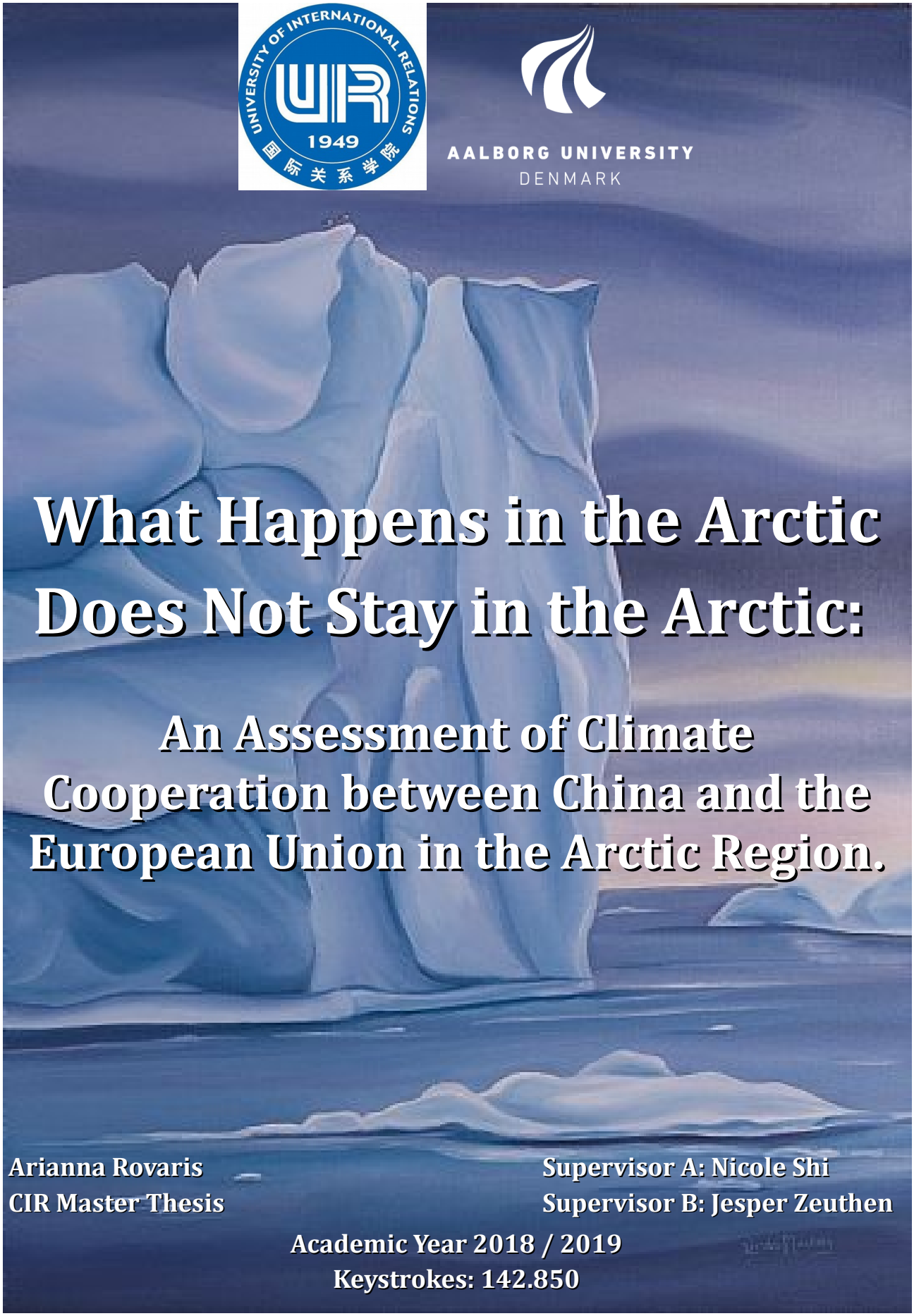

What Happens in the Arctic Does Not Stay in the Arctic:

An Assessment of Climate Cooperation between China and the European Union in the Arctic Region.

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CIR Master Thesis

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* Front page image: “Bird’s Eye View” (2007), Subject: Arctic Iceberg, Dimensions (inches) 36 x 24, Medium: Oil on canvas, © Copyright Linda Dawn Lang, available at http://www.natureartists.com

Summary

During the last few decades, the world has witnessed a radical change in its weather patterns, such as the increase of the average temperatures, desertification, glacial reduction, pollution of the oceans, and threats to the life of flora and fauna. The rise in the global temperatures is known as global warming, and it is caused by the increase of greenhouse gas emissions in the atmosphere.

The detrimental effects of climate change are especially visible in the Arctic, as in the last few decades the Arctic average temperatures have risen at more twice the global average, causing the fast melting of its ice cap. The consequences of climate change in the Arctic region affect the entire globe and cannot be ignored; thus, it became imperative for nations to acknowledge the severity of the situation and the need for a global response to it, to address the issue globally and increase the number of actors involved in Arctic affairs and its environmental protection.

Climate cooperation between China and the European Union started in the 1990s and intensified especially after the United States' withdrawal from the Paris Agreement, giving space to China for joining the European Union as a global climate leader. The two parts have established various bilateral and multilateral mechanisms to cooperate for tackling climate change, and have implemented domestic measures to reduce their negative impact on climate.

Even though cooperation between China and the European Union within global climate governance may be said to be successful, however there are not specific measures for addressing climate change in the Arctic.

The melting of the Arctic ice is opening opportunities for new shipping and trade routes, as well as for the exploration and exploitation of untapped energy resources. The potential economic benefits resulting from the warming Arctic are attracting an increasing number of actors, among them China and the European Union. Given the two actors' vested interests in the Arctic region, it seems that they are striving to find a concrete way to work together for tackling climate change in the Arctic while securing their respective interests.

Climate cooperation between China and the European Union is analysed through the theoretical framework of Robert Keohane's *Neoliberal Institutionalism*. Its focus on the role of institutional regimes in shaping and framing actors' behaviour in their foreign policies, helps define how China's and the European Union's decisions and actions are influenced by their membership in international institutions, such as the climate policy regimes and the Arctic institutional framework.

Therefore, the thesis investigates how China and the European Union cooperate internationally on climate issues, and then the research is narrowed to their cooperation in the Arctic governance and environmental protection, to testify to

what extent they cooperate for climate issues at the global level and at the Arctic regional level.

Moreover, the research attempts to explain how China's and the European Union's vested economic interests in the region affect their cooperation, and how the Arctic institutional regime influences their relationship and foreign policy behaviour.

The thesis aims at giving a contribution to the existing literature addressing this topic, which has not been vastly investigated yet, by revealing the reasons behind China's and the European Union's problematic cooperation on climate issues in the Arctic given the presence of common interests and commitment to fight climate change and protect the environment.

Key Words

China, European Union, Cooperation, Climate Change, Arctic.

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List of Abbreviations and Acronyms

AC	Arctic Council
ACAP	Arctic Contaminants Action Programme
AEPS	Arctic Environmental Protection Strategy
AMAP	Arctic Monitoring and Assessment Programme
BRI	Belt and Road Initiative
BRICS	Brazil, Russia, India, China, South Africa
CAA	China Arctic and Antarctic Administration
CAFF	Conservation of Arctic Flora and Fauna
CCP	Chinese Communist Party
CDM	Clean Development Mechanism(s)
CNARC	China-Nord Arctic Research Council
COP	Conference of the Parties
DG	Directorate General
EEA	European Economic Area
EEAS	European External Action Service
ESIF	European Structural Investment Fund
ESMA	European Maritime Safety Agency
EU	European Union
G20	Group of 20
G77	Group of 77 Underdeveloped Countries

GHG	Greenhouse gas
HRFASP	High Representative of the Union for Foreign Affairs and Security Policy
IAEA	International Atomic Energy Agency
IASC	International Arctic Science Committee
IEA	International Energy Agency
IMO	International Maritime Organisation
IR	International Relations
IRENA	International Renewable Energy Agency
IPCC	International Panel on Climate Change
IPY	International Polar Years
MOPPR	Marine Oil Pollution Preparedness and Response
NATO	North Atlantic Treaty Organisation
NDC	Nationally Determined Contribution
NPT	Nuclear Proliferation Treaty
NSR	Northern Sea Route
PAME	Protection of the Arctic Marine Environment
PCA	Paris Climate Agreement
PLAN	People's Liberation Army-Navy
PRC	People's Republic of China
PRIC	Polar Research Institute of China
ROC	Republic of China
SAR	Search and Rescue

SDWG	Sustainable Development Working Group
SOA	State Oceanic Administration
UN	United Nations
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
US	United States
WMO	World Meteorological Organisation
WTO	World Trade Organisation

0 Introduction

During the last few decades, the world has witnessed a radical change in its weather patterns, such as the increase of the average temperatures, desertification, glacial reduction, pollution of the oceans, and threats to the life of flora and fauna. The rise in the global temperatures is known as global warming, and it is mainly caused by the increase of GHG emissions in the atmosphere.

Climate change in the Arctic region is not something new, and in the last few decades the Arctic average temperatures have risen at more twice the global average, causing the fast melting of its ice cap. This phenomenon is believed to generate profound consequences both within the Arctic climate system and the global one. The Arctic may be considered as the "tip of the iceberg of global climate change", as it is connected to the global climatic, environmental and political processes and systems (Keil & Knecht 2017: 3, 4; Cavazos-Guerra et al. 2017: 231; Féron 2018: 85).

The title of this thesis comes from a speech held by Vidar Helgesen, the Norwegian Minister of Climate and Environment, during a seminar organised by the NATO Parliamentary Assembly and the Norwegian Parliament in Svalbard in 2017. His words clearly explain how the consequences of climate change in the Arctic region affect the entire globe and cannot be ignored; thus, it became imperative for nations to acknowledge the severity of the situation and the need

for increasing the number of actors involved in Arctic affairs and its environmental protection (NATO-PA 2017).

International climate cooperation started in the 1990s, when the UNFCCC was founded in 1992. This organisation aimed at keeping the level of GHG emissions in the atmosphere at a lower level through international cooperation. Up to date, its membership is almost universal. Since the UNFCCC establishment, there have taken place many international climate negotiations and agreements, leading up to the 2015 PCA, which represented a landmark in global climate discourses. The Arctic is not explicitly mentioned in the PCA, however the convention preceding the agreement, the UN Climate Change Conference (COP 21) held in Paris, has helped to grow awareness regarding climate change in the Arctic region (Keil & Knecht 2017: 1).

In the past decades, and especially after the US' withdrawal from the PCA, China has emerged as a responsible power and a global climate leader together with the EU. However, even though its role in climate governance is praised in the international arena, its commitment to climate issues has been questioned by some. China has shown a great interest in the Arctic, and since 2013 it holds an observer role in one important Arctic governing body, the AC. On January 26th 2018 the country stated its official positions and interests regarding the Arctic region through the issue of the first *China's Arctic Policy White Paper* (Graczyk et al. 2017: 131; State Council Information Office of the PRC 2018).

Since the 1990s, the EU has developed its climate policy together with the international one, and has always maintained a leading role in climate governance and environmental protection. Unlike China, its application to the AC is still pending because of a lack of unanimity within the Council's members.

Among the reasons behind Arctic States' reticence in granting the EU an observer status, there is the Canadian opposition to the 2008 EU's approval of a ban on the trade of commercial seal products, as well as the Russian discontent with the sanctions imposed by the EU after the annexation of Crimea in 2014 (Depledge 2015). However, the EU contributes to the governance and the environmental protection of the Arctic region through other means and has begun to develop its Arctic policy since 2008. Three of the EU's Member States are permanent members to the AC, namely Denmark, Finland and Sweden, and other Member States hold the role of formal observers to the AC; the Union confines with the region and has vested interests in cooperating in Arctic affairs other than for climate issues (Graczyk et al. 2017: 132; Arctic Council 2018).

Climate cooperation between China and the EU started in the 1990s and intensified especially after the US' withdrawal from the PCA, thus giving space to China for joining the EU as a global climate leader. The two parts have established many mechanisms to cooperate for tackling climate change, and are essential actors in the setting of the global climate agenda. However, given the vested

interests of both actors in the Arctic, it seems that they are striving to find a concrete way to work together for tackling climate change in the region.

0.1 Working Definitions

Before proceeding with the research, it may be relevant to provide an explanation of some key concepts pertaining to the analysis.

Concerning China's and the EU's involvement in the Arctic, *vested interests* in the thesis are intended as: interests in influencing something in order to continue to benefit from it, as well as strong reasons for supporting particular actions in pursuance of gaining some advantages (Cambridge Dictionary).

The analysis is conducted through an institutionalist perspective, thus there are a few terms and concepts which need to be clarified. In his 2013 article, Oran Young[1] provides some definitions which are relevant to the purpose of this thesis:

> *Governance is a social function centered on steering human groups toward desired outcomes and away from undesirable outcomes.*
>
> *A governance system is an ensemble of elements performing the function of governance in a given setting.*
>
> *Institutional arrangements form the core of such a system* [governance system]*, but the ensemble normally includes cognitive, cultural, and technological elements as well.*

1 Oran R. Young is an eminent Arctic expert and a precursor in the study of international governance and environmental institutions. More information available at http://www.bren.ucsb.edu/people/Faculty/oran_young.htm

> *Institutions are collection of rights, rules, and decision-making procedures that give rise to social practices, assign roles to the participants in these practices, and guide interactions among the participants.*
>
> *Regimes are institutions specialized to addressing functionally defined topics* […] *or spatially defined areas* […]. *All regimes are institutions, but not all institutions are regimes* (Young 2013: 88, 89).

