



UNIVERSITY OF MACAU

**FACULTY OF SOCIAL
SCIENCES AND HUMANITIES**

**Climate Change in Sino-U.S. Relations
-A Catalyst of Cooperation or Conflict?**

Zong Jianping
M-A9-5513-2

Thesis submitted in partial fulfillment of the requirements for the degree of

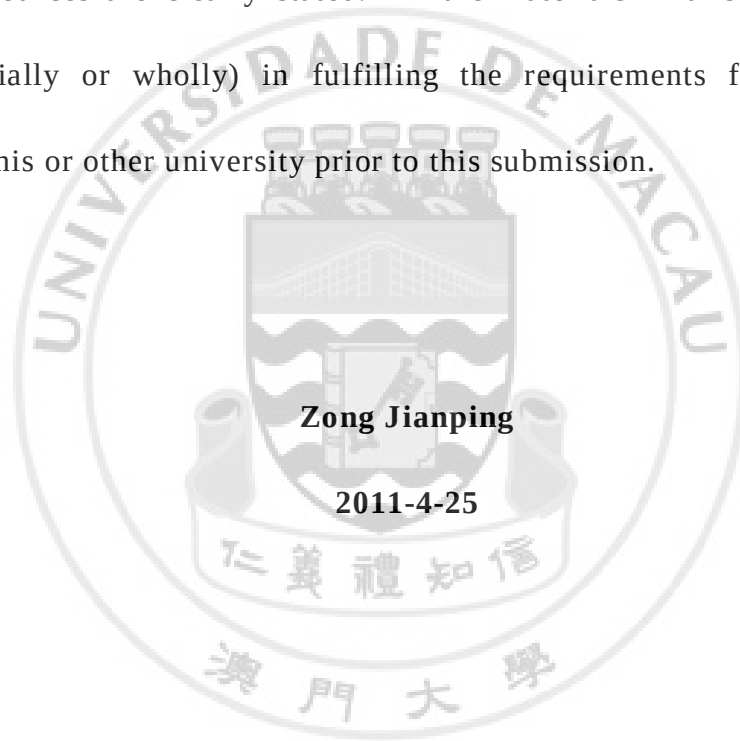
Master of Arts in International Relations and Public Policy

At the University of Macau

April 2011

Statement

I, Zong Jianping, hereby state that this thesis is my original work, apart from the sections where sources are clearly stated. All the materials in this thesis have never been used (partially or wholly) in fulfilling the requirements for any degree or qualification in this or other university prior to this submission.



Abstract

As the impact of the greenhouse gases (GHG) on the climate change of the planet is widely recognized and evaluated, the international community has been taking many positive actions to slow down the global warming through the efforts of all human beings. They have already reached some conventions or legal documents, such as "Kyoto Protocol". However, with the expiring of Kyoto Protocol in 2012, climate change has become a hot topic in international community. Research on how climate change issue impacts on Sino-U.S. relations is significant for us.

As the world's two largest greenhouse gas emitters, both China and the U.S. play important roles in controlling climate change. In this paper, the author conducted a research on the Copenhagen conference and Sino-U.S. clean energy cooperation in the two-level game model. Through the two cases, the author discussed the status quo and prospects of climate change policy in the U.S. and China, analyzed their positions and decision making process in the international climate negotiations table. More importantly, through two case studies, the author tried to answer the major research question of this study: whether climate change will constitute a new foundation for bilateral cooperation or a new source of conflict.

In the coming decades, the two sides need to continuously adjust the policies and properly strengthening the clean energy cooperation. From the viewpoint of the author, with the coming of post-Kyoto era, the two countries are facing the grim task of significantly reducing emissions. However in a short term, the issue of climate change is not going to change the basic dynamics and patterns of Sino-U.S. relations. The two countries will cooperate on some aspects of climate change while collide with each other in some other issue areas related to climate change. In any case, they should explore a pattern of economic development with low-carbon hand in hand. In this way, they can continue to maintain the stable growth of economy and ensure the coordination of national economic development and environmental protection.

