

Comparative Analysis of the Carbon Tax Policies in British Columbia (Canada) and Australia

Master thesis



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Abstract

So-called carbon pricing instruments are measures to address climate change by charging a fee on carbon dioxide (CO₂) emissions. As such, carbon pricing instruments present the view that the emitter of the CO₂ emissions should be held accountable and, consequently, pay for the expenses resulting from greenhouse gas (GHG) emissions causing activities that impact the environment and climate. This study focuses on one specific carbon pricing instrument, namely, the carbon tax. Among the increasing number of carbon jurisdictions which have already implemented a carbon tax or are planning to do so are Australia (AUS) and the Canadian province British Columbia (BC). BC implemented its carbon tax in 2008. This carbon tax is still in place today. The carbon tax in BC received mainly positive reviews and according to Bavbek (2016) the tax “is one of the foremost examples of the policy mechanism employed in a sub-state actor” (p. 8). Australia, in turn, introduced its carbon tax on the national level in 2012. However, the carbon tax was repealed in 2014. The repeal of its carbon tax made AUS the only country so far which has abolished a carbon Tax (Bavbek, 2016).

The aim of the thesis was to examine how the different policy fates - the continuation of the carbon tax in BC and discontinuation of the carbon tax in AUS - can be explained. The chosen research design is a congruence (CON) analysis. In this context, three different policy modes (institutionalist mode, rational mode and social constructivist mode) have been applied to analyze and explain the policy development of the two carbon taxes. By identifying the policy mode with the highest explanatory power, important factors which led to the continuation (BC) and the non-continuation (AUS) of the carbon tax policies could be derived. Based on the conducted analysis it was concluded that the institutionalist policy mode is more suitable to explain the differing fates of the AUS and BC carbon tax policies than the rational and the social constructivist policy mode. This research result leads to the identification of two key policy implications. Firstly, it can be concluded that an adequate communication and explanation about the mechanism and the impacts of a carbon tax policy on key stakeholders, such as citizens and companies, is significant for the policy actors in charge to successfully maintain a carbon tax policy. Furthermore, the implication can be drawn that respective policy stakeholders should strategically adapt their program and degree of attention of the carbon tax policy to the respective needs of the citizens and the particular socio-economic situation. From a theoretical perspective, more studies are needed to affirm the result of this thesis regarding the relevance of the three applied theories for explaining the fates of established carbon tax policies. In order to prevent further repeals of and improve the administration of established carbon tax policies, further studies should assess factors impacting the continuation and discontinuation of established carbon tax policies.

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List of Acronyms

AUD	Australian Dollar
AUS	Australia
BC	British Columbia
CAD	Canadian Dollar
CO ₂	Carbon dioxide
CON	Congruence analysis
GHG	Greenhouse gas emissions
INDCs	Intended Nationally Determined Contributions
NDP	New Democratic Party

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1 Introduction

The first chapter provides an introduction to the topic of this thesis - the differing fates of the carbon tax policies in BC and AUS - and the research design and structure of this thesis. Subchapter 1.1 gives a general introduction to the carbon pricing instrument carbon tax, the carbon policies in BC and AUS and the three applied public policy modes (rational, social constructivist and institutionalist policy mode). This is followed by the aim of the thesis in subchapter 1.2, the main research question and sub research questions in subchapter 1.3. Subchapter 1.4 deals with the research approach of the thesis and introduces its research design, a congruence analysis. The academic and policy relevance are reviewed in the subchapter 1.5 and 1.6. Chapter One closes by providing a brief outline of the thesis in subchapter 1.7.

1.1 Introduction to the topic: AUS and BC carbon tax policies

These days climate change is not only seen as the biggest environmental issue anymore but also as one of the biggest risks to humanity, according to the Global Risk Report 2017 (World Economic Forum, 2017, Figure 3). Some 750 experts, identified “extreme weather events” (World Economic Forum, 2017, p. 11) as the biggest risk to humanity in the year 2017 and a “Changing climate” (World Economic Forum, 2017, p. 11) is quoted as the second most likely event to determine global developments over the next ten years. A scientific consensus of 97% declares human impact as the main driver for global warming (Cook et al., 2013; Cook et al., 2016). The global concentration of greenhouse gas (GHG) emissions such as carbon dioxide (CO₂) have risen significantly since the pre-industrial period starting in 1750 which is predominantly attributed to an augmented anthropogenic use of fossil fuels, agriculture and land use change (IPCC, 2007). The rising amount of GHG in the atmosphere can result in a broad range of impacts - environmental, social and economical - to the human species and Earth. The character of the impacts can be very diverse but according to Bowen (2011) the effects “will be adverse, the more so the larger the global temperature increase” (p.4).

The Paris Agreement reached at the 21st Conference of the Parties (COP21) of the United Nations Framework Convention on Climate Change (UNFCCC) in year 2015 marked a key step in fighting against global warming. 189 countries presenting 98% of the global population and 96% of global GHG emissions made the commitment to decrease their respective GHG emissions in the form of their Intended Nationally Determined Contributions (INDCs). In order to implement the INDCs diverse instruments and policies will be applied, including carbon pricing mechanisms such as carbon taxes and cap-and-trade systems (World Bank, 2016). According to the IPCC (2007) a wide range of impacts of climate change can be diminished or prevented if efficient policies and instruments are applied and adapted in a sufficiently early time frame. Based on scientific evidence and research, diverse policy programs and tools aiming at reducing GHG emissions incorporate “substantial economic potential” (IPCC, 2007,

p. 58). In this context, the IPCC (2007) emphasizes the potential of carbon pricing methods by indicating that “policies that provide a real or implicit price of carbon could create incentives for producers and consumers to significantly invest in low-GHG products, technologies and processes” (p. 59).

The idea of carbon pricing mechanisms is based on the “polluter-pays principle”. This principle indicates that the polluter, who is responsible for GHG emissions, should be held accountable and pay for the expenses resulting from GHG emissions causing activities that impact the environment and climate (OECD, 1972). Accordingly, carbon pricing initiatives imply to charge polluters who basically impose the costs resulting from the GHG emissions on other people. Besides the intention to make the GHG emitters to assume the costs of their actions, carbon pricing initiatives aim at emphasizing the shift from GHG emitting resources to climate-friendly renewable energies (Bowen, 2011). There are a variety of carbon pricing instruments but the two predominant forms of carbon pricing are carbon taxes and cap-and-trade systems. The latter is also known as emissions trading system. The significant difference between a carbon tax and a cap-and-trade system is that in the case of an applied carbon tax the carbon price is fixed but not the emission reduction outcome. In the case of a cap-and-trade system the amount of the decreased emissions is pre-assigned but not the price (World Bank, 2017b). The growing importance of carbon pricing initiatives can be derived from the increasing number of jurisdictions already applying or planning to implement carbon pricing instruments. In 2016, around 40 national jurisdictions and more than 20 regions, states and cities applied carbon pricing instruments, representing 13% of global GHG emissions. Furthermore, in 2016 around 100 parties such as states and regions, representing about 58% of GHG emissions globally, intended or contemplated to implement carbon pricing mechanisms. Summing up, the coverage of GHG emissions by a carbon pricing instrument has tripled in the last decade and 2017 could be the year with the highest increase of GHG emissions covered by a carbon pricing mechanism (World Bank, 2016).