Thus, the term *institutional regime* refers to the institutions that address matters of governance relating to a specific issue or a spatially defined area, such as the Arctic institutional regime, which is constituted by the institutions addressing the governance of the Arctic region.

0.2 Problem Statement

In light of the information presented above, the purpose of this thesis is the investigation of the reasons behind the paradoxical relationship between China and the EU when it comes to climate cooperation in the Arctic region.

The main research question of this thesis is:

Given China's and the European Union's common interests and commitment in fighting climate change,

why is their climate cooperation in the Arctic problematic?

Following the main research question, the ensuing sub-questions have been considered relevant to the purpose of this thesis:

- *How do China's and the EU's vested economic interests in the region affect their relationship and cooperation?*
- *How does the Arctic institutional framework influence cooperation between China and the EU in the Arctic?*

Therefore, the thesis investigates how the two actors cooperate internationally on climate issues, and then the research is narrowed to their cooperation in the Arctic governance and environmental protection, to demonstrate to what extent they cooperate for climate issues at the global level and at the Arctic regional level. Moreover, it tries to explain how China's and the EU's vested economic interests in the region affect their cooperation, and how the Arctic institutional framework influences their relationship and foreign policy behaviour.

The thesis aims at giving a contribution to the existing literature addressing this topic, which has not been vastly investigated yet, by revealing the reasons behind China's and the EU's problematic cooperation on climate issues in the Arctic given the presence of common interests and commitment to fight climate change and protect the environment.

0.3 Thesis Structure

The first chapter consists of a literature review of the thesis topic. It encompasses literature regarding climate change in the Arctic and the governance of the Arctic region, China's and the EU's cooperation on climate issues at the domestic and the international levels, as well as the existing literature regarding their cooperation in the Arctic region.

The second chapter exposes the methodological framework employed in the analysis. It gives an explanation of the reasons for the choice of addressing this topic, the research approach of the thesis, the choice of the theoretical framework supporting the analysis, the method used for collecting and analysing the relevant data, the research delimitation and the limitations faced in the research process.

The third chapter outlines the theoretical framework selected for conducting the analysis, namely Robert O. Keohane's Neoliberal Institutionalism. It presents the theory historical evolution, the main assumptions, as well as the criticism to the theory. The chapter explains how the theory is connected to the thesis topic, how it is employed in the analysis, and which are the most relevant aspects for the sake of the research.

The fourth chapter provides an introduction to the phenomenon of climate change in the Arctic region, its consequences on the regional and global environment, as well as the geostrategic and geopolitical implications for the international community and the governance of the region.

The fifth chapter provides an overview of the complex Arctic institutional regime and introduces the main governing bodies of the region and the actors involved.

The sixth chapter is devoted to the analysis of global climate cooperation between China and the EU, as they are both meaningful actors in global climate governance. The chapter highlights the main achievements and problematic issues in their historical relations, and introduces their common interests and commitment in leading global climate governance through various international agreements and bodies.

The seventh chapter outlines respectively China's and the EU's historical engagement with the Arctic, their respective policies and commitments towards the region, and their strategic and economic interests in the potential economic benefits and opportunities of the warming Arctic.

The eighth chapter analyses the issue of cooperation between China and the EU regarding climate change within the Arctic institutional framework and through other bilateral or multilateral means, as well as the problematic issues in their cooperation and the conflictual interests in the region.

The ninth chapter discusses the analysis findings and attempts to answer to the research questions of this thesis.

Finally, the last chapter consists of some concluding remarks to the analysis.

1 Literature Review

Climate change has been widely discussed in the international community, as it impacts are not only affecting the Earth's ecological environment and weather patterns, but they are also having implications for the global politics, economy, and society. Therefore, climate change has risen to the top of the international agenda, and the world has witnessed the development of a global climate governance framework involving countries from all around the globe. Hence, there has been created an increased number of institutions, negotiations, and agreements for addressing this issue in an integrated and comprehensive approach.

Global warming effects are particularly visible on the already-precarious Arctic environment, which in turn acts as a regulator for global climate and ecosystems; hence, it was acknowledged the need for a global response to the warming of the Arctic. China and the EU are global climate leaders, thus they exert a great influence on the global climate governance agenda; moreover, as they are large emitters, they have a direct impact on the Arctic environment.

All things considered, the purpose of this chapter is the survey of the existing literature on the previously-stated topics, to provide a guidance for the subsequent analysis, as well as to better explore the actual situation in Arctic climate governance, and the role of China and the EU in tackling climate change, both globally and regionally in the Arctic.

During the development of the literature review, it became apparent that a significant part of climate change literature deals with general information and the scientific aspects of the phenomenon. However, this chapter is not aimed at being a comprehensive review of the scientific literature on climate change, but rather a revision of the body of literature connected to the thesis topic and research questions. Thus, this chapter considers the existing literature on climate change research from social and political sciences, to identify the material specifically linked to climate cooperation between China and the EU in the Arctic region.

Part of the existing literature relevant to this research provides data on the historical progression and development of climate change discourses and negotiations. Climate change discourses and international cooperation started during the 1990s. Some scholars (Weber 2010; Oreskes 2004; Hulme 2009; Hoggan 2009) argue that, despite the urgent reports published by the IPCC since 1990, there has been controversy within the national and international public opinion about climate change, as there are many reasons for citizens, politicians, the media and scientists to disagree about climate change, being them political or strategic. Nevertheless, since climate change discourses first appeared within the international community, the issue of global warming has gained importance in the international agendas. Some scholars argue that, even though climate change has been widely recognised as a negative externality, its short-term effects on some countries' economies may be positive. However, it is widely accepted that climate

change needs a rapid international response, as in the long run its negative impacts prevail on the positive ones, and because the economic benefits of an early action exceed the costs of inaction (Ton 2018; Stern 2006).

Climate change discourses and cooperation have been led by the EU, which has consistently acted as a global climate leader. Prior to the PCA, the EU's climate policy has occasionally been referred as 'climate unilateralism', as it was characterised by "the adoption of unilateral commitments and measures despite the absence of an international comprehensive legal framework for action to protect the climate" (Oerthür & Pallemaerts 2010).

However, it may be argued, as for Belis et al. (2015), that there has occurred a shift in the global climate governance structure of power, with the inclusion of more actors in the management of the global climate agenda, such as China, thus leading to a redefinition of global climate actions towards a multilateral approach replacing the former EU's 'climate unilateralism'.

Even though China's attitude towards global warming has changed overtime; however, after the tremendous weather events that hit China in 2008, such as the devastating winter storms and the torrential rains in South China, the country has adopted a more proactive approach to fight climate change.

Climate cooperation between China and the EU has improved especially after the US' withdrawal from the PCA, and nowadays the two actors are considered global climate leaders, and their cooperation greatly influences the

global climate governance agenda. Regarding China and the EU, some scholars, such as Gu (2014), see their cooperation in global climate governance as motivated by the great stakes involved, since they are the two actors which may benefit the most from this cooperation to achieve their respective goals, as well as the ones who might meet the biggest set of losses in the absence of cooperation. Financial incentives may also be among the reasons of their cooperation in global climate governance, as for Belis & Kerremans (2015), since the actors might greatly benefit from the implementation of environmental-friendly instruments, such as emission trading mechanisms.

International efforts to fight global warming lack of specific measures for addressing climatic change in the Arctic region; moreover, the governance of the Arctic is undergoing many transformations, thus the literature addressing this topic is under continuous review. The existing literature stresses the importance of cooperation between China and the EU and their leading role in global climate governance, but few sources explain in detail how they cooperate in the Arctic region, how they influence each other, and what are the potential outcomes of their joint efforts.

Some scholars stress the importance of considering the Arctic as a globally embedded space, since a global response is needed for addressing and solving issues regarding the region's sustainable development, and the institutional challenges for the Arctic environmental governance. The Arctic climate discourses

are becoming globalised, thus there is the need of better coordinating the governing institutions present in the region. In this regard, Forbis and Hayhie (2018) suggest that the scientific community should act as stakeholders in Arctic governance to influence the region's climate and energy policies. Other scholars highlight the importance of addressing the vulnerability of the Arctic environment and its societies, as well as Arctic safety matters and collective action for sustainable development and regional policy-making (Keil, K. & Knecht, S. 2017; Latola & Savela 2017; Goel et. Al, 2018; O'Donnels et al. 2018).

The enlisted literature proved to be useful to the understanding of the complex dynamics of global climate discourses and governance, the role of China and the EU in climate governance, as well as the intricate structure and mechanisms of the Arctic governance framework.

It may be concluded that, even though the amount of literature regarding climate change in general is significant, there is much less material concerning concrete climate cooperation between China and the EU in the Arctic.

Thus, this research aims at contributing to the existing literature by filling this information gap, through the combination and analytical reasoning of the relevant available data.

2 Methodological Framework

This chapter describes the methodological framework adopted in the analysis, presenting the reasons behind the choice of addressing this topic, the research approach of the thesis, the choice of the theoretical framework supporting the analysis, the method used for collecting and analysing the relevant data, as well as the research delimitation and its limitations.

2.1 Research Topic

The reason behind the choice of this topic is that climate change is a reality affecting everyone's life and is widely discussed in the international arena. This phenomenon, among other consequences, has led to the detrimental damage of the already-fragile Arctic ecosystem and environment, now threatened by the fast melting of the ice cap. Thus, the number of actors involved in the governance of the Arctic and its environmental protection has greatly increased.

China and the EU represent two interesting case studies for the analysis as they have have made a pledge to fight global warming, both domestically and internationally. However, despite their common interest in fighting climate change and their successful cooperation concerning global climate governance, it seems that they have difficulties in finding a concrete way to cooperate for addressing climate issues in the Arctic. Thus, the purpose of this thesis is to reveal the reasons

behind this problematic cooperation and outline the possibilities of mutually beneficial solutions.

2.2 Research Approach

The research follows an inductive approach. After the observation of the recent developments in the cooperation between China and the EU in climate governance in the Arctic, relevant data have been collected and investigated to understand the reasons behind their behaviour.

China and the EU represent interesting case studies for the analysis of climate governance cooperation, as nowadays they are both global climate leaders with an essential role in the setting of the global climate agenda. The case of their cooperation in the Arctic is of particular interest as they are both greatly involved in the region, where they hold vested interests other than their commitment to the fight against climate change.

With the assumption that China's and the EU's behaviour is shaped by the norms of the Arctic institutional framework, and that they are both rational actors seeking to accommodate their interests, Keohane's Neoliberal Institutionalism has been selected as the theoretical tool supporting the analysis.

2.3 Selection of the Theoretical Framework

The analysis is conducted through Robert O. Keohane's Neoliberal Institutionalism (Keohane 1984) as it focuses on cooperation between states in the international system, especially regarding the role of international institutions and regimes in shaping states' behaviour.

The thesis investigates cooperation between China and the EU in global climate governance, and, as they cooperate through different international organisations, such as the PCA and the UNFCCC, Neoliberal Institutionalism seems suitable for conducting the analysis. However, cooperation does not always lead to preferable outcomes, even in the presence of common interests. If on the one hand, cooperation between China and the EU in global climate governance proves to be successful at the global level, on the other hand, their cooperation in Arctic climate governance seems ambiguous.

The research goal is to reveal the reasons behind the problematic relationship between the two actors particularly in the field of climate governance in the Arctic region, which is characterized by the presence of various international bodies; thus, the employment of this theoretical tool enables to reveal the reasons behind their cooperating efforts and outcomes. The theory proves to be useful for discovering how their membership to these international institutions and regimes affects their behaviour internationally.

2.4 Data Collection

The primary sources accumulated in this research consist of articles, official media, documents and negotiations reports on the state and institutional levels from the EU's institutions official websites, the Chinese government websites, as well as official documents and reports from the AC's official website. Secondary data consist of scientific and academic books, articles, relevant research papers, think tanks, reports and news media, both from Chinese and European sources. The Theoretical Framework chapter relies on Robert Keohane's original sources as well as IR scholars' articles.

The data have been interpreted qualitatively; after having gathered the relevant material to gain a holistic picture of the situation in the Arctic regarding climate change and the governance of the region, as well as China's and the EU's relation with the Arctic region and their cooperation in global climate governance, the research has been narrowed to the analysis of their cooperation concerning Arctic climate issues. The data have been connected to the theoretical framework of Neoliberal Institutionalism to provide an explanation of their behaviour in the international system and especially in the Arctic region. Then, the findings have been interpreted and confronted in order to answer the research questions posed in the Introduction.

2.5 Research Delimitation and Limitations

Before delving into the analysis, it may be necessary to address the research delimitation and the limitations faced.

The choice of dealing with two actors may represent a limitation for the analysis, as global climate governance involves a multitude of actors. However, given the eminent role of both China and the EU in setting the global climate agenda, they have been selected as case studies for the analysis.

The choice of considering the EU and not its singular Member States is motivated by the central role of the Union in Arctic affairs, and by its leadership role in global climate discourses. Moreover, as the focus of the thesis is on the dynamics of the European Arctic (especially the territories of Greenland, Iceland, the Svalbard archipelago and Northern Scandinavia) and, as the EU's Members or states with association agreements with the Union cover a substantial part of the Arctic territory, thus the governance of the Arctic is of great interest for the EU.

