national interest is significantly attached to the concept of foreign policy. This is because national interest shapes the foreign policy of states. Through its foreign policies, states pursue, advance and further their national interest. The concept of national interest was popularly introduced by Hans J. Morgenthau, who stated that any actions or policies taken by states should be based on the state's national interest and shall put away all the moral,

ideological and legal reasons. National interest according to Morgenthau should be defined by the government and the government shall make all decisions and take actions that are directed to achieve those national interests (Mas'oed, 1990, pp. 140-143). National interest is one of the most popular concepts in the discipline of international relations to describe, explain, predict, and recommend international behavior of states. Analysts often use the concept as the basis to explain state's behavior. National interest is defined as country's goals, ambitions, and objectives (Mas'oed, 1990, pp. 139-140). In terms of its importance, Morgenthau identified two levels of national interests including vital and secondary national interest. The vital interest is defined to be those interests which any nation can't compromise which includes the preservation of the physical, political and cultural identity of a state. The states shall do whatever it takes to protect these interests. In contrast to the vital interest, secondary interests are the interests which state can seek to compromise, for instance, the interest of protection of citizen abroad (Marleku, 2013). National security is considered to be one of the vital interest and primary goal of the state. According to Morgenthau, the fundamental goal of any foreign policy is to guarantee the sovereignty and self-preservation of the country's territory. After the survival of the state, the advancement of the country's wealth is another vital interests and objective in foreign policy as this is directly associated with state's existence. The state would always endeavor to adopt a course of action, which brings economic prosperity (Holsti, 1978).

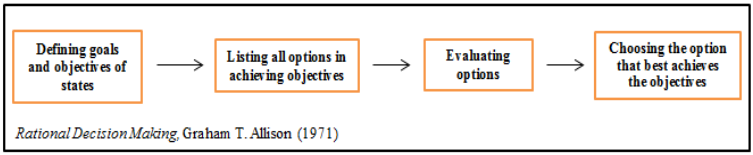
In the case of Canada, its approval of four contentious pipeline projects that will export gas and oil throughout and outside Canada is a policy adopted aimed to promote its national interests specifically as a course of action that can bring economic prosperity to the country. It is no secret that the oil and natural gas industry is a significant source of Canada's economic growth and development. As the largest private sector investor, it is estimated that the energy sector accounts for almost 7% of nominal GDP of Canada. The government also receives a fantastic amount of revenues from

this sector and the social benefits through a high amount of job creation.

2. Rational Choice

The Rational choice model is a framework of foreign policy analysis introduced by Graham T. Allison in 1971 among other models he introduced in his infamous book, *Essence of Decision*. The key to this model lies in its attempt to explain the foreign policies adopted by states by having a set of objectives and rational calculations of the policies (Allison, 1971). In this model, Allison employs two key assumptions on how states formulate decisions in international relations. First, the state is a single actor that has set of objectives and capacities in pursuing these objectives. Second, this single actor pursues the objectives in a rational manner (Bendor & Hammond, 1992).

Figure 1 1.1 Rational Decision-Making Model by Graham T. Allison



In his explanation, Allison provides steps in rational decision making including defining goals, listing options in achieving these goals and evaluating each of these options and finally to choose the best efficient option that will efficiently achieve the objectives. The basic unit of analysis in Allison model is the national government who is conceived as a rational and unitary decision maker that has a set of specified goals, a set of options in achieving those objectives, along with the consequences listed from each alternative option. The consequences are the outcomes of choice that will ensue when a particular alternative is chosen. The rational agent (state) selects the alternative or option with consequences that rank highest in terms of the goals and objectives (Allison, 1971).

In adopting a decision, the decision makers under this model would evaluate the options through listing available

alternatives and considering the costs and benefits from those alternatives.