This study focuses on the carbon tax as carbon pricing instrument. The application of carbon taxes has spread significantly in the last years, starting with only a few Northern European countries in the early 1990s. Until late 2016, the number of countries applying carbon taxes on a national scale has increased up to 18. Among the increasing number of jurisdictions which have already implemented a carbon tax or are planning to do so are Australia (AUS) and the Canadian province British Columbia (BC). In 2008, BC implemented a carbon tax which represents the first carbon tax applied on the Northern American continent. Today, the BC carbon tax is still in place. The carbon tax in BC received mainly positive feedback and according to Bavbek (2016) the tax “is one of the foremost examples of the policy mechanism employed in a sub-state actor” (p. 8). Being the country with the highest GHG emissions per capita, AUS introduced a carbon tax on the national level in 2012. In contrast, the AUS carbon tax was repealed in 2014 “making Australia the first and only country to abolish a carbon tax” (Bavbek, 2016, 9-10). This thesis will analyze the differing fates of the BC and AUS carbon tax policy. In the following

section of this chapter the two carbon tax policies are introduced by discussing their history and structure.

BC carbon tax:

In July 2008, the BC carbon tax policy was introduced by the center-right Liberals and then Premier Gordon Campbell. The opposition New Democratic Party (NDP) opposed the carbon tax and soon promoted a repeal of the carbon tax with its populist “Axe the Tax” campaign. The strong personal engagement and interest of BC Premier Gordon Campbell in the carbon tax was a key factor for its introduction. Despite rising public opposition Premier Campbell was to defend his course of action regarding the carbon tax. In May 2009, a provincial election in BC took place. Despite the widely-spread opposition to the carbon tax, resulting in decreasing approval for the ruling party, the Liberals in combination with a continuity of the carbon tax was favored by the voters over the opposition party NDP which emphasized the abolishment of the tax (Harrison 2013; Murray & Rivers, 2015).

In contrast to the initially significant resistance among the BC citizens towards the carbon tax, the public acceptance generally increased over the years (EnviroNics Institute, 2014). In October 2014, the rate for strong support for the carbon tax was at 18% and the rate for “somewhat” support was at 40% among the citizens. According to the EnviroNics Institute (2014) these approval rates of the BC carbon tax were “well above the level recorded during the first few years of its implementation” (p. 7). Scientific studies have been increasingly indicating that the tax has been causing a decrease of GHG emissions while not impacting the economy negatively. Despite the leadership change from Premier Campbell to Premier Christy Clark in 2011, the governing Liberals continued to support the tax (Harrison 2013). Based on the initial plans, the price per ton of CO₂ equivalent increased gradually from CAD (Canadian Dollar) 10 in 2008 to CAD 30 in 2012, representing a consistent increase by CAD 5 per ton per year. The considerable long phase of the price increase up to CAD 30 in 2012 was chosen on purpose in order to allow affected stakeholders such as businesses and citizens to gradually adapt to the carbon tax. With a view to the provincial elections in 2013, the Liberals and the NDP presented diverged plans for the carbon tax. Whereas the NDP supported an increase of the tax, the Liberals advocated for keeping the then current price of CAN 30 per ton (Government of British Columbia, 2008; Harrison, 2013). The Liberals focused their engagement for a carbon tax not only on BC, but also on other Northern American jurisdictions, motivated and affirmed by their victory in the provincial elections in 2013 (Bailey, 2013). The carbon tax was maintained since its introduction in 2008 by the BC Liberals until July 2017, when a minority government of the NDP and the Greens formed the new BC government (McElroy, 2017). The new BC government maintained the carbon tax as well.

The BC carbon tax covered 77% of emitted GHG in BC when it was introduced in 2008 (Harrison, 2013). The tax applies to all GHG emissions resulting from the combustion of fossil fuels which are used in BC with only certain exemptions (Harrison 2013; Murray & Rivers, 2015). A main feature of

the BC carbon tax is its revenue neutrality. It is designed to be achieved by a tax shift which indicates tax cuts in other taxes or direct transfers to different stakeholders, such as businesses and households. In effect, all revenues by the carbon tax are intended to be retransferred to citizens and businesses (Government of British Columbia, 2017).

AUS carbon tax:

The AUS carbon tax policy was implemented in July 2012 and repealed in July 2014. The topic of carbon pricing instruments has been a highly-debated topic in Australian politics for several years. The result of the federal elections in August 2010 was a minority government of the center-left Labor party, one Green MP and three independent MPs. Despite the initial announcement not to do so, then Prime Minister Julia Gillard announced to introduce a carbon tax beginning in July 2012. In June 2013, the former Labor Premier Kevin Rudd again became Premier after Gillard lost against him in a ballot about the leadership of the Labor party.

The AUS carbon tax started with an initial price of AUD (Australian Dollar) 23 per ton, increasing to AUD 24.15 per ton in 2013 and AUD 25.40 in 2014 (Carbon Tax Center, 2017). It was planned that the carbon tax will be transferred into an emission trading system from July 2015 onwards. Due to the only low or mixed approval rates among the citizens for the carbon tax, Rudd announced in July 2013 to revise the transition from the carbon tax into the emission trading system with a floating price already in 2014 (ABC News Australia, 2014). In contrast to the Gillard and Rudd government, the opposition Liberal party under Tony Abbott heavily criticized the carbon tax and promised to repeal the carbon tax in case of a victory in the federal elections in September 2013. The new government was formed by a coalition of the center-right Liberal party and National party with Abbott as new Prime Minister. He fulfilled his promise to repeal the tax policy in case of a victory which is why the carbon tax was abolished in July 2014 (ABC News Australia, 2014).

Overall, the public approval for the carbon tax was mixed or low (i.a. Baird, 2014; McDonald, 2015; Roy Morgan Research, 2014). According to Bavbek (2016) “the carbon tax failed to receive widespread support from the society” (p. 10). According to a study by the Roy Morgan Research (2014) in February 2014 49% of the AUS citizens supported Abbott’s plan to repeal the carbon tax, whereas 41% opposed the planned repeal.

The carbon tax was levied on big industrial facilities, government bodies and electricity generators which emitted more than 25,000 tons of CO₂ annually. The agricultural sector and transport fuels were excluded from the carbon tax. 60% of the national GHG emissions were estimated to be covered by the carbon tax. Several measures to compensate harming effects of the carbon tax were introduced for households and affected sectors. To compensate for rising prices, such as the one of electricity, welfare and pension were increased and income taxes decreased (Bavbek, 2016).

This master thesis contributes to the literature about factors leading to policy continuation in BC and discontinuation in AUS. The thesis particularly aims at identifying the determining factors for the difference fate of the two policies. More precisely, the emphasis will be on the question which factors and developments are responsible for and can explain a continuation and a discontinuation of a carbon tax policy, in this case the ones in BC and AUS.

To explain the disparate fates, the policies and their development after the introduction of the taxes will be analyzed from the perspective of three different policy modes: institutionalist mode, rational mode and social constructivist mode. The three-angle examination should allow an adequate identification of the policy mode with the highest explanatory power of the diverging policy fates, leading to the identification of the determining factors of the different policy developments after the introduction of the taxes.