The research is delimited to the analysis of China's and the EU's bilateral and multilateral cooperation concerning global climate governance, and their involvement with the Arctic institutions for tackling climate change in the region. Thus, the research may be improved with the inclusion of more actors in the analysis. For example, the NATO is a key actor in the Arctic, however it has not been considered in the analysis, as the theoretical foundation lies on the role of institutions and regimes in facilitating cooperation rather than focusing on the

security realm, which is central to the organisation. In addition, the analysis mainly covers the dynamics of climate cooperation between China and the EU in the European Arctic, thus the security issue is considered less relevant for the purpose of the research. Security issues may be more relevant when dealing with Russia or the US, as the territories of Greenland, Iceland and the Svalbard archipelago are of great important for the two actors' security. However, given the new potential opportunities for resources exploitation and the opening of new shipping routes, the Arctic security may be challenged in the near future, thus it may be interesting to further improve the research by addressing the role of NATO in maintaining peace and security in the region.

Even though the theoretical framework of the analysis concerns the interactions between states, the EU is considered as a single actor in the analysis despite being a union of twenty-eight divergent Member States.

The research may be further improved with the analysis of China's relations with individual EU's Member States and their cooperation on climate issues in the Arctic. The EU is not a formal observer to the AC, however some of its Member States hold this position, hence it might be interesting to analyse these states' relations with China as they are formally part of the Arctic institutional framework. Nonetheless, the EU is a crucial actor both in the Arctic and in global climate governance, thus the research is delimited to China-EU relationship and cooperation.

The Arctic institutional framework includes a variety of institutions, however the research focuses especially on the interactions between China and the EU with the main governing body of the region, namely the AC.

A significant limitation posed to the research stands in the fact that the international situation in Arctic's climate governance is not static and negotiations are ongoing, thus it is likely that it will undergo many changes. Hence, the material relevant to the research, especially regarding cooperation between China and the EU on climate issues in the Arctic is rather scarce.

Potential biases are presented by the subjectivity in the EU's perspective sources as well as the Chinese ones; moreover, the research impartial stance might be biased from a personal Western perspective and the inability to analyse articles and reports written in Chinese.

Despite the wish to primarily collect the most recent data possible, some outdated data had to be included, such as the theory sources; however, it is possible to further develop the analysis with more theories and models as this topic may be analysed through the spectrum of alternative theoretical perspectives other than Neoliberal Institutionalism.

3 Theoretical Framework: Neoliberal Institutionalism

This chapter describes the theoretical framework employed in this research, namely Robert O. Keohane's Neoliberal Institutionalism, with a focus on its historical evolution, its main assumptions and concepts, and its criticism, in order to provide a ground for better understanding the subsequent analysis.

Neoliberal Institutionalism finds its origins in its founding father's representative work *After Hegemony: Cooperation and Discord in World Political Economy* (Keohane 1984), which examines how cooperation is possible in world politics in the absence of hegemony.

Keohane makes the implicit assumption that international politics may be divided into two spheres, namely political economy and security, and Neoliberal Institutionalism mainly covers political economy, but not security. It shares some assumptions with the Neorealist thought, as they both consider: states as the main actors in international politics, the international system to be anarchic, and states as rational actors pursuing their national interests or self-interested. In *After Hegemony: Cooperation and Discord in World Political Economy*, Keohane writes about "how cooperation has been, and can be, organised in the world economy when common interests exist". He develops his theory by taking the existence of

common interests as given, and analyses how these may lead to cooperation as well as the reasons behind failures in cooperation (Keohane 1984: 6).

3.1 Historical Evolution of Neoliberal Institutionalism

After World War I, with the creation of the League of Nations and the emergence of international law, IR scholars started to focus on the study of international organisations. However, as the World War II broke out, it emerged some criticism against the emphasis on international organisations and international law.

Since the end of World War II, it seems that international cooperation between the advanced industrialized countries has been greater compared to any other period in the history, and the extent and complexity of coordination efforts have been more extensive than in the period between the two world wars or the century before 1914. However, cooperation has remained scarce relatively to discord, due to the potential frictions created by the fast advancement of international economic interdependence since 1945 and the increased engagement of governments in the operation of modern capitalist economies, as interdependence may transmit good influences as well as bad ones, such as growth and prosperity or unemployment and inflation (Stein 2008: 202; Keohane 1984: 5).

What started as the study of regional integration and international organisations changed in the early 1980s in what was called *Regime Theory*, then

named Neoliberal Institutionalism. In the period following World War II, the focus was on international organisations, defined as "concrete entities with a physical presence – names, addresses and so on", and then this concept was broadened to the study of regimes, defined as "principles, norms, rules, and decision-making procedures around which actors expectations converge in a given-issue area" (Krasner 1982 in Stein 2008: 203).

This intellectual turn is also characterized by the acceptance of the realist view of states as the key actors in international politics, which behaviour is rooted in power and interest. The consequent new institutional literature, while sharing some realists' features, such as focusing on self-interest, drawing on microeconomics, or using game theory, was called Neoliberalism and Neoliberal Institutionalism, as it focuses on cooperation and institutions (Stein 2008: 203, 205).

The empirical evidence of Neoliberal Institutionalism has been demonstrated by the expansion of institutions created during the Cold War, such as the EU in 1957, the NATO in 1949, or the WTO in 1948. Moreover, many regimes, institutions and multilateralism have developed during the 21st century, such as the G20, the BRICS, the UNFCCC and the PCA in global climate governance, the IEA or the IRENA in global energy governance, or the NPT and the IAEA in global nuclear security governance (Keohane & Martin 1995).

3.2 Main Assumptions of Neoliberal Institutionalism

At the centre of Neoliberal Institutionalism there is the thought of international institutions as the "self-interested creations of states", as states prefer the building of international institutions to handle issues instead of having an autonomous self-interested behaviour. States face coordination problems, as their interests create different equilibria, thus they need some regulating mechanisms. Moreover, through the creation of institutions, states may decrease the governance costs related to autonomous decision-making (Stein 2008: 208, 209).

International institutions present great variations, such as in their membership and size, or in their nature. Some international institutions are "universal and encompass all states in the international system", while others are "purely regional in character and encompass only a small set of countries". They may be focused on very specific issues as well as have a broader domain, and they may have different mechanisms for solving disputes, or various rules of procedures (Stein 2008: 213).

Keohane's main thesis in *Neoliberal Institutionalism* (Keohane 2011), is that, in world politics, the variations in the institutionalization have a great impact on governments' behaviour, especially regarding cooperation and discord, which may be understood in the context of the institutions which allow the understanding of the significance of state action.

This may be important to understand when dealing with cooperation between China and the EU in climate governance, as they cooperate in and are influenced by the institutional framework of global climate governance, which norms and rules affect their behaviour and actions.

According to Keohane, states are not always "highly constrained by international institutions", and neither they neglect the consequences of their behaviour on other actors. He argues however that their actions rely upon the dominant institutional arrangements, which influence:

- "the flow of information and opportunities to negotiate;
- the ability of governments to monitor other's compliance and to implement their own commitment – hence their ability to make credible commitments in the first place; and
- prevailing expectations about the solidity of international agreements" (Keohane 2011).

China and the EU find it useful to be members of climate international institutions, as they may feel more confident about monitoring the actions of the other actors as they are framed by an institutional regime, based on norms and rules that must be respected by members. Moreover, being part of an agreement may facilitate governments in trusting the solidity of their relationship with other actors. However, according to Neoliberal Institutionalists, international agreements are hard to make and maintain.

Keohane defines Neoliberal Institutionalism as not being a single logically connected deductive theory, but as a school providing a perspective on world politics, which questions about the influence of institutions on state actions and the reasons behind institutional change (Keohane 2011).

Neoliberal Institutionalism main assumptions may be summarized as follows:

- states build international regimes to promote mutually beneficial cooperation, as in the case of China and the EU in their climate cooperation, both regionally and globally;
- international regimes, defined as clusters of principles, norms, rules, and decision-making procedures, decrease the transaction costs for states, lighten problems of asymmetrical information, and reduce the degree of uncertainty among members when evaluating each others' policies;
- international regimes frame states' policy behaviour by providing various costs and benefits of different alternatives;
- international regimes do not ignore self-interest but rather influence self-interest calculations (Keohane 2005).

Cooperation between China and the EU is analysed following these assumptions, to discover how their roles in international institutions and organisations for climate cooperation might influence their behaviour in climate change negotiations and policies.

The research takes into consideration different institutions and organisations, namely the EU, the AC, the Arctic governance regimes, the global climate governance regime, as well as climate policy regimes.

3.3 Criticism to Neoliberal Institutionalism

Neoliberal Institutionalism has been criticized as it cannot explain why there have been cases of failure in solving international conflicts and security issues in the presence of international regimes (Mearsheimer 1995).

Realists argued that international cooperation and international institutions were more difficult to construct compared to the Institutionalists' belief. Moreover, they see these institutions as reflecting the power of the states that created them, as well as they believe that the construction of the institutions itself is an exercise of power, despite their voluntaristic or autonomous nature. They argue that international cooperation in IR was harder because of distributional concerns other than just the welfare-maximizing ones (Stein 2008: 209).

Cooperation might be difficult to achieve and maintain because states are concerned about relative gains; thus they may give up cooperation if they believe that other states could gain more than them. This may be the case of China and the EU when cooperating in the Arctic, because their great interests in the region may create opportunities for competition and conflict (Grieco 1988 in Stein 2008: 210).

Another wave of criticism believes that international institutions are not as benign as they are presented, and that they follow the actions of the powerful states, which take advantage of their power to influence the creation of institutions. However, Neoliberal Institutionalism does not exclude the presence of power or even coercive threats in the cooperating process. This is well-represented by the AC's framework, in which the Arctic States hold the main powers for decision- and policy-making processes (Stein 2008: 210).

Official policy documents may be important for the analysis, as these state the positions of China and the EU towards the Arctic region, thus facilitating mutual understanding with the Arctic actors and appeasing uncertainty. Hence, by clarifying the actors' intentions and commitment to fight the Arctic climatic change while promoting the region's sustainable development, cooperation may be strengthened.

Given the considerable variety of international institutions, which range from regional to global coverage, from specific issues to broader ones, it may be concluded that states nowadays have to deal with a more complex world of multi-level governance, and the Arctic governance framework is part of it (Stein 2008: 216).

4 Climate Change Implications for the Governance of the Arctic and the World

This chapter provides an overview of climate change issues in the Arctic region, as the consequences of the warming of the Arctic ice, such as opportunities for resources extraction and the opening of new trade routes, might greatly influence the geopolitics of the Arctic with the involvement of more actors in its governance framework, as well as influence the global climate policy regime.

It is important to acknowledge that, on the one hand, climate change is having a detrimental impact on the already-fragile Arctic environment, while on the other hand, this issue is gaining a prominent role in climate, economic, political, as well as geostrategic discourses, both within and outside the Arctic region. The warming of the Arctic is creating opportunities for resources extraction and exploitation, the opening of new shipping and trade routes, as well as potential commercial benefits.

In the past century, the world has witnessed the globalisation of human activities, which have led to the enhancement of human well-being while causing great environmental concerns, such as climate change. The effects of climate change are dramatic especially in the Arctic region. As stated previously, climate change in the Arctic is not something new, and, even though the Arctic is not

specifically mentioned in the PCA, since the COP21 there has grown awareness about the effects of global warming in the Arctic region.

It is known that the Arctic is closely connected to "climate, environmental, and socio-economic processes" taking place in other parts of the globe, and that a comprehensive range of adaptation measures is needed to respond to the effects of global warming, such as the rise of the sea levels due to the melting of the Arctic ice cap. The ice is melting so rapidly that it is reliable to predict ice-free summers in the Arctic by the 2030s (Steffen et al. 2015 in Crépin et al. 2017: 341; Keil & Knecht 2017: 1, 2; Selin 2017: 116; Knecht 2017: 167; Féron 2018: 85).

Global warming has affected the Arctic not only by melting and warming its surfaces, opening new potential sea routes and posing new geopolitical dilemmas, but also by rendering it a governance issue discussed in the international fora.

The 2004 *Arctic Climate Impact Assessment*[2] constituted a milestone in Arctic climate discourses, as it has been the first comprehensive assessment of the impacts of climate change in the region, thus recognising global warming as a global problem with regional impacts. These impacts may be seen in the rising sea levels, the fast melting of the ice cap, the probability of changing the ocean currents patterns, or the threats posed to the life of flora and fauna (Cavazos-Guerra et al. in Kristoffersen & Langhelle 2017: 32; Coates & Holroyd 2017: 221; Corry 2017: 65).

2 Full text available at http://www.acia.uaf.edu/PDFs/ACIA_Policy_Document.pdf

Scientists and ecologists acknowledge the severe consequences that climate change in the Arctic may provoke on the global system, and that global warming is directly connected to the increased industrial activities and the immoderate consumptive human lifestyle in the rest of the globe. They also acknowledge that the Arctic is not a big producer of pollutants, and thus it is not to be completely held responsible for the environmental damage of the region (Coates & Holroyd 2017: 221).