Key Words: Climate change, Sino-U.S. relations, cooperation, conflict

Contents

CHAPTER 1 INTRODUCTION.....	1
1.1 STUDY BACKGROUND AND MAJOR ARGUMENT	1
1.2 SIGNIFICANCE OF THE CLIMATE CHANGE ISSUE.....	2
1.3 STUDYING AIMS AND STRUCTURE	5
CHAPTER 2 LITERATURE REVIEW	7
2.1 CLIMATE CHANGE AND CLIMATE CHANGE POLITICS	7
2.2 CLIMATE CHANGE IN INTERNATIONAL RELATIONS	9
2.3 STUDY ABOUT THE CLIMATE CHANGE IN SINO-U.S RELATION.....	13
CHAPTER 3 THEORETICAL FRAMEWORK	17
3.1 REALISM.....	17
3.2 REALIST VIEWS ON CLIMATE CHANGE ISSUE.....	19
3.3 NEOLIBERAL INSTITUTIONALISMAND TRANSNATIONALISM	19
3.4 NEOLIBERAL INSTITUTIONALISM AND TRANSNATIONALISMVIEW ON CLIMATE CHANGE ISSUE.....	21
3.5 TWO-LEVEL GAME THEORY	23
3.6 THE MAJOR ARGUMENT AND HYPOTHESES	28
3.7 METHODOLOGY	29
3.7.1 The Copenhagen case.....	31
3.7.2 The clean energy cooperation case.....	31

CHAPTER 4 EVOLUTION OF CLIMATE CHANGE POLITICS.....34

4.1 ESSENTIAL BACKGROUND	34
4.1.1 <i>Definition and objective fact of climate change.</i>	34
4.1.2 <i>Causes of climate change</i>	36
4.1.3 <i>Impacts of climate change</i>	41
4.2 INTERNATIONAL RESPONSE TO CLIMATE CHANGE	43
4.3 CLIMATE CHANGE IN SINO-US RELATIONS	47
4.3.1 <i>A brief review of Sino-U.S. relations.</i>	47
4.3.2 <i>Climate change in Sino-U.S. relations.</i>	50

CHAPTER 5 THE COPENHAGEN CONFERENCE.....53

5.1 INTRODUCTION OF COPENHAGEN CONFERENCE.....	55
5.1.1 BACKGROUND.....	55
5.1.2 <i>US-China interaction in Copenhagen</i>	58
5.2 THE NATIONAL-LEVEL	62
5.2.1 <i>Public opinion</i>	62
5.2.2 <i>Interest group</i>	65
5.2.3 <i>Political regime</i>	69
5.3 THE INTERNATIONAL-LEVEL.....	72
5.3.1 <i>National interest</i>	73
5.3.2 <i>International climate regime</i>	76
5.3.3 <i>International political environment and NGOs</i>	79
5.4 CONCLUSIONS	79

CHAPTER 6 CLEAN ENERGY COOPERATION	82
6.1 BACKGROUND INFORMATION OF CLEAN ENERGY COOPERATION	82
6.1.1 <i>The concept of clean energy</i>	82
6.1.2 <i>The Sino-U.S interaction on clean-energy cooperation</i>	82
6.2 THE NATIONAL LEVEL.....	88
6.2.1 <i>Public opinion</i>	88
6.2.2 <i>Domestic interest group</i>	92
6.2.3 <i>Political regime</i>	95
6.3 INTERNATIONAL- LEVEL.....	96
6.3.1 <i>National interest</i>	97
6.3.2 <i>International climate regime</i>	101
6.3.3 <i>Non-states actors</i>	102
6.4 CONCLUSIONS	104
CHAPTER 7 CONCLUSIONS	106
REFERENCES.....	115

LIST OF FIGURES

Figure 1: Global surface air temperature change 38

Figure 2: The link between greenhouse gases and temperature, 1850-2009.40

Figure 3: Lobbies in the national congress 2008-2009.....67

Figure 4: Most republicans see no solid evidence of global warming. 70

Figure 5: Coal share percentage of total energy consumption in China (%)....99

Figure 6: World crude oil prices 1980-2035.....100