By assessing the different policy fates of the carbon taxes in BC and AUS with three diversified public policy modes, representing three of the main theoretical streams of public policy, this thesis aims at conducting a comprehensive comparison covering a broad range of factors which could have impacted the different carbon tax policies fates. Furthermore, the three applied policy modes were specifically selected for the analysis as they include elements and aspects that seem to be relevant for the analysis of a continuation and discontinuation of established carbon tax policies. The rational mode can be described as evidence-based public policy making indicating that policy making should be based on apparent facts, e.g. research and studies (Kay, 2011; Sanderson, 2002). By applying the rational policy mode this thesis aims at examining the role of evident facts on the different policy fates. In this context, the rational policy mode seems to be relevant for the analysis of a continuation or discontinuation of carbon taxes as it deals with the question whether the actual results of carbon tax policies (e.g. the impact on the amount of GHG emissions) - measured and demonstrated by scientific evaluations - are significant enough to determine the fate of carbon taxes or whether other factors are more important for their fates. In contrast, the social constructivist mode states that policy making depends on the social construction of a specific target object and the individual interpretation of a respective context rather than on evident facts (Ingram & Schneider, 1993). The mode allows to analyze the influence of the social construction and different interpretations of the two carbon taxes on their policy fates. In this context, the social constructivist policy mode seems to be relevant for the analysis of a continuation or discontinuation of carbon taxes as it assesses the importance of how important political stakeholders strategically create a particular image of a carbon tax policy and how they communicate a carbon tax policy. The third public policy mode, the institutionalist mode, is based on stabilities and changes in policy processes. The punctuated equilibrium framework and the historical institutional approach represent the two major streams of the institutionalist policy mode. The punctuated equilibrium framework states that the policies can either evolve into policy stability or policy change. Certain circumstances or events, referred to as windows of opportunity, can be used by policy entrepreneurs to change the status quo,

leading to policy change. According to the historical institutionalist mode, only incremental policy change is possible and with regard to the path-dependency construct past policies influence future policies (Baumgartner, Jones & True, 2007; Pierson, 1993). The institutionalist policy mode seems to be relevant for the analysis of a continuation or discontinuation of carbon taxes as it deals with policy change and policy stability. Policy stability and policy change are important concepts for the analysis of the differing fates of the BC and the AUS carbon tax policy as the BC carbon tax represents an example of a stable carbon tax policy whereas the AUS carbon tax policy can be seen as an example of policy change.

Steele (2014) describes the two carbon taxes as “wildly different, with strikingly different impacts on business and the public” (para. 4). Derived from the reviewed literature for this master thesis about carbon tax policies, there has not been previous academic research on a direct comparison of the different fates of the carbon tax policies in BC and AUS. Accordingly, no research about the fates of the two policies has been conducted previously from the perspective of the three applied policy modes. This master thesis aims to bridge this gap.

1.2 Research aim

The aim of the thesis is to examine how the different policy fates - the continuation in BC and the discontinuation in AUS - can be explained and which policy mode describes the different fates in the best way. By identifying the policy mode with the highest explanatory power, important factors which led to the continuation (BC) and the non-continuation (AUS) of the policies can be derived. The study aims at contributing to the knowledge and theory of established carbon tax policies, thus the determining factors for the policy development after the introduction of carbon tax policies.

1.3 Main research question and sub research questions

In accordance with the aim of this master thesis the following question has been chosen as the central research question:

Main research question: *How can the different fates of the carbon tax policies in BC (continuation) and AUS (non-continuation) be explained best?*

In order to find an appropriate answer for the central research question and to fulfill the aim of the study the following sub research questions have been established:

Sub research question 1: *Which elements of the three applied theories are relevant to analyze the differing fates of the carbon tax policies in AUS and BC?*

Sub research question 2: *How can the rational policy mode explain the continuation of the carbon tax policy in BC and the non-continuation in AUS?*

Sub research question 3: *How can the social constructivist policy mode explain the continuation of the carbon tax policy in BC and the non-continuation in AUS?*

Sub research question 4: *How can the institutionalist policy mode explain the continuation of the carbon tax policy in BC and the non-continuation in AUS?*

1.4 Research approach

The aim of the study is to investigate how the different fates of the two carbon taxes in BC and AUS can be explained by applying three policy modes. Sub research question 1, covering the question which elements of the three applied theories are relevant to analyze the differing carbon tax policy fates in BC and AUS, will be approached in the literature review, which also represents the theoretical framework. Hereby, the three theories (institutionalist, rational and social constructivist) will be used. Propositions according to each policy mode will be derived in the literature review/theoretical framework, before they will be developed into testable concrete predictions and operationalized. Sub research question 2, 3 and 4 approach the suitability of the three different policy modes (institutionalist, rational and social constructivist) to explain the policy fates in BC and AUS. These three sub questions will be answered in the comparative analysis. The comparative analysis comprises a general analysis of the two policy fates from the perspective of the three policy theories and especially the testing of the concrete predictions about the potential of the three theories to explain the two different policy fates. For each policy mode one proposition and one prediction respectively for both cases will be derived.

The research design is a congruence analysis (CON) examining two cases. Comparing the carbon tax policies of only two countries, a qualitative research approach was chosen. In the event of studying only two cases, the qualitative approach allows for a comprehensive analysis including the capture of details of the policy developments. In contrast, a quantitative approach is often chosen when a large number of cases are studied. In the framework of a CON analysis, case studies are used to empirically show the explanatory or relative suitability of a theoretical approach compared to other theoretical approaches. In this master thesis, the three applied theories are compared regarding their suitability to explain the different policy fates of the carbon taxes in BC and AUS (Blatter & Haverland, 2012).

The empirical data, on which the comparative analysis is based, will be derived from secondary information. The applied secondary information will comprise sources such as quantitative and qualitative scientific studies, newspaper articles, government and non-government's websites, and citizens surveys.

1.5 Academic relevance

This thesis aims at contributing to the academic literature of carbon tax policies, particularly factors leading to a continuation or discontinuation of established carbon tax policies. More specifically, the thesis aims at explaining the different fates of the carbon tax policies in AUS and BC. Since the number of existing carbon taxes is relatively small so far, the academic attention on the case of established

carbon tax policies is limited. Notwithstanding, the general topic of the carbon pricing instrument carbon tax has received a broad amount of scientific attention and the attention is growing. The specific cases of the fate of the carbon tax policies in BC and AUS has been assessed by several scholars, but the two differing fates of the two policies have not been directly compared in an academic context so far - to the best knowledge of this master thesis. By directly comparing the two policy fates - one case of an overall positively assessed policy continuation and one case of a policy discontinuation - this thesis contributes to the analysis of general determining factors leading to different developments of established carbon tax policies.

Furthermore, the thesis adds to the established literature of the rational policy mode, the social constructivist policy mode and the institutionalist policy mode by applying the three public policy theories in the case of carbon tax policies. By applying the three theories, the potential of the three theories to explain different policy developments and fates is tested. Notwithstanding, it is important to analyze this potential and value of the three theories in the specific context and circumstances of the assessed policies, in this case the carbon tax policies in BC and AUS.

1.6 Policy relevance

The policy relevance of carbon taxes is especially high to the urgency of global warming. Effective carbon taxes possess an important role in the context of policies to address climate change (Bavbek, 2016). Besides the question whether to apply a carbon tax or another carbon pricing instrument and to implement a certain design of a carbon tax, it is also crucial to analyze the factors influencing the policy development once the policies are established, with the aim to apply the findings of the study to other implemented carbon taxes. In this context, the two carbon tax policies in BC and AUS were chosen to study because of their differing policy fates.

1.7 Outline of thesis

This study will analyze the policies of the carbon taxes in BC and AUS by comparing and explaining the different policy fates.

Chapter One introduces the reviewed topic and emphasizes the research aim, the main research question and sub research questions, the research approach and the relevance of the study.

Chapter Two represents the literature review and theoretical framework. In Chapter Two it is elaborated which elements of the three theories are relevant to analyze the differing carbon tax fates. By doing so, propositions according to each policy mode will be derived.

Chapter Three presents a more comprehensive presentation of the research design, including the operational approach of the study and the rationales for the chosen research design. Furthermore, the propositions from Chapter Two will be developed into testable predictions and operationalized.

Chapter Four comprises the actual comparative analysis of the two case studies of the carbon tax policies in BC and AUS, structured by the three policy modes. The comparative analysis is conducted by analyzing - aiming at explaining - the differing policy fates of the two carbon taxes from the perspective of the three policy modes and accordingly testing of the predictions. Consequently, the findings of the comparative analysis are discussed.

Finally, Chapter Five represents the conclusion and deals with the answers to the central research question and the four sub research questions. Furthermore, it examines theoretical, policy, and academic implications which result from this study. Moreover, research constraints of the study will be discussed.