Concerns about atmospheric pollution in the Arctic started to gain attention in the 1940s and 1950s, when the US Air Force registered for the first time the so-called *Arctic Haze*, a layer of high concentration of aerosol in the atmosphere, caused by the presence of black carbon. This phenomenon affects climate change particularly in the Arctic, because of the phenomenon called *Arctic amplification*, consisting in a rise in the temperatures in the region due to the decline of the summer sea ice, which in turn influences the temperature and thus changes the Arctic weather patterns. Moreover, it causes changes in the weather patterns of countries at mid-latitudes, thus affecting their agriculture, forestry, and water resources. Hence, the issues of climate and resource governance in the Arctic are gaining a more prominent place in world politics (Cavazos-Guerra et al. 2017: 232, 233; Rajeevan 2018: 73).

The EU confines with the Arctic region, thus the consequences of the Arctic climatic change directly affect the Union's ecological environment; moreover, the

potential economic benefits brought about by the changing situation are of great interest for the EU, as it aims at gaining a leadership role within the Arctic climate governance and sharing the economic benefits of the new Arctic economic opportunities.

In China, the warming of the Arctic is having direct consequences on the country's weather patterns and ecological environment. Climate change in the Arctic not only affects China's industrial and agricultural production, but also the country's economic growth, which lies at the basis of the political stability of the CCP, thus the country is greatly concerned with tackling this issue other than pursuing its economic interests in the region (Dobson & Trevisanut 2018: 401, 402; Lim 2018: 4; Grieger 2018: 5).

The large amount of scientific literature on climate change proves that the consequences of global warming have great implications on the Earth's climate systems, and pose great threats to its ecological environment, its global weather patterns, and the preservation of its flora and fauna lives. Moreover, in the long run, the consequences of climate change are likely to affect every aspect of human life and activities, as well as agricultural and industrial production.

The melting of the Arctic, while deteriorating the environment, is creating opportunities for the opening of new trade and shipping routes, for resources exploration and exploitation, along with potential significant economic benefits. As a consequence, an increased number of countries has manifested interests in

cooperating within the region and in securing themselves a place in future negotiations for sharing these new opportunities. Thus, to avoid the worsening of this already-precarious situation, there may be a need for finding a balance between the economic interests of Arctic and non-Arctic actors, the sustainable development of the region, and its environmental protection.

It may be concluded that, even though the negative impact of climate change on the Earth's environment is widely acknowledged, some governments may prioritize the new potential economic opportunities of the region over the implementation of measures for preventing the warming of the Arctic ice and for protecting its environment. Considering all the actors and stakes involved, the Arctic climatic change needs a prompt global response and a more integrated approach. Hence, the governance framework of the Arctic and its institutions might need to adapt to this evolving situation and find a balance between the new economic opportunities, the protection of the Arctic environment and the fight against global warming.

5 The Arctic Governance Framework

The Arctic governance framework is a complex combination of institutional bodies in which actors from within and outside the region cooperate together for dealing with Arctic-related issues. It is relevant for the thesis to address this topic, in order to understand the actors involved, the dynamics of Arctic governance, as well as cooperation between China and the EU within the Arctic institutional framework.

Since the first European explorers expeditions in the 18th century, the Arctic has been an imagined and contested space, and became a place of geostrategic struggles. Imaginaries are important when talking about the Arctic, as its governance framework is yet to be definitively determined, and the region faces continuous environmental, political and economic challenges. Today's Arctic is divided between strong economic interests and the need for a stronger resources and climate protection governance.

The Arctic is not ruled on a treaty base, but through the 1991 *Rovaniemi Declaration*[3], the 1992 *Nuuk Declaration*[4], and the 1982 UNCLOS[5]; this fragmented governance has been considered problematic and not adequate for addressing the

3 Full text available at http://arcticcircle.uconn.edu/NatResources/Policy/rovaniemi.html

4 Full text available at https://oaarchive.arctic-council.org/handle/11374/92

5 Full text available at https://www.un.org/Depts/los/convention_agreements/texts/unclos/unclos_e.pdf

Arctic issues (Tamnes & Holtsman 2014 in Keil & Knecht 2017: 7; Kneil & Knecht 2017: 7, 8; Sinha 2018: 60; Forbis & Hayhoe 2018; Ibsen 2018: 9).

The strong militarization during the Cold War impeded the formation of an appropriate circumpolar institutional regime because of the East-West rivalry climate. The end of this conflict led to the increase of Arctic cooperation, especially concerning environmental and health issues caused by pollution and climate change. In the late 1980s the Arctic States started to cooperate with non-state actors, thus creating a first set of "institutionally comprehensive programmes and forums to address technical, scientific, and political issues of circumpolar importance" (Selin 2017: 102, 103; Coates & Holroyd 2017: 208; Ibsen 2018: 7).

In 1987, during a speech held in Murmansk, the Soviet leader Mikhail Gorbachev called for enhancing cooperation on environmental concerns, and declared the Arctic as a 'zone of peace and cooperation'. Following this speech, in 1989 negotiations on the AEPS started, resulting in the 1991 meeting in Rovaniemi, Finland. The AEPS constitutes the precursor of today's AC, and aimed at an Arctic governed in a peaceful way through the cooperation of eight Arctic States: Canada, Denmark, Finland, Iceland, Norway, Russia, Sweden, and the US. The outcomes of the meeting in Rovaniemi were the adoption of the Declaration on the Protection of the Environment and the creation of the AEPS (Keil & Knecht 2017: 7; Selin 2017: 102, 103; Shadian 2017: 51).

The Arctic region comprehends the Arctic Ocean and the surrounding territories, including Greenland and the Svalbard archipelago, the northern part of Alaska, Canada, Norway, and Russia; thus, it is a combination of "sovereign territories, internal waters, and high seas". Its governance is a complex mixture of national laws, international arrangements and an evolving regional management (Brady 2017: 16).

In analysing Arctic politics, one sees that the political order of the Arctic has followed a geopolitical paradigm for years, a political order which the major Arctic actors considered legitimate and effective in the region; thus, following the paradigm, Arctic governance is historically, legally, and geographically linked to the interactions of the eight Arctic States, in a political order institutionalised in the AC's membership. The dominant order has been challenged by the growing presence of new actors in the Arctic community, increasingly more connected to multilevel politics and multiple stakeholders (Keil & Knecht 2017: 8).

Keil & Knecht (2017: 10) argue that it is not likely that, due to the complexity of the Arctic governance and processes, the Arctic States alone would be able to find solutions to the challenges of the Arctic change. However, they will stay at the centre of most Arctic governance arrangements.

This Arctic-global connectivity involves the presence of actors, processes, and institutions and it is interesting to see how they interact for solving issues regarding the Arctic change. In the Arctic, behind the internationalisation of Arctic

processes, issues and actors, a regional politics takes place (Keil & Knecht 2017: 10-12).

The most prominent instrument in Arctic governance is the AC, established in 1996 with the main task of facilitating cooperation on Arctic-related issues. The AC's core mandate is the promotion of sustainable economic and social development in the Arctic and environmental protection in the region, with the involvement of the Arctic States and the Arctic indigenous communities and inhabitants (Brady 2017: 17; Shadian 2017: 51-53, 104; Humrich 2017: 82).

Most of the Arctic institutional instruments are non-binding and are not comprehensive. The AC, for example, despite its prominent role in Arctic governance, may be considered more as a forum for negotiating agreements rather than a strong binding mechanism (Féron 2018: 87).

The AC is not the only governance instrument in the Arctic, as there are various forums supporting it for enhancing cooperation in the region, for example the Conference of the Parliamentarians of the Arctic Region, the Arctic Economic Council, the World Winter Cities Association for Mayors, and the Youth Arctic Coalition. Other influential organisations in the Arctic governance are: the International Tribunal of the Law of the Sea, the UN Commission on the Limits of the Continental Shelf, the IMO, the Secretariat of the UNFCCC, the UNEP, and the UNCLOS (Brady 2017: 19).

It is important to mention the Arctic Circle, the latest addition in Arctic governance framework; it is an independent forum created in 2013 for enhancing the Arctic dialogue by involving more actors from different fields, such as "civil society, the business sector, the scientific community, as well as public policy makers, both from within and outside the region" (Ibsen 2018: 9).

It may be concluded that, as argued by Féron (2018), the last decade has witnessed significant progress in Arctic governance despite its fragmented structure, in particular for soft security and environmental issues. The greater examples of this improvement are the founding of the AC in 1996, the adoption of the Arctic SAR Agreement in 2011 and the Arctic MOPPR Agreement in 2013, and the implementation of the IMO's Polar Code in 2017 (Féron 2018: 125).

5.1 The Arctic Governance Framework: Theoretical Reflections

The Arctic States may be regarded as rational actors seeking to accommodate their interests within the international system; these actors are influenced in their behaviour by the great variations they present in their characteristics. According to Keohane's theory, cooperation exists in the presence of common interests, thus it may be asserted that the Arctic States recognised the existence of common interests between them and the need to create an institutional framework for dealing more thoroughly with Arctic-related issues (Keohane 1984).

As for Neoliberal Institutionalism, the Arctic institutional framework is the 'self-interested creation' of the Arctic States, as they might prefer to cooperate through institutional bodies rather than acting alone in a self-interested way. Certainly, due to the great differences between them, the Arctic States may face coordination problems, and thus recognised the need for establishing some regulating mechanisms to facilitate cooperation and foster their common interests in the region. Besides, they may increase efficiency and reduce the governance costs of autonomous decision-making through the building of these institutional instruments, as these institutions may act as centralised forums (Keohane 1984).

The Arctic institutional framework is regional in character and includes a small club of countries, at least concerning the ones with the decision-making power. However, the Arctic States acknowledged the need to enlarge participation to other actors, as it is in their interest to include other governments and organisations in the Arctic governance, in order to reduce the governance and transactions costs. In addition, as the Arctic institutional regime frames the actors' behaviour and actions through a set of norms and rules that are to be respected, the probability of conflictual issues and uncertainty may decrease. The Arctic institutional regime facilitates the actors' involved in anticipating the flow of information and opportunities for negotiations, in having expectations regarding other actors' compliance and commitment, as well as in being confident about the solidity of the agreement (Keohane 1984; 2005).

Following Keohane's theory, the Arctic States built the AC to promote mutually beneficial cooperation in the Arctic region, and created a set of principles and norms, as well as decision-making procedures. In this way, they are able to better coordinate their policies and reduce the transactional costs and uncertainty stemming from self-interested actions. However, it may be argued that the Arctic institutional framework reflects the Arctic States' power as, for example, within the AC they are the only actors holding decision-making power. Moreover, the Arctic governance is influenced by the Arctic States' domestic laws and by international law, thus making the Arctic a very complex regime where the probabilities of coercion and conflict are not to be excluded.

6 Global Climate Cooperation between China and the EU

This chapter aims at providing an overview of cooperation between China and the EU within global climate governance, as they are both meaningful actors within this realm, and their relationship greatly affects international climate discourses and negotiations and the global climate agenda.

China and the EU are actively cooperating in climate change governance, in particular for low-carbon economy and emission reductions. At present, the UNFCCC and the *Kyoto Protocol* are the only legally-binding mechanisms which address climate change globally. However, with the expansion of global climate discourses, there has been an increase in the number of international organisations dealing with climate-related issues, thus China and the EU also cooperate through these institutional frameworks. After the US' withdrawal from the PCA their cooperation in the context of global climate governance has further improved, and China and the EU are both recognised as global climate leaders (Cong 2017: 167, 168).

China and the EU are cooperating especially in the fields of clean energy technology manufacturing, carbon credit trading, and low-carbon environmental services; moreover, the two actors maintain close economic relations regarding the

nuclear industry, as nuclear power may be employed as an alternative for fossil energy power generation (Cong 2017: 169-171).

In their history of climate actions the two actors have presented different attitudes towards global warming until the 2000s, when China acknowledged the massive impacts of its rapid economic growth and the consequent pollution, environmental problems and health issues. The EU has kept a consistent climate policy since the climate discourse appeared in world politics in the 1970s and 1980s. However, they both exhibit global climate leadership and their bilateral relation has shown a positive tendency in the past decades. China and the EU are both investing in sustainable development and innovation research development to replace the polluting technologies with environmental-friendly ones (Lei & Tong 2019).

China-EU relation on global warming was lacking a strong institutionalised framework until the early 2000s. In 1992 it was established an *EU-China Environmental Dialogue*, and in 1996 it was created an *EU-China Environment Working Group*, however their cooperation did not bring any particular advancement (Torney 2015: 105, 106).

The history of China-EU climate relations, following Cong (2017), may be divided into different stages, which are delineated in the next sections of the chapter.

6.1 Stage of the UNFCCC Negotiation and Entry into Force in the Years 1990-1994: Limited Cooperation

In the early 1990s, the years in which the UNFCCC negotiations started, China and the EU were more interested in their domestic affairs, thus cooperation between the two was not remarkable.

The EU and its major Member States sustained the need for countries to specify their targets in cutting emissions and provide a time schedule. China was not fully prepared at this stage of negotiations, however, it actively participated in and supported a global conclusion to the climate convention, as it saw an opportunity in the international protection of the global environment, as well as the opportunity for improving China's environment, and the rational utilisation of energy and resources. Together with the G77 countries, China advocated for the protection of developing countries' interests, and asked for developed countries to assume the major responsibilities for addressing climate change and supporting developing countries with funds and technological transfer. The EU promoted to include in the UNFCCC the specific commitments for maintaining carbon dioxide emissions in 2000 at the level of 1990 (Cong 2017: 177, 178).