Table 1 1.1 Rational Actor Table: Cost and Benefit

Options	Cost	Benefit
Alternative A	…	…
Alternative B	…	…

Allison (1971) stated that government is seen as a rational primary actor which examines a set of alternatives and evaluate them according to their utility. From Table 1.1, we can see that the government will evaluate the cost and benefit of each alternative. Government is to pick the alternative that has the highest payoff meaning, the alternative which its benefit exceeds its costs. Furthermore, the rational model offers two propositions (Allison, 1971):

a. An increase in the costs of an alternative (reduction of benefits granted by the alternative action) reduces the likelihood of the action being chosen
b. A decrease in the costs of an alternative (increase in the benefits that will follow from an action) increases the likelihood of that action being chosen.

In this research, the particular model will be utilized in explaining the decision-making process of the Canadian government. The model will be implemented to address the ambiguity of Canada's climate commitment because of its clashing energy export policies with a sustainable environment. In the context of rational choice, the policies that are approved by the political elites in the government specifically Justin Trudeau's administration must have been through the long process of consideration heavily based on the advantages and disadvantages that the policy would bring to the country. The chosen alternative must be the best alternative that can achieve its perceived goals and objectives (national interests). In the application of Graham T. Allison's Rational Choice model, the option of alternatives faced by the Canadian government will be exposed particularly in deciding

whether to approve four controversial pipeline projects especially after the momentous Paris Agreement vows made by Canada and Trudeau's administration that was seen a highly considerate of combatting climate change.

In this thesis, the researcher has identified the available alternatives that are faced by the Canadian government and also discovered the considerations of Canada in approving the pipeline projects by analyzing the economic gains brought by the policy and applying them into the rational choice model by Graham T. Allison. The researcher identified that Canadian government faced two alternatives of the decision including approving and disapproving the pipeline projects. In terms of its costs, the approval of the pipeline projects would spark worldwide criticisms particularly from environmentalist groups, NGOs and Canada would risk not achieving its carbon emission target pledged in the Paris Agreement. However, the benefits it may bring on the approval of the pipeline projects would be highly economical where Canada's economy is projected to boost from its export revenues and how the projects will increase job opportunities for Canadians. In addition to that, the approval of the pipeline projects can be Canada's way of national branding to prove that its economic interest on the energy sector can go hand in hand with its environmental concerns. Meanwhile, on the alternative decision to disapprove the pipeline projects, Canada may lose the opportunities to boost its revenues and employment opportunities. However, the decision would be as an emphasis of its strict commitment to combatting climate change.

D. Hypothesis

In addressing the research question, based on the background and theoretical framework expounded, the decision on the environmentally detrimental pipeline projects by the Canadian government is under Canada's perceived goals and objectives particularly in ensuring its economic

prosperity and sustainability and is considered as the best alternative for Canada's national branding.

E. Research Objectives

The objectives of this research are as follows:

1. Evaluate Canada's energy export policies and find out the reasons for its approval of policies and further implications of the policies to Canada.
2. Evaluate Canada's efforts in fulfilling its climate commitments, and determine whether Canada's energy policies under Trudeau's administration are still in line with its climate commitments and global sustainable development.

F. Research Methodology

The method used in the thesis is qualitative analysis supported by both primary and secondary sources. The thesis is based on academic literature, official government reports, journals, credible news reports, articles, and other electronic data that are relevant.

G. System of Writing

The structure of the thesis is arranged as follows:

Chapter I

This chapter consists of the background of the issue, research question, theoretical framework, hypothesis, research method, research scope and research outline.

Chapter II

This chapter explains on Canada's climate commitment by reviewing Canada's environmental approaches and policies particularly under the supremacy of Justin Trudeau. In this chapter, the researcher will explore on Canada's environmental performances and

actions that show its commitments to combatting climate change.

Chapter III

This chapter discusses the pipeline projects approved by Canada as part of their energy export policies. It examines the importance of Canada's oil and gas industries for its national interest.

Chapter IV

This chapter will explain the process of formulation of Canada's energy export policies specifically on the approval of the pipeline projects that will carry oil from Canada to several parts of the world. This chapter will specifically address the underlying research question formulated in this thesis by explaining Canada's motives behind the approval of the construction of pipeline projects and on how the policies were formulated through rational calculation process.

Chapter V

This chapter will summarize and provide conclusions of the entire discussion within the thesis.