2 Literature review/Theoretical framework

This chapter represents both the theoretical framework and the literature review. In the first part of the chapter, subchapter 2.1 briefly explains why the three policy modes have been chosen. Then, in the following subchapters (2.2, 2.3 and 2.4) the three policy modes are introduced one by one and key concepts and elements of the theories are discussed as well as which of the elements are relevant for the analyzed cases. Finally, one proposition for each policy mode will be formulated. Firstly, the rational policy mode will be discussed in subchapter 2.2. Secondly, the social constructivist mode will be represented in subchapter 2.3., and thirdly the institutionalist policy mode in subchapter 2.4.

2.1 Selection of the theories

The aim of this master thesis is to assess and explain the differing fates of the carbon tax policies in BC and AUS. It is briefly explained why the three policy modes - the rational, the social constructivist and the institutionalist policy mode - have been particularly chosen for the analysis of the differing fates of the carbon tax policies in BC and AUS.

The key parameter for the selection of theories for the analysis was to cover a broad variety of factors possibly impacting the differing fates of the carbon tax policies. The main reason for the emphasis on this parameter is the fact that the topic under investigation of this master thesis - the comparison of the case of a stable persistent carbon tax policy (BC) and the case of a repealed carbon tax policy (AUS) - represents a topic which has received only limited or none academic attention. Therefore, the three diversified theories were selected to establish a solid base of research about the topic. Eventually, future academic research can focus more on specific aspects of the fates of established carbon tax policies, both continuations and repeals. The rational mode policy will be applied as it assesses the impact of evident facts and evaluations on the fates of the two carbon tax policies. The social constructivist mode allows to assess the influence of the social construction and different interpretations of the two carbon taxes on their policy fates. The institutionalist mode was chosen because it enables to assess the role of policy stability and windows of opportunity leading to policy changes. As it can be seen, the three modes cover a broad variety of factors which could have impacted the differing policy fates: evidence-based facts, individual interpretation and framing and changes and stabilities in the policy process. Another reason for the focus on the coverage of a broad variety of factors for the selection of the theories was the factor that the carbon tax policies in BC and AUS had significant impacts on several stakeholders, such as the citizens and business community, and important political developments and occurrences, such as election results and election campaigns.

In the following part of Chapter Two the three applied theories and its key elements and concepts will be discussed. Based on this, it will be assessed which elements of the theories are relevant for the cases of the carbon tax policy fates in BC and AUS. For each policy mode one proposition will be formulated, considering the previously elaborated elements of the three theories which are relevant to assess and

explain the differing carbon tax policy fates. In Chapter Three, the propositions will be developed into precise testable predictions which are specifically applied to the two carbon tax policies in BC and AUS. Furthermore, the predictions will be operationalized.

2.2 Rational policy mode

The rational policy mode, also referred to as evidence-based public policy making, can be understood as a “normative theory of policy choice” (Kay, 2011, p. 236), indicating that evident facts should be the base for policy making. By using evident data and information as base for policy making, the policy mode aims to support governments to conduct reasonable policy making (Kay, 2011). According to Plewis (2000) in the framework of evidence-based policy, policy making should be based on scientific data and be assessed very thoroughly.

According to Sanderson (2002) “evidence can inform the development and implementation of policy in a number of ways” (p. 4). In this context, mainly two factors are normally highlighted. The first is about “evidence of the likely effectiveness of policy options to inform decisions on what policy action to take” (Sanderson, 2002, p. 4). The second factor addresses “evidence from evaluations of policies as implemented to inform decisions on whether to continue or how to adjust and improve policies and to contribute to the evidence base to inform future consideration of policy options” (Sanderson, 2011, p. 4). With other words, evident data can be used to provide policy makers with information about the estimated effectiveness of certain policies. The second aspect of evidence suggests that evidence derived from policy evaluations can be applied to determine appropriate decisions about the further handling of a policy such as a continuation or discontinuation. Relating to the latter aspect of evidence, it seems that evidence is very important for policy learning and improvement by providing information which policy forms and options work and which not. Sanderson (2002) states that the given data of the performance of different policy options and forms are needed to be able to “control by result” (p. 5). With the term “control by results” Sanderson indicates that a policy should be administered and evaluated - “controlled” - based on actual policy outcomes and effects, the “results”.

Notwithstanding, contrary to these assumptions and understanding of the rational policy mode, the actual logical influence of evident facts on policy-making is questioned among certain scholars. According to Juntti, Russel and Turnpenny (2009) “many policies seem to fall short of, or directly contradict, what the available ‘evidence’ suggests is required” (p. 207), especially in the case of environmental policies. In this context, it is argued that the way how evidence is applied in the policy-cycle and policy-making in the case of environmental policies depends a lot on the respective social and ethical understanding of environmental policies. Furthermore, Juntti et al. (2009) state that the relation between evidence and environmental policy making is influenced by the interactions and power plays between different political and institutional stakeholders having differing political aims and interests. Another disputed aspect of evidence-based policy making is regarding the question what counts as evidence and its influence on

policy making. Some scholars argue that only expert or scientific knowledge should be counted as evidence, whereas others include lay knowledge in the wider definition of evidence (i.a. Clarence, 2002; Collins & Evans, 2002). Lay knowledge is understood as knowledge of lay stakeholders “that it is embedded in a specific cultural and often also practical context” (Juntti et al., 2009, p. 209).

Based on this discussion of the rational policy mode it seems that certain elements and concepts of the rational policy mode are relevant to analyze the differing fates of the carbon tax policies in BC and AUS. As discussed above, evident data can impact policy implementation and development particularly in two ways according to Sanderson (2002). It can be concluded that the second aspect of evidence in the understanding of Sanderson is especially relevant to explain best the different policy fates of the carbon tax policies in BC and AUS. Thus, it should be tested to what extent the policy continuation in BC and the discontinuation in AUS can be referred to evidence derived from policy evaluations and scientifically proven evident facts. Given these points and assumptions the following proposition for the rational policy mode is made:

2.2.1 Proposition

The fates of the two carbon tax policies can best be explained by the rational policy mode if they can be referred to and are based on scientifically proven evident facts.

2.3 Social constructivist policy mode

The key aspect of the social constructivist mode is generally considered as the subjective perception of subject matters rather than an objective interpretation of reality, based on evident rational facts. In that sense humans are seen to be restricted in their capability to act according to clear evident facts. This is a result of the human interpretation and evaluation of a subject matter corresponding to their individual social and moral understanding of the world (Guba & Lincoln, 1989; Ingram & Schneider, 1993; Ritchie, Lewis, Nicholls & Ormston, 2013). Due to the diverse perceptions and interpretations of the world by different persons, there is not only one universal valid reality but rather various kind of socially constructed realities “ungoverned by laws, natural or otherwise” (Guba and Lincoln, 1989, p. 86).

The aspect of framing is very important in the context of the social constructivist policy mode. According to Rein and Schön (1993) framing is “a way of selecting, organizing, interpreting, and making sense of a complex reality to provide guideposts for knowing, analyzing, persuading, and acting (...) from which an amorphous, ill-defined, problematic situation can be made sense of and acted on” (p. 146). Framing is a complex concept as it leads to diverse views and understandings of situations, subject matters and the world. Different individuals and groups, acting and located in diverse contexts and surroundings shaped by different experiences and values, act according to different frames. The different frames lead not only to diverse interpretations and views but also different actions and to different perceptions of which actions should be done by whom and how (Rein & Schön, p. 1993). As Berger and

Luckmann (1991) say, what seems to be “real” (p. 15) for a Tibetan monk can be perceived totally differently by an American businessman. Furthermore, they state for the average citizen his or her life and perception of the world, by Berger and Luckmann (1991) referred to as his or “reality” (p. 15) and “knowledge” (p. 15), are taken as given and are normally not questioned unless an issue or significant incident challenge this reality and knowledge.