6.2 Stage of the *Kyoto Protocol* Negotiation and Entry into Force in the Years 1995-2004: Open Cooperation

At this stage of global climate negotiations, China's and the EU's positions shared many similarities, thus cooperation between the two actors improved.

Even though China was interacting in international climate governance through the "G77 + China" label, the country expressed its positions and interests in a closer cooperation with the EU compared to the former stage. Despite the two actors' different interests, they both advocated for developed countries to be the first to reduce emissions. China and the G77 countries demanded developed countries to continue reducing carbon dioxide emissions after 2000, and required that developing countries should be given time before undertaking any obligation on emissions reduction. The EU and developed countries proposed the revision of the binding commitments for developed countries under the UNFCCC and did not include requirements for developing countries to reduce emissions in the *Kyoto Protocol*'s agenda (Cong 2017: 178).

The EU's position was closer to the developing countries' one, however the situation worsened after the 2001 US' withdrawal from the *Kyoto Protocol*. As a consequence, the EU intensified cooperation with the developing countries and found some compromises, thus the international community reached the

Marrakesh Agreement, giving a start to the implementation of the *Kyoto Protocol* (Cong 2017: 179).

6.3 Stage of Post-Kyoto Agenda Negotiation in the Years 2005-2012: Interdependence

With the US' withdrawal from the *Kyoto Protocol*, China and the EU became the essential actors for the development of global climate governance and mechanisms.

They both advocated for climate cooperation after 2012 to be performed through the UNFCCC and the *Kyoto Protocol* frameworks, which will constitute the legal basis for future climate agreements (Cong 2017: 179).

An important step taken in their bilateral relationship is the 2005 *EU-China Partnership on Climate Change*, a high-level political framework favouring dialogue and cooperation on climate issues, such as the implementation of CDM or emission trading schemes. This was confirmed in 2010 with a Joint Statement, followed in 2013 by the *EU-China 2020 Strategic Agenda for Cooperation*; one of the document's core areas is devoted to sustainable development and green growth. Moreover, they have implemented a *Climate Change Hotline*, aimed at knowledge-sharing for renewable energy, carbon capture and storage and CDM (EC 2018; Torney 2015: 112-116).

At the 2009 *Copenhagen Climate Conference* cooperation between China and the EU was not as successful as expected, as China and the EU held great communications

and consultations regarding the Conference negotiations. However, after the Conference, their cooperation was repaired, as the EU softened its position and China, as a large emitter, realised its future obligations in reducing emissions in proportion to its developmental stage (Cong 2017: 180, 181).

6.4 Stage of the Post-PCA Negotiation and Implementation in the Years 2015-present: Enhanced Cooperation

At the 2015 *Conference of the Parties* (COP21) in Paris, Parties to the UNFCCC reached consensus over the creation of an agreement to fight global warming and boost cooperation for emission reductions, namely the PCA (UNFCCC).

After the US' withdrawal from the agreement under President Trump's administration, cooperation between China and the EU increased. The close cooperation between China and the EU was confirmed through the 2015 Joint Statement and later in 2018 via the Leader's statement. China and the EU have also created a *Bilateral Consultation Mechanism* to address their domestic policy developments and bilateral agreements, as well as to discuss about the international climate agenda. In July 2018 at the *EU-China Summit*, the two actors have confirmed their commitment to implement the PCA and increase cooperation for clean energy and climate change.

The two actors are working together through various joint projects, such as the implementation of GHG emissions trading in China, as China aims at establishing a

nation-wide emission trading system, knowledge-sharing between their experts regarding long-term strategies for cutting GHG emissions and other climate policy issues, or the *EU-China Clean Development Mechanism Facilitation Project* (EC 2018; Torney 2015: 114).

It might be concluded that China and the EU share similar views regarding the establishment of global climate mechanisms for protecting the environment and energy security, as well as for incrementing their economies and international status. The core foundation of their climate relations stands in respecting the principle of 'common but differentiated responsibilities' under the UNFCCC framework (Cong 2017: 184).

6.5 Cooperation Between China and the EU in Global Climate Governance: Theoretical Reflections

In the last decades, China and the EU both acknowledged the detrimental consequences of global warming on their ecological environment and economy, and thus the need to address this phenomenon in a collective way. Together with other actors and governments, they recognised the need to create an international regime for addressing climate change on a global scale, as this issue necessitates coordination and cooperation from all the international community.

In accordance with Neoliberal Institutionalism, China and the EU decided to take part in the creation of a global institutional climate regime in order to

coordinate their policies more efficiently and pursue their interests, while reducing the governance costs of operating alone in a self-interested manner. However, as Neoliberal Institutionalism acknowledges, institutional regimes are not easy to maintain, and cooperation does not always result in the expected successful outcomes (Keohane 1984; 2005).

In their history of global climate cooperation, China and the EU have not always reached positive outcomes and their relation has undergone many challenges. However, in the recent decades their cooperation under the framework of global climate governance has proven to be successful. Through their membership to the UNFCCC and the PCA, they are able to better predict the other's positions and policies, thus facilitating cooperation for reaching mutually beneficial outcomes. Certainly, global climate governance is complex and, given the heterogeneity of the actors involved, it does not lack of coordination problems and conflictual issues.

It may be said that global climate governance institutional framework influences and frames China's and the EU's behaviour and policies. However, as for Keohane, international institutions are the self-interested creations of states, and given China's and the EU's leadership role in global climate discourses, it may be argued that these two actors in turn greatly affect global climate governance (Keohane 1984).

7 China's and the EU's History, Policy and Interests in the Arctic Region

Climate change is accelerating the transformation of the Arctic region from an ice-covered one to an ice-free ocean at an exaggerate pace. The melting of the ice, other than the dramatic consequences on the ecological environment, is opening prospects for future economic developments in the region. These developments consist in the opening of potentially shorter shipping routes through the Arctic Ocean, as it is prospected an ice-free summer by 2030, the access to untapped natural resources, as well as opportunities for further Arctic scientific research. As a consequence, countries all around the globe have shown increased interests in participating in the governance of the region, including China and the EU (Lim 2018: 1).

States outside the Arctic region do not have territorial sovereignty in the Arctic; however, they have rights regarding scientific research, overflight, navigation, fishing, and rights over resource exploration and exploitation, in accordance with the UNCLOS and international law (State Council Information Office of the PRC 2018).

China and the EU, as non-Arctic States, hold the following rights:

- "to engage in scientific and economic activities in the Svalbard islands;
- to apply for observer status in the Arctic Council;

- to access Arctic seas for scientific research, transportation, tourism, and fishing;
- to utilize cross-Arctic air routes;
- to participate in international decision-making on Arctic matters under international governance;
- to bid for mineral rights and other economic opportunities with Arctic states;
- to bid for deep-sea mineral exploration licenses in Arctic international waters" (Brady 2017: 31).

This chapter provides an overview of China's and the EU's historical relationship with the Arctic, their current policies towards the region, as well as their strategic and economic interests, in order to better comprehend the dynamics behind their cooperation.

7.1 China's Engagement in the Arctic Region

The White Paper on "China's Arctic Policy" defines China as an 'important stakeholder' in the region and as a 'near-Arctic State', thus placing the country as a global power holding a crucial role in Arctic governance. Chinese Vice-Minister of Foreign Affairs Kong Xuanyou, at a press briefing on releasing the White Paper, asserted that China recognises itself as being a non-Arctic State, and, in accordance with its foreign policy principle of 'non-interference', it has no intentions of directly intervene in Arctic States' affairs. Moreover, he claimed that China will actively

participate in addressing Arctic regional and global issues, promote cooperation, and act with respect of international laws and the Arctic States' domestic laws (Lim 2018: 3, 6; State Council Information Office of the PRC 2018).

China's interests may be summarised into two directions: to contribute to Arctic environmental governance, and to benefit from the economic opportunities. China recognises both challenges and opportunities when it comes to climate change in the Arctic. It acknowledges the effects that climate change may have on its ecological environment and population, as China has experienced extreme weather patterns and is aware of the consequences of the rise of the sea level along its coastal cities. However, when communicating with its domestic audience, Beijing emphasises the importance of mineral resources over the environmental issues. In order to reach its goals of accessing Arctic resources and advancing its rights and interests in the region, China may need international support, or at least non-opposition, to its policies (Brady 2017: 219-229; Amatulli 2017: 105; Grieger 2018: 6; Lim 2018: 3).

It follows an overview of China's historical relation with the Arctic, its official policy towards the region, its economic and commercial interests, as well as some theoretical reflections about China's engagement in the Arctic.

7.1.1 China's History in the Arctic

Foreign analysis and Chinese media accounts usually dates China's interest in the Arctic as starting from 2007, when Russian scientists planted a flag on the Arctic

seabed, thus provoking a strong international reaction; however, China's engagement in the Arctic started well before that event. In 1925, having attended both the first and the second IPYs, China, under the nominal government of the ROC, signed the *Spitsbergen Treaty*, thus assuring itself a share of the economic benefits of the Svalbard archipelago. Nowadays, it uses this event as a justification for its current engagement in Arctic affairs and its long-standing interests in the region (Brady 2017: 44).

Polar expeditions were at the centre of international discourses during the 1920s and 1930s, and these discourses filtered in China as well, with Chinese scientists cooperating with other nations to study the polar regions and participating in polar explorations. However, the ROC was overthrown by the CCP with the establishment of the PRC under the guidance of Mao Zedong. During the first years of the new government, Chinese scientist were limited in their international research abilities. The same situation occurred during the 1960s, as China was engulfed in the Cultural Revolution and could not follow the initially stated interests in the polar regions (Brady 2017: 44-47).

A new phase in China's foreign policy and international diplomacy started in 1971, when the PRC gained the 'China' seat at the UN and on the Security Council, opening its way to cooperation in international organisations and global governance, as previously it was excluded.

After Mao Zedong's death in 1976, the government's 'long-standing political, military, and scientific interests in the polar regions were restored. Nonetheless, the 1989 'Tiananmen incident' represented another stalemate for China to put forward its ambitions in the polar regions. However, after 1989 China begun again to explore the scientific and political links in the Arctic to become a polar player, and in 1996 joined the IASC, one of the main governing bodies in the region.

In 1999, the CAA conducted the first scientific voyage of the *Xuelong*, China's icebreaker ship and research vessel, in Arctic waters, and since 2003 it started to undertake biannual Arctic voyages. In 2004 China established the Arctic Yellow River Station as a research base in the Svalbard archipelago.

Since 2004, China has entered a period of increased engagement in polar affairs, especially in terms of capacity-building. In 2007, China was firstly accepted as an observer to the AC, but only with a temporary status. After two rejections in 2009 and 2011, China was finally accepted as a formal observer to the AC in 2013 (Brady 2017: 48, 54-57; Lasserre et al. 2017: 33; Lim 2018: 6).

On September 2nd 2015, five PLAN vessels navigated in US' territorial waters close to the coast of Alaska, marking the first ever incursion of Chinese navy boats in the Arctic. This event received great media attention, as it was a display of the Chinese growing maritime capabilities and military interests, and an announcement of China's aim to expand its operation in the polar regions.

China is now part of the club of nations that are influential at both poles, and its Arctic strategy is part of China's effort to show its increasing global power and be recognised this new status internationally (Brady 2017: 1, 2; Lasserre et al. 2017: 32).

7.1.2 China's Arctic Policy

Following some concerns and debates about China's role as an observer to the AC, on January 26th 2018, the State Office Information Office of the PRC released the first edition of "China's Arctic Policy" White Paper, which encompasses the government's official position on Arctic affairs, its policy objectives, and its policies and principles about China's engagement in the region affairs.

Compared to other actors, Beijing has been historically more hesitant in outlining its policies unless it regarded it as necessary; thus, the publication of the "China's Arctic Policy" White Paper reflects the growing significance of the Arctic region in the government's agenda.

The Chinese government released the White Paper not only to appease international concerns regarding China's intentions in the Arctic, but also as a guidance to more effectively coordinate the country's institutions and agencies in charge of dealing with Arctic-related issues and better involve them in the governance of the region, while cooperating with the international community for protecting and promoting the sustainable development and the stability of the Arctic region.

China claims to be an important stakeholder in Arctic affairs, as the change of the Arctic environment is having a direct impact on the country's ecological environment and climate system, as well as on its economic interests concerning forestry, agriculture, fishing, and other activities. China is concerned about global and trans-regional issues in the Arctic, particularly for climate change, environment, scientific research and the opening of shipping routes, the exploration and exploitation of natural resources, security issues, as well as global governance (State Council Information Office of the PRC 2018; Heggelund & Han 2016: 141; Lim 2018: 5, 6).

China's main institution for Arctic-related affairs is the SOA, which proposes policies and plans and oversees Arctic activities; moreover, it participates in the country's climate change policy-making processes. China's main Arctic-focused research institutions are the PRIC, the China Institute for Maritime Affairs, and the Institute of Oceanology (Heggelund & Han 2016: 142).