According to Hajer (1993) it is nearly a “commonplace” (p. 44) to claim that political issues are socially constructed. He states the perception of a certain situation or subject matter as a political problem is based on the way how it is discussed and what kind of language is used. He emphasizes the impact of the linguistical characteristics of a subject matter on the way how the subject matter is discussed and administered in the policy making. The linguistical representation of a subject matter in the political arena represents a relevant tool of political studies, as it possibly enables policy analysts to assess “how certain relations of dominance are structured and reproduced” (Hajer, 1993, p. 45). By using the example of acid rain in the UK, Hajer emphasizes the important role of the usage of language and generally social constructivism particularly in the case of environmental issues. The public image and interpretation of a policy and its content depend not only how it is framed in the political arena, but also to a large extend how it is framed and portrayed in the media.

Based on the assumptions and points of the social constructivist policy mode and the concept of framing, it can be derived that one evident subject matter can result in a variety of different interpretations and perceptions of persons and groups, which in turn can lead to different actions and outcomes. According to Ingram and Schneider (1993) the social construction of target groups of certain policies considerably impact public officers and determines both policy agenda and design. Another determining factor is the way how related science is transferred and communicated to policy makers and the political arena in general. According to Haas (2004) the number of efficient direct transfers from science to policy makers and executives, therefore the case when politicians incorporate scientific recommendations and knowledge into decisions, is limited. He (2004) describes this transfer as a “circuitous route at best” (p. 517). However, it is stated that science can impact political stakeholders if suitable scientific knowledge is communicated and transferred adequately to policy makers. This concept is referred to as “usable knowledge” (2004, p. 573). Scientific knowledge becomes “usable” for policy stakeholders when it incorporates, besides the substantial policy content, a certain dimension enabling a proper knowledge transfer from science to the political arena.

Concerning the aim of this master thesis, to assess the policy mode explaining best the two different policy fates, the framing concept seems to be particularly relevant. Particularly, the interpretation and active framing of the topic carbon tax by the determining policy stakeholders, presumably the different political actors, will be assessed. With regard to Haas’ “usable knowledge” (2004, p. 573), it is interesting to analyze how scientific knowledge was used and framed by politicians in order to either strengthen

the role of and continue with the carbon tax policy (in the case of BC) or to repeal it (in the case of AUS). Seeing these points, the following proposition for the social constructivist mode is made:

2.3.1 Proposition

The fates of the two carbon tax policies can best be explained by the social constructivist policy mode if they have mainly been a result of the respective framing of important stakeholders.

2.4 Institutional policy mode

The institutional policy mode is about the institutional settings in which policies are made. These institutional settings are represented and influenced by factors such as, formal and informal norms and past experiences. The different institutional settings, in which policies are produced, can lead to differing policy developments, such as either policy stability or policy changes. The institutional policy mode encompasses different policy streams. Two main theories of the institutional policy mode are the historical institutionalist approach and the punctuated equilibrium framework. Because of several reasons the punctuated equilibrium framework was chosen over the historical institutionalist approach to analyze the differing policy fates of the carbon taxes in BC and AUS. A brief review of the two policy streams and the discussion about the more suitable policy stream for this master thesis is given below.

The historical institutionalist approach is assigned to the “new institutionalism”, an institutionalist school of thought which emerged in the 1970s and 1980s (Hall & Taylor, 1996; Thelen, 1999). In the framework of the historical institutionalist approach only incremental policy change is possible. Following the path-dependency concept, past policies significantly influence future policies (Baumgartner et al., 2007; Pierson, 1993). A key aspect of the historical institutional policy mode is the analysis of the influence of past policies on future policies and how past policies can be used to explain later policies (i.a. Pierson, 1993; Thelen & Steinmo, 1992). The historical institutionalist approach has been criticized for several points. Several scholars describe the historical institutionalist approach as eclectic, therefore it incorporates elements of different new institutionalist theories (Hall & Taylor, 1996; Immergut, 2006; Thelen & Steinmo, 1992). Notwithstanding, this does not mean automatically an explicit distinction regarding its methodology and theoretical framework from other the other two new institutionalist theories (Immergut, 2006; Thelen & Steinmo, 1992). Accordingly, the historical institutionalist approach was questioned to be a precise policy mode (Thelen, 1999). Furthermore, the policy mode is particularly criticized for its insufficient ability to explain change. In the framework of the historical institutionalist approach - with focus on the path-dependency concept - it is assumed that past policies influence future policies and developments and the strong influence of the past only allows for incremental policy changes. However, in the course of time numerous non-incremental policy changes have been observed. In this context, the following question arises: How can non-incremental policy changes and clear shifts from the status quo be explained from the historical institutionalist policy mode?

In contrast to the historical institutionalist approach which indicates that overall only gradual policy change is possible, the punctuated equilibrium framework implies that besides policy stability also non-incremental policy change is possible (Baumgartner et al., 2007; Pierson, 1993). Baumgartner et al. (2007) state that the punctuated equilibrium framework aims to explain the phenomenon that “political processes are generally characterized by stability and incrementalism, but occasionally they produce large-scale departures from the past” (p. 155). As already mentioned above different institutional settings can lead to different policy developments. A certain institutional setting can activate strong policy stability; therefore, the policy development is significantly influenced by path dependency. This situation is referred to as *negative feedback* (Baumgartner et al., 2007). With other words, there is negative feedback for ideas to modify the policy in place or no real intention to change the status quo or to implement, but rather to keep the status quo. Negative feedback is strongly linked to policy monopoly (only gradual policy development in a stable policy sub system), they trigger and reinforce each other. Negative feedback itself occurs if it is very difficult to alter the status quo. Baumgartner et al. (2007) describe the effect of negative feedback as maintaining “stability in a system, somewhat like a thermostat maintains constant temperature in a room” (p. 160). Policy change describes the opposite of policy stability or only incremental policy development: a considerable and non-gradual shift of the then status quo. These clear policy changes can emerge if specific circumstances allow for a change from the status quo. With other words, policy change happens when an institutional setting, so far triggering policy stability and negative feedback, breaks down. In this situation, there is the possibility for *positive feedback* (Baumgartner et al., 2007). Positive feedback may occur if stakeholders of the policy, referred to as policy entrepreneurs, make use of these windows of opportunity. Thus, windows of opportunity are specific circumstances or events, which are beneficial for non-gradual changes of the specific policy states quo. Hence, by activating positive feedback, policy entrepreneurs are able to use windows of opportunity in order to change the status quo and by this to implement their agenda and increase their sphere of influence. Policy punctuations, also referred to as “bursts of change” (Baumgartner, 2007, p. 163), can emerge, because “established interests tend to dampen departures from inertia (...) until a political mobilization, advancement on the governmental agenda, and positive feedback occurs. At that point, issues spill over into the macro-political system, making possible major change” (Baumgartner et al., 2007, p. 162).

However, it is important to state that the punctuated equilibrium framework, besides its more suitable ability to address and explain policy change, has also been criticized and should not be seen as a generally better institutionalist approach (i.a. Hall & Taylor, 1996; Thelen, 1999). Based on this short excursus of the two institutionalist streams, it was decided to apply the punctuated equilibrium in this master thesis as this policy stream emphasizes both policy stability and change. In this context, it is especially interesting to assess whether certain policy stakeholders used windows of opportunity to change the then status quo and to implement their agenda, in other words to trigger policy punctuations. Besides the

concept of the window of opportunity, negative and positive feedback seem to be relevant concepts of the institutionalist policy mode to describe and analyze the differing fates of the carbon tax policies in BC and AUS. Seeing these points, the following proposition for the institutionalist policy mode is derived:

2.4.1 Proposition

The fates of the two carbon tax policies can best be explained by the institutionalist policy mode if they are the result of the emergence of negative or positive feedback.

3 Research design

Chapter Three discusses the research design of the thesis. Subchapter 3.1 starts by discussing the chosen research design - the case study approach and in particular the CON analysis - and explains why this research design was chosen. Subchapter 3.2 deals with the operationalization. The established proposition of each policy mode will be concretized and transferred into testable predictions. The process of the data collection and the sources used for the analysis are discussed in subchapter 3.3. Subchapter 3.4 reflects on the reliability and validity of the chosen research design. At the end of the chapter three tables summarize the propositions, the predictions and the necessary data for the testing of the predictions.

3.1 Research design

The chosen research design is a CON analysis. Hence, it is a qualitative comparative analysis of two cases. The CON analysis represents one of the main research approaches of the case study analysis. The CON analysis was selected because of several advantages compared to other research designs. A key factor of a large-N research design is the resulting generality. A high number of cases can be analyzed in the framework of a large-N research design. Therefore, the result can be generalized. As this master thesis does not aim to do this but rather aims to conduct a detailed and comprehensive analysis of two cases, a small-N research design is more appropriate. Furthermore, it would not be feasible to apply a large-N research design in this case because of the limited number of existing carbon taxes (Bavbek, 2016; World Bank, 2016). Conducting a detailed analysis of only two cases, the case study approach seems appropriate to be applied as a qualitative research approach examines only a small number of cases. Yin (2009) describes the case study approach as a suitable approach in order “to understand complex social phenomena” (p. 2). In the case of this master thesis the “complex social phenomena” are the fates of the two carbon tax policies. The CON analysis and the co-variational approach represent the two main approaches of a case study analysis (Blatter & Haverland, 2012). Blatter and Haverland (2014) describe the co-variational approach as a research approach that derives causal inferences based on “co-variations among variables across cases” (p. 24). In contrast, the CON analysis as a research approach draws conclusions by analyzing the degree of congruence between empirical observations and varying expectations which are derived from different theories. The aim of this thesis is to examine which of the three applied theories can explain best the differing fates of the two carbon tax policies. The CON analysis was selected instead of the co-variational approach as it seems to be more suitable to fulfill the aim of this thesis.

Generally speaking, a CON analysis is applied in two cases. On the one hand, the CON analysis is often used when the research aim is to contribute to the academic discourse about the relative importance of different theories. On the other hand, a CON analysis is used to particularly explain socially and politically important cases. This master thesis and therefore the analysis of the differing fates of the carbon

tax policies in AUS and BC are based on the second scenario. The three chosen theories - the rational, the social constructivist and the institutional policy mode - are applied to explain the fates of established carbon tax policies. Notwithstanding, this master thesis also emphasizes the relative suitability of the theories to explain the cases.

3.2 Operationalization & Measurement

3.2.1 Operationalization

Operationalization represents the shifting of the analysis and variables “from the rather abstract conceptual level to the very real measured level” (Kellstedt & Whitten, 2013, p. 93). It describes how the chosen conceptual research design, in this master thesis the CON analysis, will be applied for the specific case of the carbon tax policies in BC and AUS in order to answer the research questions. As outlined in subchapter 3.1, a CON analysis is either used to contribute to the scholastic debate about the relevance and importance of competing theories or to explain one or several socially important specific cases. In the first scenario, the scholar first selects the theories and then the case or cases. In the second scenario, the case or cases are selected before the theories are chosen (Blatter & Haverland, 2012). Given the fact that mainly the second scenario applies in this master thesis, the cases have been selected before the three policy modes have been chosen.

In this master thesis one proposition for each policy mode has been formulated in Chapter Two. These propositions are based on the respective policy mode and should reflect its theoretical understanding and concepts. These “specific, but still abstract, propositions” (Blatter & Haverland, 2014, p. 187) will be developed into precise predictions which are specifically applied to the two cases of the carbon tax policies in BC and AUS. As the level of abstraction between the theoretical propositions and the cases are on a different scale, the level of abstraction needs to be reduced. Blatter and Haverland (2014) describe the process of turning the theoretical propositions into practical predictions as “inferential leaps” (p. 187). In other words, these inferential leaps allow the theoretical propositions to be translated into the real world. Practically speaking, the theoretical predictions can also be observed in the real world. The assessment of the disconfirmation or confirmation of the predictions builds the key base for the analysis of the policy mode with the highest explanatory power. The prediction based on one of the theories is compared with the empirical data derived from the cases. This comparison is built on interpretation and “requires explicit reflection and justification” (Blatter & Haverland, 2014, p. 189). Finally, the results of the different comparisons of the predictions and the empirical data are combined to assess the different levels of congruence and therefore the relative explanatory power of the different applied theories (Blatter & Haverland, 2012).

To assess the policy continuation in BC and the non-continuation in AUS, it is important to consider the positions, the reasons for these positions and the actions of the various affected stakeholders such as

politicians, the business community and the electorate. A carbon tax policy has different impacts on the different stakeholders. For the business community and companies, certain mitigation measures such as a carbon tax or the prohibition of specific production materials can force companies and whole sectors to adapt to these rules and to change the way of production. This development often results in higher costs. Citizens may also be affected by the tax with increased prices for certain products and services such as electricity or the use of specific means of transport. For politicians, the topic of measures addressing global warming is becoming an increasingly delicate issue. This is the result of the trend of global warming and mitigation measures, including carbon taxes, becoming an increasingly important factor on policy agendas at national and international level. Furthermore, it is a by-product of the fact that a carbon tax does not only affect the business community but can also impact the way of living of the citizens.

The focus of the analysis will be on the stakeholder groups of the citizens and political actors, such as politicians and parties. Despite being an important stakeholder and being directly impacted by the carbon tax policies, the business community will not be a key focal group of the following analysis of the differing fates of the two carbon tax policies. The decision to mainly focus on the stakeholder groups of the citizens and the political actors results from the limited scope and time frame of this master thesis.

In the following part the propositions formulated in Chapter Two are defined and operationalized. This is done by developing the propositions into concrete testable predictions.

3.2.2 Rational policy mode: Prediction and measurement

3.2.2.1 Prediction

Proposition:

The fates of the two carbon tax policies can best be explained by the rational policy mode if they can be referred to and are based on scientifically proven evident facts.

The administration of an established policy such as a continuation or discontinuation or modification of a policy should be based on scientific evaluations of these policies (i.a. Davidson, 2005; Kay, 2011; Sanderson, 2002). Hence, the administration of an established carbon tax policy should be based on scientific evaluations of the impact of the respective carbon tax. If the scientific evaluation of the results and impacts of a carbon tax is positive and successful, the tax should be kept and the policy continued. In contrast, if the scientific evaluation of the results and impacts of a carbon tax is negative, the tax policy should be modified or replaced by another measure. In this context, the main task of the prediction will be to look for evidence which shows whether the respective course of action and the position regarding the carbon tax policies of key stakeholders have been significantly impacted by their consideration of evident data and scientific evaluations of the results and impacts of the carbon tax policy. With that in mind, the following prediction has been formulated:

Prediction:

If the rational policy mode is correct, there will be evidence that the respective course of action and position of important stakeholders has been impacted by the consideration of scientific evaluations of the results and impacts of the two carbon tax policies.

3.2.2.2 Measurement

In order to test the prediction, it will be examined for two types of evidence. Firstly, it will be researched for scientific evaluations and data of the results and impacts of the carbon tax policy in AUS and BC. Then it will be assessed whether important stakeholders of the carbon tax policies considered these scientific evaluations and data and whether those considerations impacted their respective position and course of action concerning the carbon tax policies.