China's Arctic policy, according to the White Paper, follows the principles of 'respect', 'cooperation', 'win-win results', and 'sustainability', and addresses five key policies areas. First, China aims at advancing scientific expeditions and research programmes in the Arctic. Second, it pledges commitment to fight global warming and the environmental and climate challenges in the Arctic region. Third, China promotes the rational use and exploitation of Arctic resources and shipping routes. Fourth, it claims an intention of actively participate in and contribute to the Arctic

governance regime, and promote cooperation, both regionally and globally. Fifth, China acknowledges the importance of keeping peace and stability in the region. Moreover, China emphasises its commitment to international law treaties and regimes in dealing with Arctic issues, such as the UN Charter, the IMO, the UNFCCC, or the PCA (Lim 2018: 6, 7).

7.1.3 China's Interests in the Arctic

China, as other non-Arctic actors, holds various interests in the Arctic region, and recognises the benefits it may achieve through cooperation rather than competition; conflictual issues may arise in case an actor or two might try to monopolise access to resources or shipping routes. Moreover, as there is no sovereignty over the high seas in the Central Arctic Ocean, China's interests and rights are legally justified (Brady 2017: 196; Lim 2018: 8).

China is interested in benefiting from the economic opportunities of the Arctic, as the region is rich in energy and natural gas resources, and the country is in a constant demand of energy supply to maintain its economic growth, and also needs to diversify its energy supply. Moreover, it wishes to take part in the discovery of oil and gas energy resources and to pay a fair price for them, as these resources are believed to be held on the sovereign territories of some Arctic States. In addition, it is interested in polar fishing rights, as food security is a key priority in China's agenda for its national security. Concerning security issues, China's nuclear security is directly linked to the Arctic, and the greatest threats to its

security, from a military point of view, come from the Northern Pacific and the Arctic region. (Brady 2017: 90-97; Lim 2018: 4).

China's interest in the opening of Arctic shipping routes may be interpreted as the result of geopolitical and geostrategic calculations and objectives rather than commercial ones, as there are potentials for the establishment of a new IR order, and China aims at being at its centre. The opening of the NSR provides an alternative route for China, as nowadays its foreign trade is conducted through the 'saturated and unreliable' Straits of Malacca and the Suez Canal; moreover, China foresees opportunities for developing its north-eastern coastal areas (Brady 2017: 67, 68; Lim 2018: 5; Grieger 2018: 6, 7; Amatulli 2017: 104).

The opening of new shipping routes in the Arctic Ocean is part of the 2015 BRI.. Initially, the BRI included plans for establishing the *Silk Road Economic Belt* and the *21st-Century Maritime Silk Road*. However, in 2017 China issued a document called *Vision for Maritime Cooperation Under the BRI*[6], hence including the Arctic region in its ambitious plan, as the maritime routes in the Arctic Ocean might be part of the so-called Chinese 'blue economic passage'.

China recognises the difficulties in implementing this plan in the absence of cooperation with the Arctic States. Before releasing its White Paper, China already started various forms of cooperation with the Arctic States under the BRI

6 Full text available at http://www.china.org.cn/world/2017-06/20/content_41063286.htm

framework, even though its infrastructural projects have raised concerns about the future of the Arctic security, as they are said to be lacking transparency (Lim 2018: 9-11; Grieger 2018: 5; Huang et al. 2015: 60).

China seems to lack credibility about its involvement in Arctic affairs, thus it might need to be more transparent about its Arctic investment plans in order to have a more constructive dialogue with the Arctic States, as its presence and the ambition of implementing a *Polar Silk Road* bring both opportunities and challenges for them; moreover, to protect its current and future interests, China might need to maintain a positive global public opinion about its intentions and actions in the Arctic (Brady 2017: 35, 36; Lim 2018: 12; Grieger 2018: 3).

7.1.4 China in the Arctic: Theoretical Reflections

China's engagement with the Arctic may be evaluated through Neoliberal Institutionalism. According to the theory, every actor's behaviour within the international system is influenced by the great variations in the internal features. China is a central actor in international politics, and a key actor in Arctic affairs; moreover, it may be seen as rationally seeking to accommodate its interests in dealing with the Arctic.

The Arctic States and China share common interests, such as the protection of the Arctic environment, the sustainable development of the region, as well as economic interests; thus, in accordance with Keohane's theory, the presence of these interests has led to the development of cooperating ties between them. China

has joined every possible governing body in the Arctic region, as it is easier for it to handle Arctic issues in cooperation with other actors rather than acting alone.

As China is a major global power, its membership to the Arctic institutional bodies and commitment to the norms of the regime may appease other actors' concerns and uncertainty, as the country has to respect the rules of the Arctic governance regime. Following Keohane's theory, China's participation in the Arctic institutional framework may help China in building trustiness about its solid commitment to the rules of the Arctic governance, to its environmental and social development and protection, as well as to be considered a responsible stakeholder. Moreover, China may better coordinate its internal institutions and agencies in charge of Arctic-related issues under the guidance of these regulating mechanisms.

The institutional framework of the Arctic, as for Neoliberal Institutionalism, greatly affects China's behaviour, as the country has to follow and respect the rules of this regime. China recognises that, in order to put forward its interests, it needs more cooperation than conflict with other Arctic actors, otherwise it may risk to be excluded. Following the theory, China's engagement with the Arctic institutional framework is based on the existence of mutual benefits in cooperating. Moreover, China's Arctic policy is shaped and framed on the basis of the existing Arctic regime, which influences China's actions and calculations. However, as China does not hold the same power of the Arctic states within the AC, it has joined other Arctic governing bodies for the sake of gaining a more powerful role in the region,

as well as for securing itself a place in future policy-making in the Arctic, and maintain its rights and interests in the region (Keohane 1984; 2005).

7.2 The EU's Engagement in the Arctic Region

The EU is a global climate leader and holds strong commitments in fighting global warming. As the Arctic performs as a regulator for climate and as a sink for wide-range pollution, the EU has a duty to safeguard the Arctic environment and the region ecological, social, and economic resilience. The EU is also particularly concerned about the protection of the rights of the indigenous people living in its territory. For all these reasons, and for its economic interests in the Arctic, the Union acknowledged the need to develop a policy of its own towards the Arctic (EC & HRFASP 2016: 3; Hossain 2015: 90).

Dobson & Trevisanut (2018) argue that it "may not seem entirely intuitive that the EU should have a leading role to play in climate-related Arctic policy"; geographically the EU is represented in the area through some of its Member States, namely Denmark (Greenland), Sweden and Finland, as well as through EEA's members, Iceland and Norway. However, these states remain independent actors, thus the Union may need to find a way to indirectly contribute to climate issues in the Arctic, given its direct impact on climate change in the region.

The EU is a relatively new actor in the region as it has started to develop its Arctic policy since 2008, with international cooperation and sustainability in

environmental protection and climate change as the keys of the overall policy objectives. Nowadays, the Union aspires in pursuing a greater engagement in the region while adjusting to the already-existing regional regime (Romppanen 2018: 45; Dobson & Trevsanut 2018: 384).

7.2.1 The EU's History in the Arctic

The EU started to develop its Arctic policy in March 2008, when the European Commission ratified *Climate Change and International Security*[7], a document focused on the growing geopolitical importance of the Arctic, as the melting of the ice cap opened opportunities for accessing Arctic waters and new shipping and trade routes (Hossain 2015: 96).

Concrete steps in the development of an EU's Arctic policy began with a European Parliament's Resolution[8] in October 2008, which proposed the adoption of an international treaty for regulating Arctic governance. However, the Resolution met strong criticism from almost all the Arctic States, as they did not support the introduction of a new regime in the region. To avoid another wave of strong criticism, in November 2008 the European Commission endorsed the Communication *The European Union and the Arctic Region*[9], which did not include

7 Full text available at https://publications.europa.eu/en/publication-detail/-/publication/489ee3e8-41d1-4af1-bdcf-fa42f3355af1/language-en

8 Full text available at http://www.europarl.europa.eu/sides/getDoc.do?type=TA&reference=P6-TA-2008-0474&language=EN

9 Full text available at http://www.eeas.europa.eu/archives/docs/arctic_region/docs/com_08_763_en.pdf

any reference to the adoption of an Arctic treaty. The document outlined the key policy goals of the EU, among which the first was climate change. It enlisted proposals regarding the improvement of energy saving, energy efficiency and renewable energies in the Arctic; the EU committed itself to consider the environmental impacts of its decisions and to share information with the Arctic States, thus it did not cover its economic interests behind this cooperation (Hossain 2015: 96; Dobson & Trevisanut 2018: 386, 387).

The reasons behind this new interest derive from the effect of climate change on the 'geostrategic dynamics' of the Arctic, as the melting of the ice cap opens opportunities for new shipping routes and access to the vast resources in the region. The 2008 Paper of the HRFASP and European Commission on *Climate Change and International Security* highlighted the need to manage the debate over territorial claims and access to new trade routes as these may challenge the EU's ability to secure its trade and resource interests in the region.

The 2008 Paper proposed an EU's Arctic policy with a focus on the Union's geostrategic interests, showing that, even though the Arctic policy was strongly motivated by climate change issues, the initial goals emphasised more the resources and trade interests rather than environmental protection. These conflicting issues raised questions about the leadership role of the EU in climate governance and its commitment to the principle of 'leading by example' (Dobson & Trevisanut 2018: 385 386).

7.2.2 The EU's Arctic Policy

Over the years, the EU's Arctic involvement has been criticised by Arctic States because of its lack of a coherent direction and a clear vision. Thus, in 2016 the European Commission together with the HRFASP, published the *Joint Communication to the European Parliament and the Council: An integrated European Union policy for the Arctic*, which emphasises the importance of keeping a "safe, sustainable and prosperous Arctic", not only for the Arctic, but also for the EU and the globe. The Communication represents a shift in the EU's Arctic policy goals, from strategic geopolitical interests to climate research, protection and environmental sustainability. The 2016 Joint Communication highlights the fact that, whereas previously the focus has been on climate change in the Arctic, nowadays attention has shifted towards the Arctic as a regulator of and contributor to climate change (Romppanen 2018: 47; EC & HRFASP 2016: 2; Pérez & Yaneva 2016: 442; Dobson & Trevsanut 2018: 381-390).

Due to the growing awareness of the effects of global warming, the focus of the EU's Arctic policy is the enhancement of international cooperation for addressing climate change impacts on the Arctic environment and the promotion of sustainable development, particularly in the European part of the Arctic. Thus, the EU's position is that Arctic States are primarily responsible of addressing their territorial issues, while other issues affecting the Arctic may be better managed through regional and multilateral cooperation.

The EU Arctic policy emphasises cooperation and partnership with the Arctic States through bilateral and institutional means, in a constructive engagement with the Arctic States, the indigenous people, and other actors for solving challenges that need an international effort (EC & HRFASP 2016: 2; Hossain 2015: 97).

The 2016 Communication repeats the EU's commitments under the PCA, however it does not specify how these commitments specifically address the Arctic. A weakness in the EU's Arctic policy may stand in the different and divergent positions of the EU's institutional bodies and Member States; moreover, it is important to acknowledge that the EU's energy policy towards the Arctic complements and competes with the EU's climate goals.

The European Commission is a member of all the sub-circumpolar bodies, while the EU has no direct role in Arctic cooperation through the AC, as it has not gained the formal status as an observer, but it participates in AC's Working Groups and attends the ministerial meetings as an 'ad hoc observer'. Notwithstanding, the EU's legitimate rights in the Arctic are regulated by international law and not by EU's engagement with the AC. Indeed, as argued by Hossain (2015), the EU does not need to be a formal observer to the AC to influence the Arctic region, as it may influence the Arctic through its various policies and its market power; moreover, it is able to influence the work of the AC as some of its Member States are formal observer to the Council.

The EU is contributing to Arctic research, development and governance mainly through considerable funding, and by participating in AC procedures as an 'observer in principle' and through its Arctic Member States and EEA's Arctic Members (Hossain 2015: 91; Dobson & Trevisanut 2018: 391, 398; Romppanen 2018: 46).

In sum, the EU's Arctic policy has established that the Arctic is gaining importance for the Union, and that the Union should improve its efforts to contribute and assist the region in addressing sustainable development, adaptation and mitigation measures, to effectively and responsibly combat climate change (Pérez & Yaneva 2016: 447).

7.2.3 The EU's Interests in the Arctic

The EU has always had various and complex interests in the Arctic, and in the last fifteen years these interests have progressively increased. They are partly motivated by the commercial and resources opportunities in the region and partly by the Union's commitment to tackle the rapid climate change in the region (Hossain 2015: 89, 90; Dobson & Trevisanut 2018: 381).

Undoubtedly, natural resources are among the main reasons of the EU's increased involvement in Arctic affairs, as the Arctic region is one of the major oil and gas suppliers for the Union. Moreover, there are great commercial interests, as the EU is the largest single market in the world and it may cooperate with Arctic States for the opening of new shipping and trade routes.

Against this background of resource-oriented and business interests, the primary focus of the EU's Arctic policy is given to climate change mitigation and adaptation measures (Dobson & Trevisanut 2018: 381; Pérez & Yaneva 2016: 444; Hossain 2015: 93).

Among the EU's interests in the Arctic, there are opportunities for "EU's offshore drilling companies, shipping companies engaged in resource transportation, as well as increasing cruise ships and tourism activities". The EU's utmost interest in Arctic resources lies in the region hydrocarbons, as one third of Arctic oil and gas is consumed within the Union. Moreover, around one third of Arctic fish is consumed in the EU, and the Union is cooperating with Arctic States in order to maintain its fishing opportunities and ensure long-term conservation measures for fishing resources (Hossain 2015: 94; Pérez & Yaneva 2016: 443).