Several factors have been selected for the assessment of evident data and scientific evaluations of the results and impacts of the carbon tax policy in AUS and BC. The main function of a carbon tax is to reduce GHG emissions. Therefore, scientific evaluations about the impact of carbon tax on the amount of reduced GHG emissions will be focused on. Besides the impact on the amount of reduced GHG emissions, the following other factors will be applied: impact on economic growth (GDP growth) and impact on income distribution.

The second type of evidence is about the consideration of scientific evaluations of the results and impacts of the two carbon tax policies by important stakeholders and the impact of these considerations on the respective position and course of actions of those stakeholders. The study will look for evidence which indicates the reasons for the respective position and course of action such as support or rejection for the carbon tax policies from important stakeholders. The focus is on reference points which demonstrate that the important stakeholders based their reasons for, and legitimize their specific course of action and position towards the tax policies, on scientific evaluations and data about the impact and results of either the carbon tax policy in BC or the one in AUS.

3.2.3 Social constructivist policy mode: Prediction and measurement

3.2.3.1 Prediction

Proposition:

The fates of the two carbon tax policies can best be explained by the social constructivist policy mode if they have mainly been a result of the respective framing of important stakeholders.

In the proposition of the social constructivist policy mode, the concept of framing is expected to have a strong impact on the differing fates of the two carbon tax policies. A carbon tax policy, as with all other policies, is introduced by key political players such as the governing party. However, the administration of an established policy and its fate (policy continuation, repeal or modification) is strongly influenced by the support or disapproval of other key stakeholders such as the citizens. Thus, it is important to

analyze the influence of a positively or negatively created image - the framing - of the carbon tax policies in BC and AUS on key stakeholders such as the citizens. In this context, the following prediction has been formulated for the social constructivist policy mode:

Prediction:

If the social constructivist policy mode is correct, there will be evidence to show that the respective framing of the carbon tax policies by important political stakeholders of the policy influenced the position and degree of approval concerning the carbon tax policies among the citizens in BC and AUS.

3.2.3.2 Measurement

As with the testing of the prediction of the rational policy mode, two types of evidence will be assessed to test the social constructivist prediction. Firstly, the test will examine whether the specific course of action of important political stakeholders of the carbon tax policy in BC and AUS can be understood as framing. Therefore, it is essential to assess whether important political stakeholders disproportionately praised and promoted or criticized and neglected the carbon tax policies. In particular, the study will examine to what extent important political stakeholders in BC and AUS emphasized the topic of the carbon tax policy and how they framed the carbon tax policy regarding key events such as the provincial elections in 2009 and 2013 and the assumption of office as BC Premier from Campbell to Christy Clark in 2011 in BC and the federal elections in September 2013 in AUS.

Secondly, the study will look for clear facts in order to determine whether a potential framing, either positive or negative, of the carbon tax policy in BC and in AUS by important political stakeholders impacted the position and degree of approval among the citizens in BC and AUS. In order to determine the impact of possible positive framing of important political stakeholders on stance and degree of approval among the citizens, the study will look for facts and indications about the motives of the citizens on their stance towards the tax policy.

3.2.4 Institutional policy mode: Prediction and measurement

3.2.4.1 Prediction

Proposition:

The fates of the two carbon tax policies can best be explained by the institutionalist policy mode if they are the result of the emergence of negative or positive feedback.

In the framework of the punctuated equilibrium framework both positive and negative feedback can emerge, possibly leading to either a policy change (positive feedback) or policy stability (negative feedback). With respect to the BC carbon tax policy, the emergence of negative feedback will be assessed as the tax policy was maintained. Relating to the carbon tax policy in AUS, the emergence of positive feedback and the use of a window of opportunity will be assessed as the AUS carbon tax policy was repealed. In other words, the task of the prediction is to test the emergence of positive feedback and its

potential impact on the policy discontinuation in AUS and policy change respectively, and the emergence of negative feedback and its potential impact on the policy continuation in BC and policy stability respectively. Furthermore, the task of the prediction is to assess whether important political stakeholders used a window of opportunity in the case of the emergence of positive feedback. Thus, the following prediction has been formulated for the institutionalist policy mode:

Prediction:

If the institutionalist policy mode is correct, there will be evidence that the policy continuation in BC and the policy repeal in AUS were significantly impacted by the emergence of negative (BC) or positive (AUS) feedback. In the case of the emergence of positive feedback, there will have been evidence that important political stakeholders used a window of opportunity.

3.2.4.2 Measurement

The task of the prediction is to determine whether the policy continuation in BC was impacted by the emergence of negative feedback and the policy discontinuation in AUS by the emergence of positive feedback.

To analyze whether the policy continuation in BC was impacted by the emergence of negative feedback, the study will assess whether there is evidence of the emergence of negative feedback. The result of negative feedback is that there is either none or only small gradual policy development. This emerges when there is no real intention to change the status quo but rather the preference to keep the status quo. Furthermore, negative feedback occurs when there are significant barriers to alter the status quo. Evidence of negative feedback leading to the continuation of the tax policy would be a sign that the different stakeholders, such as the citizens and politicians, had no real incentives or motivation to change the status quo and therefore generally evaluated the policy as beneficial or at least not unfavorable. Furthermore, there could be signs that the barriers to change the status quo of the policy were too high.

To examine whether the policy discontinuation in AUS was impacted by the emergence of positive feedback, this study will assess whether there is evidence of the emergence of positive feedback. As positive feedback and policy change are often the result of using of a window of opportunity, the study will look for evidence of such a window, and will try to determine whether this could be used by important political stakeholders. Within the framework of punctuated equilibrium, positive feedback might occur if policy stakeholders, so-called policy entrepreneurs, use windows of opportunity. Windows of opportunity represent particular circumstances or situations which are favorable for non-gradual changes of the then status quo of the respective policy. If policy entrepreneurs can initiate positive feedback by using windows of opportunity, it is possible that the policy entrepreneurs can implement their agenda and extend their sphere of influence (Baumgartner et al., 2007).

Firstly, the study will assess whether the situation regarding the AUS carbon tax policy represented a

window of opportunity for important political stakeholders. More specifically, it will examine whether the overall situation concerning the AUS carbon tax policy gave significant incentives for important political stakeholders to act as policy entrepreneurs and to use the situation in their favor. In order to test this, the socio-economic and political circumstances regarding the AUS carbon tax policy such as approval rates of important political stakeholders and elections and the general debate about carbon pricing instruments will be analyzed. Secondly, it will be determined whether important political stakeholders used a potential window of opportunity and acted as policy entrepreneurs, aiming at increasing their sphere of influence and implementing their agenda. To test this second factor, the study will look for evidence which shows that, in case of an identified window of opportunity, the specific behavior and actions of the particular important political stakeholders helped them to increase their sphere of interest and to implement their agenda.

3.3 Data collection and sources

After the formulation of the predictions, the next step is to gather the empirical data in order to test the developed predictions. The type of sources used for suitable data depends on the content and sort of prediction. Yin (2009) states that regarding the case study approach, six sources of evidence are used for conducting research: archival records, documents, direct observation, interviews, participant-observation, and physical artifacts.

Retrieving information for a study from only one of these six sources of evidence is possible, however, studies can also be based on data retrieved from multiple sources of evidence. According to Yin (2009), in the framework of the case study analysis it is recommended to apply several types of sources of evidence. Hence, the application of several types of sources of evidence when conducting case study research enables the scholar to cover a “broader range of historical and behavioral issues” (Yin, 2009, p. 115).

Despite this recommendation to use multiple sources of evidence for case study analysis, the case study analysis in the framework of this master thesis is only based on one source of evidence, more precisely on documents. The use of a single type of source of evidence is a result from the information and sources available and seen as suitable for this case study analysis and the specific topic of interest. Archival records, direct observation, participant-observation, and physical artifacts were identified as not being suitable to be applied for this case study research. Interviews can be used to increase the understanding and knowledge about a specific subject matter by getting comprehensive information from important stakeholders which are relevant for the case. Due to the limited capacity of time and scope of this master thesis it was decided to not conduct interviews. Consequently, documents represent the single source of evidence on which this case study is based on.