The EU may be considered to hold a moral responsibility for changes in the Arctic because of its resources extraction and import activities in the region and the Union's GHG emissions and pollution, as well as for its shipping and tourism activities (Romppanen 2018: 46).

Despite the fact that Arctic countries all recognise the importance of the EU's involvement in Arctic affairs, they have never recognised the Union as a precursor actor in the region, nor they have accepted it as a legitimate 'stakeholder' in the Arctic. Nonetheless, it is important to acknowledge that the EU's and the

Arctic States' policies are complementary, as they both pursue environmental protection and the promotion of indigenous people's rights.

The EU aims at gaining a formal observer status to the AC in order to be recognised as a legitimate Arctic stakeholder. Even though there is no real difference between an 'ad hoc' and a 'full' observer status, for the EU it would be an important symbolic act of acceptance as "an equal and trustworthy" actor in the region (Hossain 2015: 101-103; Pérez & Yaneva 2016: 441).

The EU, to justify its interests and intervention in the region, reaffirms its proximity to the Arctic and its attention to trans-boundary phenomena; moreover, it attempts to promote the EU's policy within the AC through its Arctic Member States (Dobson & Trevisanut 2018: 397).

7.2.4 The EU in the Arctic: Theoretical Reflections

For the sake of conducting a theoretical reasoning through Neoliberal Institutionalism, the EU, even though it is a Union of twenty-eight different Member States, is considered as a single rational actor seeking to accommodate its interests within the international system.

The EU is not formally a part of the AC, even though some Member States are observers to the Council, thus it may be interesting to analyse the relation between an institution and an actor which, despite not being directly part of the institution, is nonetheless able to influence it.

Other than facing internal coordination problems due to the great divergences in its Members' characteristics, the EU has acknowledged the need to build and participate in institutional regimes for better managing and solving particular issues worldwide, in this case the Arctic affairs and the warming of the Arctic (Keohane 1984).

Even though the EU justifies its interests and engagement in Arctic affairs with its geographical proximity to the region, the EU has no direct impact in the policy-making processes in the Arctic. Thus, it may be said that the institutional framework of the Arctic greatly affects the Union's decisions and positions in foreign policy, as it has to adjust itself to the existing institutional regime while pursuing its interests. The EU is interested in being a part of this framework, as it may be able to better predict the flow of information necessary for negotiations and for implementing its policies towards the region, as well as expect commitment from other actors and a certain degree of solidity in international agreements, as there are rules that have to be respected by the parties.

In accordance with Neoliberal Institutionalism, the EU aims at being officially part of the Arctic institutional framework as it sees opportunities for mutual benefits, being them economic or regarding the fight against global warming. Moreover, being part of the Arctic institutional framework allows the EU to reduce the problems of asymmetrical information, transactional costs, and the uncertainty in evaluating other actors' positions (Keohane 2005).

The Arctic regime provides both opportunities and challenges to the EU, and the EU has made its own calculations before taking part in it, as the benefits are greater than the costs. As previously said, the EU holds many interests in the Arctic, ranging from oil and gas resources, fisheries, shipping routes, or the protection of the environment. The Union aims at being included in the policy-making processes of the Arctic, as it would face more costs from being excluded from the Arctic institutional framework; moreover, it holds geopolitical and geostrategic interests there, and is interested in having a seat at the future negotiating tables for policy-making in the region (Keohane 1984; 2005).

It may be concluded that, even though the EU is not a formal observer to the AC, it is nonetheless able to influence the governance framework of the Arctic region through its domestic policies and investments in the region; in turn, the Arctic institutional framework frames the Union's actions and decisions.

8 Climate Cooperation between China and the EU in the Arctic

Nowadays, the Arctic region and climate change are gaining importance within the international community and in global governance agendas. China and the EU are global climate leaders and they seem both strongly committed to combat global warming and to find solutions to tackle climate change in the Arctic region. Concurrently, the two actors hold considerable interests in the Arctic's potential economic opportunities.

The presence of common interests in environmental protection and economic benefits, may create opportunities for cooperation as well as for conflict between the two; thus, this chapter aims at presenting China's and the EU's engagement with the Arctic environmental issues, their cooperation under the Arctic institutional regime, as well as through bilateral and multilateral means; moreover, the chapter analyses the potential conflictual issues arising from their cooperation, and provides some theoretical reflections.

8.1 China-EU Cooperation within the Arctic Institutional Framework

Both China and the EU recognise climate change as a circumpolar issue, thus they have pledged commitment to cooperate with the Arctic States, the Arctic

indigenous people and the relevant regional and multilateral organisations, in order to develop a successful climate adaptation agenda for the Arctic.

Even though they hold different status within the AC, they are both actively cooperating with the Council, especially through their participation in some AC's Working Groups, Task Forces and Expert Groups. According to their respective AC Reports, China and the EU both work together in the following permanent AC Working Groups: the AMAP, the CAFF, the PAME, and the SDWG. China is also taking part in the work of the ACAP. These groups, among other issues, research on migratory birds, black carbon, climate pollutants, and ocean acidification. However, China and the EU do not have decision-making powers within the AC, as the final decisions are in the hands of the Arctic States (Coninsx 2019; Li 2019; Brady 2017: 177; EC & HRFASP 2016: 7; Pérez & Yaneva 2016: 442; State Council Information Office of the PRC 2018).

The EU is engaged in several AC Working Groups, Task Forces and Expert Groups. It does so through various DGs of the European Commission. According to the 2018 AC Report, some of the DGs involved are the DG for Maritime Affairs and Fisheries and the ESMA, the DG for Climate Acton, the DG for the Environment and the European Environment Agency, the DG for Research and Innovation, the Joint Research Centre, and the DG for Mobility and Transport (Coninsx 2019).

China cooperates with the Northern Forum, thus promoting sustainable development for resources extraction in the Arctic region; moreover, it is a member

of the World Winter Cities Association for Mayors, which aims at promoting more liveable cities. China has participated actively at Arctic Circle's annual meetings and is represented at the University of the Arctic (Brady 2017: 178).

China and the EU cooperate under the framework of the Arctic Circle, where they may have a greater say concerning their positions and policy, as it is an independent forum involving a multitude of actors. They contribute to Arctic environmental governance and protection through international laws and the UNCLOS, as well as through the IMO's Polar Code. Moreover, China cooperates with the European Arctic region through the 2013 CNARC.

The AC has postponed the EU application as a formal observer for two times, in 2009 and in 2011; however, in 2013 the EU was given the right to attend the AC meetings as an 'observer in principle'. The Union has not been admitted to the AC as unanimous approval from all the Arctic States is needed; Canada was against it due to an EU's Seal Ban Regulation, and Russia opposed the EU's admission probably because of problematic diplomatic relations. Despite the EU being geographically linked to the Arctic, Canada, Russia and the US consider the Union as an external actor in the Arctic. However, the European Arctic States' attitude towards the EU's engagement in Arctic affairs is generally positive (Hossain 2015: 90).

It might be important to note that among the formal observers to the AC, there are some of the biggest EU's Member States regarding population and

economy, such as Germany and France. Thus, it may be argued that the Arctic States might be reticent in conceding the EU a formal observer status to the AC, as its presence may complicate the situation in the Council by bringing divergences in the EU's and its Member States' positions and opinions in the Council.

The EU's engagement in the Arctic and its Arctic policy have been criticised due to the fact that the Union has not followed the same ambitious goals it has committed itself globally under the PCA framework. As the EU is struggling to place itself in climate leadership in the Arctic, it appears that science may be the key for the Union to increase its engagement and cooperation in the region; however, it has an influence on the Arctic through its domestic energy and climate policies. This may provide a better ground for the EU to advance its role as an Arctic actor instead of being considered as an Arctic suppliant (Dobson & Trevisanut 2018: 401, 402).

China, given the new potential opportunities in the region, is interested in establishing an Arctic identity and being recognised as an Arctic stakeholder. It is concerned with the Arctic States' attitudes towards its Arctic strategy, as it wish to avoid fears about a "Chinese challenge to the political and economic status quo in the region". As a consequence, Beijing has established many mechanisms for effectively cooperating within the region and strengthening its position. Before China was admitted to the AC in 2013, there were concerns among some Arctic States concerning the country's greater involvement in Arctic affairs and economic

activities, as Russia and Canada were particularly worried about the nature of the Chinese interests in the region, and as its presence in the region may upset the power balance of the Arctic regime. Thus, China increased its efforts to promote a positive public image and engaged in more regional cooperation, scientific research activities, and partnerships with Arctic governments and firms. At the same time, China ensures its interests in the region may be enhanced without opposition from the Arctic States. As for the EU, China may use its science diplomacy to increase its participation and raise its profile in the Arctic (Lanteigne 2017: 117-121).

8.2 China-EU Bilateral and Multilateral Cooperation on Arctic Climate Change

Internationally, China and the EU work together through various bilateral and multilateral means, such as the UNFCCC, the PCA, the Kyoto Protocol, or the IPCC.

Domestically, China's research in the Arctic focuses on the impact of Arctic climate change on China's ecological environment, on the Arctic ice melt, and its fisheries resources. China is promoting environmental issues in the Arctic in order to safeguard its wider interests. In the Arctic, international environmental nongovernmental organisations have been important in establishing environmental norms; however, Chinese analysts claimed that states should remain the main actors in the Arctic decision-making processes (Brady 2017: 106, 208; Grieger 2018: 6).

The EU supports efforts towards adaptation and mitigation to climatic change in the Arctic, and through the 2016 Joint Declaration the Union highlighted its intention to cooperate for climate and environmental issues in the Arctic region. The EU is contributing to mitigation measures through its binding legislation regarding black carbon emissions, one of the main causes of Arctic warming. However, the Union needs to better coordinate its climate change policy with the air pollution policy in a more integrated approach (Romppanen 2018: 51, 52; Dobson & Trevisanut 2018: 381).

Under the global climate governance framework, China and the EU contribute to the fight against global warming through their emissions reduction measures and their ambitious NDCs, as well as through the development of CDMs. They both support and finance scientific research on Arctic climate change and sustainable development measures. Given the ambitious goals in global climate governance advanced by the EU and China, it may be rational for them to extend this approach to the vulnerable Arctic region (Dobson & Trevisanut 2018: 383).

China and the EU may contribute and complement existing international and regional cooperation and actively participate in Arctic governance through international forums and negotiations, as they are both promoting cooperation in their respective Arctic policies. Moreover, given the importance of global cooperation for tackling climate change, however, they may considerably

contribute to progress in the field through cooperation with smaller groups of countries, as it may be easier to coordinate regional policies.

Even though the two actors present different attitudes towards some issues, they continue to cooperate as they perceive themselves as strategic partners rather than competitors. They may need to increase cooperation for addressing global and regional challenges, and in areas of common interests. Since 2013, their cooperation has increased through many institutional frameworks in the fields of political, economic, and people-to-people relations. It may be argued that, despite their success in cooperating for solving global issues, such as climate change, however their relation is mainly based on an economic basis (Romppanen 2018: 53, 54; Grieger 2019: 1, 2).

8.3 China and the EU in the Arctic: Conflictual Issues in the Region

China's growing presence and interests in the Arctic region, where the EU is becoming a crucial actor, may impact the Union's foreign policy, as some policy areas are of interests for both, such as "shipping, energy, trade and fisheries, as well as research on climate change" (Pelaudeix 2015: 130).

Both China and the EU wish to have a prominent place in Arctic opportunities for resources extraction and exploitation. However, these extractive activities may greatly harm the Arctic environment, and China and the EU have not provided any

specific measure for specifically addressing this issue. The melting of the Arctic ice would reveal untapped energy sources. The two actors are both highly interested in hydrocarbons resources, as for them it would mean a diversification in their energy supply, other than relying on the unstable Middle East.

Concerning the opening of new shipping and trade routes, it is of interest for both of them, as Arctic shipping routes would be shorter than the traditional ones, and would allow them the avoidance of the saturated Malacca Strait and Suez Canal.

China aims to include the project of a Polar Silk Road in its BRI; however, this would lead to the creation of a Sino-centred project, and the EU does not wish to be excluded from the benefits of the new projects. Moreover, the increased awareness on the consequences of global warming has made the Arctic a governance 'object' to be discussed internationally. This situation may allow the creation of a new international order, an order in which China aims to be at the centre. This goes against the EU's attitude for a comprehensive and inclusive order.

In their cooperation, China and the EU face coordination problems, as the EU is composed by greatly different Member States, which are divided in their attitudes towards China. In addition, China is investing in various projects in the EU, however it privileges investments in some regions of Europe, especially in the Eastern and Southern Member States. Thus, it is difficult for the EU to 'speak with one voice' when there are many interests at stake.

One example of conflict where their interests may overlap, is the construction of a railway link connecting Norway and Finland with mainland Europe. This project needs considerable funding to be implemented, thus both the EU and China aim to participate in this project, as the EU aims at keeping its influence in the Northern Member States, whereas China aims to gain a greater influence in the region.

Conflict may arise with regards to the construction of a rail-road connection from Southern Finland to Kirkenes, in order to better connect the Northern and Southern Europe. The EU, according to Lipponen (2015), should launch a project to secure its logistic access in the Arctic Ocean. On the other hand, China has included the Arctic region and the project of a Polar Silk Road in its BRI; even though the details are not defined yet, this issue may create a conflict of interests in Sino-EU relations, as the EU may be interested in maintaining its strong presence in the continent and may not welcome an increased Chinese presence. On the other hand, China foresees the opportunities for gaining power and influence in Europe and the economic benefits of cooperating with the highly developed Nordic European countries.

There are also issues concerning Russian Arctic gas resources, and China's and the EU's reciprocal relations with Russia are of interest when analysing their cooperation in the Arctic. Russian energy resources are crucial for the EU's energy supply, however, following the annexation of Crimea by Russia in 2014, the EU has

imposed sanctions to Russia, thus increasing tensions in the Arctic region and deteriorating their relationship. Russia needs partners to develop its Arctic resources and nowadays it seems to be increasingly aligning with China, for example through their common project for exploiting the Yamal gas fields (Lipponen 2015).

8.4 China and the EU in the Arctic: Theoretical Reflections

Neoliberal Institutionalists claim that states are the main actors in international politics and that they are rational actors pursuing their national interests.

Given the presence of common interests in the Arctic region, the Arctic States, China and the EU are interested in cooperating together for the sustainable development of the region, the protection of the Arctic environment, and the sharing of the new economic opportunities. However, according to the theory, the outcomes of cooperative relationships are not always positive or mutually beneficial (Keohane 1984; 2005).

The Arctic institutional regime is the result of Arctic States' desire for better coordinating the region, as it may be preferable to handle issues through institutions and reduce the costs of autonomous decision-making, as these institutions allow them to cooperate through centralised forums. Of course, the

Arctic institutions have an impact on the members' behaviour, as there is a set of norms and rules that are to be respected in order to be part of such framework.

Even though in the AC only the Arctic States have the final say on policy- and decision-making, the Arctic States have recognised the importance and the need to include more actors in the governance of the region, thus expanding the Arctic institutional regime. As a consequence, China and the EU begun to take an active part in Arctic governance, thus their foreign policy behaviour started to be influenced by this regime. They are part of the global climate governance regime as well, thus they have expectations concerning other actors' behaviour and commitment to the norms.

China and the EU may find it convenient to be part of Arctic institutions, as they may better monitor the other members, evaluate their commitment, and have expectations regarding the solidity of the agreement and the respect of its norms. Of course, China and the EU are highly influenced by the Arctic institutions in their behaviour and foreign policy decisions concerning the Arctic.

The promotion of sustainable development of the Arctic and its environmental protection are two fundamental concepts to respect when appealing for participating in the regional governance institutions.

China and the EU are strongly committed to the fight against climate change, and they cooperate in global climate governance under the framework of the UNFCCC, the Kyoto Protocol, and the PCA. As the Arctic is the most climate-

vulnerable region in the world, China and the EU have extended their commitment to the fight against global warming in the Arctic region.

It may be argued that China and the EU are cooperating in environmental protection in the Arctic in order to pursue their domestic interests. International regimes, according to Keohane's theory, are built to promote mutually beneficial cooperation and allow a calculation of the costs and benefits alternatives for cooperating within them, thus China and the EU see the benefits and advantages they may gain through their cooperation within the Arctic regime (Keohane 1984; 2005).

9 Discussion of the Analysis Findings and Assessment of the Research Questions

This chapter discusses the main findings and provides a theoretical reasoning of the analysis. Moreover, it seeks to answer the research questions posed in the Introduction:

- *Given China's and the European Union's common interests and commitment in fighting climate change, why is their climate cooperation in the Arctic problematic?*
- *How do China's and the EU's vested economic interests in the region affect their relationship and cooperation?*
- *How does the Arctic institutional framework influence cooperation between China and the EU in the Arctic?*

The employment of the selected theoretical framework has proven to be a useful tool for analysing the dynamics of China-EU relations, especially in climate and Arctic governance realms. In accordance with Neoliberal Institutionalism, as institutional regimes affect states' behaviour and decisions, China and the EU are greatly influenced by the global climate governance regime, as well as by the Arctic institutional framework in their domestic and foreign policies plans and actions.

The thesis has proven that climate change in the Arctic is affecting the climate system of the entire globe other than the regional environment. Moreover, the melting of the Arctic ice has created opportunities for the opening of new shipping and trade routes, untapped resources exploration and exploitation, as well as geopolitical, geostrategic and economic opportunities, thus becoming a central issue in international governance agendas. In addition, there has been a shift in the Arctic governance framework, with the inclusion of more actors other than the Arctic States, and the enlargement of the institutional bodies dealing with Arctic-related matters.

It has been relevant to present the Arctic precarious environmental situation and its governance framework before delving into the analysis of climate cooperation between China and the EU, to better understand the context within which they have to cooperate.

The thesis has attempted to validate the assumption that China and the EU currently hold a prosperous cooperation in global climate governance, despite the former divergences in their attitudes towards climate change. The thesis has moved to the analysis of China's and the EU's respective historical engagement with the Arctic, their Arctic policies, and their interests in the region.

The analysis has found that both China and the EU are committed to the environmental protection of the Arctic and its sustainable development, and both hold a proactive policy towards the region which highlights environmental

protection. Nonetheless, both China and the EU have expressed great interest in cooperating with the region and having a share of the new economic opportunities. However, if not well-managed, the development of these new activities in the Arctic region might worsen the environmental conditions of the region and even accelerate the warming of the Arctic.

The thesis has proceeded with the analysis of China's and the EU's climate cooperation in the Arctic and revealed that, even though both actors are actively cooperating for tackling climate change within the Arctic institutional framework, and have established bilateral and multilateral means for addressing climate issues, it appears that China and the EU lack of a specific and concrete instrument for dealing with the Arctic climatic change. Thus, they are not able to perform their role of climate leaders analogously as they do in global climate governance, and this may be due to various reasons, which are explained in the following paragraphs.

Concerning the actors' economic interests in the region, it may be said that China and the EU face challenges in cooperating in the Arctic as their geostrategic, geopolitical, and economic interests sometimes overlap. Moreover, both China and the EU, while promoting environmental protection policies in the region, they wish to pursue their interests regarding natural, fisheries, and energy resources in the Arctic. Thus, they may need to find a balance between their resources extraction interests and the environmental protection of the region.

Both China and the EU seem to be not willing to give up their economic and strategic interests in the region to prioritize environmental sustainability and climate change mitigation. Both aim at being among the top recipients of the Arctic new potential economic opportunities, and this greatly affects their foreign policies towards Arctic climate protection.

Along with Neoliberal Institutionalism, the presence of common interests in the region opens the possibility for cooperation to achieve the same goal, thus to benefit from the new economic opportunities of the Arctic. However, the presence of these interests may also lead to conflictual situations for securing themselves a prominent place in the sharing of these resources and benefit the most. Accordingly, it may be said that the presence of common interests in the Arctic region might create frictions between China and the EU and impede the creation of a concrete cooperative mechanism for tackling climate change specifically in the Arctic region, albeit fighting global warming should be prioritized.

Regarding the influence that the Arctic institutional framework may exert on China-EU climate cooperation, the research has revealed that, since the main governing body of the Arctic region is the AC and the decision-making power is kept by the Arctic States, China and the EU have to adapt themselves within this framework, and may find it puzzling to concretely influence the climate policy of the Arctic within the existing governance framework. This issue may also lead to competition between the two, as they currently different status within the AC.

There are many institutional bodies in the Arctic, however there is no binding climate legislation specifically addressing the Arctic, thus it may be argued that the Arctic lacks of a proper institutional regime, and this deficiency affects China-EU relation and cooperation concerning climate.

Both China's and the EU's Arctic policies seems to be inconsistent with the stated goals, as they do not provide concrete measures for addressing the Arctic climate change. However, if on the one hand, and in accordance with Neoliberal Institutionalism, the Arctic institutional framework frames and influences China and the EU in their foreign policy behaviour and cooperation, on the other hand, China and the EU may in turn influence the Arctic governance framework through their domestic climate policies and legislation.

Given their common interests and commitment in fighting global warming, China and the EU may find it difficult to successfully cooperate for tackling the Arctic climatic change analogously as they do within global climate governance, as the benefits they may obtain from pursuing their vested economic interests in the region may overcome the costs for implementing binding measures and legislation preventing the worsening of the Arctic warming. Moreover, China and the EU are constricted and influenced by the Arctic institutional framework, as they do not posses real decision- and policy-making powers in the Arctic because these are kept in the hands of the Arctic States.

In order to achieve mutually beneficial solutions for China, the EU and the Arctic States, there may be the need for establishing a more specific regime or agreement for addressing Arctic climate change, as well as climate adaptation and mitigation binding measures specifically targeting the region. However, the Arctic States may not welcome the establishment of a new international order in the region, as they wish to maintain their sovereignty in the Arctic and their exclusive decision-making power in the region. The creation of a new international order in the Arctic is of great interest for China, as it may gain a more prominent role in the region and establish itself as a central actor; this situation may arise competition between China and the EU, as the EU confines with the region and is also interested in gaining more influence within the Arctic.

It may be concluded that, even though global climate cooperation between China and the EU seems to be successful, concrete climate cooperation between the two in the Arctic may be limited and impeded by the presence of many conflicting interests in the region, as well as by the delimitations posed by their compliance with the Arctic institutional framework.

Conclusion

This thesis has sought out to identify the reasons behind the problematic cooperation between China and the EU in addressing climate change in the Arctic region. China and the EU have been selected as case studies for the analysis because they are currently leading global climate governance, and they are increasingly involved in Arctic affairs. In the Arctic, they both advance a policy emphasising environmental protection and sustainability, and they are both committed to fight the Arctic climatic change. Other than environmental issues, the two actors are interested in cooperating in the Arctic because of the potential economic opportunities in the region, such as oil and gas resources or the opening of new shipping and trade routes in the Arctic Ocean, as well as the Arctic new geopolitical and geostrategic implications.

The thesis has presented an overview of climate change in the Arctic and its implications, as well as the governance framework of the region, and the main actors involved. The introduction to the Arctic climatic change and its governance framework has been relevant for the subsequent analysis in pursuance of delineating the context within which China and the EU are involved.

The thesis has proceeded with the analysis of China-EU cooperation in the context of global climate governance, which determined that, despite the former

divergences in their approaches to the fight against global warming, global climate cooperation between China and the EU may be said to be a success.

For the sake of narrowing the research to China-EU cooperation for tackling climate change in the Arctic region and unveil the reasons behind their behaviour, the thesis has presented the two actors' respective historical engagement with the region, their Arctic policies, and their interests in the Arctic. The thesis has moved to the analysis of their engagement with climate change in the Arctic, focusing on their cooperation within the Arctic institutional framework, their bilateral and multilateral climate cooperation, as well as the potential conflictual issues and interests in the region.

Neoliberal Institutionalism's focus on the role of institutional regimes in shaping actors' behaviour proved to be useful in defining how the Arctic institutional framework may influence China's and the EU's behaviour and policy decisions, as well as their mutual perception and cooperation. The theory proved to suit well for the analysis of international cooperation under climate policy regimes and institutional frameworks. Institutional regimes may be considered necessary for dealing with climate issues, and as the Arctic climatic issues affect the climate systems of the Earth, thus there is the need for cooperation between actors from all around the globe. Cooperation may be difficult to achieve in the absence of regulating mechanisms, thus institutional regimes act as forums which gather more actors together and facilitate cooperation. States are believed to be

self-interested actors trying to pursue their interests, however, through institutions, they may decrease uncertainty and increase trustiness in each others' commitment to the agreement. The actors' behaviour has been examined through the theoretical foundation of the thesis to attempt to provide a logical explanation of the dynamics and the reasons motivating their actions. Finally, the last chapter has summarised the main findings and assessed the research questions posed in the Introduction.

The analysis has revealed that China and the EU present differences in their policies towards environmental protection, climate change, as well as indigenous people's right. Moreover, they may have problems of mutual misperception, as the EU might perceive China as a potential rival (the so-called 'China threat'), and China on the other hand may see the EU as opposing to the Chinese development in order to safeguard the Union's interests. In addition, the EU is divided in its attitude towards the BRI and the Polar Silk Road, as this initiative may bring great economic opportunities to some Member States, while creating economic disadvantages for others, as well as damaging the environment and contributing even more to climate change.

China and the EU are both strongly committed to the fight against global warming and are currently leading global climate governance. They have implemented domestic measures to cut emissions and pursue sustainable development; moreover, they have established various bilateral and multilateral

cooperating mechanisms for combating climate change. However, it might appear that they are striving to find a way for concretely cooperate in the Arctic. This may be due to the presence of substantial conflicting geopolitical, geostrategic and economic interests in the region, as well as it may be caused by the constraints of the Arctic institutional regime which frames and influences their actions.

It may be suggested that China, the EU, and the Arctic States might need to find a method for balancing the pursuance of their economic interests in the region, with the promotion of the sustainable development of the Arctic.

The geopolitics of the Arctic is an evolving process and it may likely undergo many changes and witness the creation and establishment of a new Arctic order with the involvement of more actors in the decision-making and policy-making processes. It is yet to be seen whether China and the EU will be part of this new potential order, and whether they might be able to establish a concrete cooperating mechanism and a set of norms for establishing measures specifically targeting the Arctic climate change and environmental protection, while continuing to pursue their interests in the region.

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