Yin (2009) states that the source of evidence documents covers a broad variety of items, such as administrative documents, written reports of events, newspaper articles, academic articles, and memoranda.

In the framework of case study research documents are a significant means to verify and enhance information from other sources. In this context, the pivotal role of documents for case study analysis is “to corroborate and augment evidence from other sources” (Yin, 2009, p. 103). Like the other five sources of evidence, documents have certain strengths and weaknesses. The following attributes are described by Yin (2009) as strengths of documents: stability, unobtrusiveness, specificity, broadness, and overall value. On the contrary, Yin (2009) also indicates several weaknesses of documents which can emerge, such as with respect to reporting bias. The reporting bias refers to the bias of any author of a document. According to Yin (2009) every document is written for with a particular aim and readership target in mind, leading to a lack of objectivity of the author. In this context, Yin (2009) criticizes the blind trust into documents as documents do not represent unbiased point of views.

Besides the selection of the right sources to gather the necessary empirical data, the availability of these sources is another important factor to properly test the predictions. The time frame and the scope with regards to content of this master thesis is limited. If required data may not be available, it could lead to the case that a prediction cannot be tested and therefore lead to its falsification.

3.3.1 Rational policy mode

To test the prediction of the rational policy mode the study will look for two types of evidence. Firstly, it will look for scientific evaluations and data of the results and impacts of the carbon tax policy in BC and AUS on the following factors: amount of reduced GHG emissions, economic growth (GDP growth), income distribution. To look for these data, qualitative and quantitative scientific studies will be assessed. Secondly, the study will look for evidence as to whether the consideration of scientific evaluations of the impacts of the two carbon tax policies by important stakeholders have impacted their respective position and course of actions. Documents such as newspaper articles, qualitative studies and citizen surveys will be assessed to search for these data. Citizen surveys will be assessed as they might also indicate reasons about the respective position and course of action concerning the carbon tax policies among the citizens.

3.3.2 Social constructivist policy mode

As with the rational policy mode, two types of evidence will also be used to test the social constructivist prediction. Firstly, for the study will look for evident facts whether the specific course of action of important political stakeholders of the carbon tax policy in BC and AUS can be seen as framing. Scientific studies and newspaper articles will be used to do so. Secondly, the study will look for evidence about the impact of a potential framing of important political stakeholders on the stance and degree of approval among the citizens. To examine the impact of a potential framing on the stance and degree of approval among the citizens, documents such as scientific studies, newspaper articles and citizen surveys will be assessed. Citizen surveys will be examined as they might indicate reasons about the respective stance and degree of approval concerning the carbon tax policies among the citizens.

3.3.3 Institutional policy mode

To test the institutionalist prediction, it will be examined whether the policy continuation in BC can be explained by the emergence of positive feedback and whether the policy repeal in AUS can be explained by the emergence of positive feedback. To examine the impact of the emergence of negative and positive feedback on the policy fates documents such as newspaper articles and scientific studies will be assessed.

3.4 Validity and reliability

Reliability and validity are pivotal factors for good research. In general, case study approaches allow for a high internal validity and reliability. Contrarily, case study approaches do not indicate a high external validity. The reliability of research is understood as the degree “that it is repeatable or consistent” (Kellstedt & Whitten, 2013, p. 99). In other words, if the analysis would be carried out by another person, it should lead to the same results, therefore the results should be consistent. In this context, the accuracy and stability of the operationalization is very important (Buttolph Johnson & Reynolds, 2008; Kellstedt & Whitten, 2013). In general, a valid measure is understood as an examination of a certain subject matter that is really measuring what it should measure. The internal validity means that a dependent variable is caused by an independent variable. Therefore, internal validity applies if a causal relationship is not influenced by another factor than the dependent variable (Buttolph Johnson & Reynolds, 2008). In this case of the CON analysis, internal validity is represented by congruence. Hence, the assessment of the internal validity and causal relation respectively is built on the congruence between empirical observations and theoretical expectations. External validity refers to the degree to which research can be generalized to population or to a high number of other cases (Yin, 2009). The case study approach and the CON analysis focus on the internal aspect of a certain case but not on the external comparison to a broad number of other cases. This means the case study approach allows for a high internal validity. However, a key disadvantage regarding validity of the case study approach is the fact that it is not possible to generalize the research results to population. But on the other hand, it is possible to generalize to theory (Haverland & Blatter, 2012).

The relevant factor to evaluate the quality of the predictions and empirical observations in the framework of the CON analysis is their concept validity, also referred to as construct validity (Blatter & Haverland, 2012). Concept or construct validity is about “the question whether the (predicted) observations express the meaning of the abstract conceptualization in an accurate manner” (Blatter & Haverland, 2012, p. 166). Thus, construct validity tests to what degree a prediction reflects the actual meaning of a policy mode and to what degree the translation of the underlying policy mode into the predictions allows for general implications from the underlying policy mode. The three predictions of this study qualify for concept validity as key concepts and aspects of the three applied theories are included in the predictions. A key understanding of the rational policy mode is that the base of policy making should be evident

facts and scientific data. Indeed, the rational prediction assesses the impact of the consideration of scientific evaluations on the respective course of action and position of important stakeholders of the fates of the two carbon tax policies. A key concept of the social constructivist policy mode is framing. Accordingly, the social constructivist prediction examines the influence of a potential framing of the two carbon tax policies by important political stakeholders on the position and degree of approval concerning the carbon tax policies among the citizens in BC and AUS. As discussed in Chapter Two the applied punctuated equilibrium framework represents one of the main streams of the institutionalist policy mode. Key concepts of the punctuated equilibrium framework are positive and negative feedback, policy stability and change, and windows of opportunity. Hence, the institutionalist prediction tests the impact of the emergence of negative and positive feedback on the policy continuation in BC and the policy repeal in AUS.

Table 1 Propositions

Rational policy mode	The fates of the two carbon tax policies can best be explained by the rational policy mode if they can be referred to and are based on scientifically proven evident facts.
Social constructivist policy mode	The fates of the two carbon tax policies can best be explained by the social constructivist policy mode if they have mainly been a result of the respective framing of important stakeholders.
Institutionalist policy mode	The fates of the two carbon tax policies can best be explained by the institutionalist policy mode if they are the result of the emergence of negative or positive feedback.

Table 2 Predictions

Rational policy mode	If the rational policy mode is correct, there will be evidence that the respective course of action and position of important stakeholders has been impacted by the consideration of scientific evaluations of the results and impacts of the two carbon tax policies.
Social constructivist policy mode	If the social constructivist policy mode is correct, there will be evidence to show that the respective framing of the carbon tax policies by important political stakeholders of the policy influenced the position and degree of approval concerning the carbon tax policies among the citizens in BC and AUS.
Institutionalist policy mode	If the institutionalist policy mode is correct, there will be evidence that the policy continuation in BC and the policy repeal in AUS were significantly impacted by the emergence of negative (BC) or positive (AUS) feedback. In the case of the emergence of positive feedback, there will be evidence that important political stakeholders used a window of opportunity.

Table 3 Necessary data

Rational policy mode	<p>1. Necessary data: Scientific evaluations and data of the results and impacts of the carbon tax policies on specific factors Measured by: Specific factors: amount of reduced GHG emissions, economic growth (GDP growth), income distribution Sources: Qualitative and quantitative scientific studies</p> <p>2. Necessary data: Evidence about the consideration of scientific evaluations and data of the results and impacts of the carbon tax policies by important stakeholders and the impact of these considerations on their respective position and course of action Measured by: Reference points indicating the reasons for and influences on the respective course of action and position of important stakeholders concerning the carbon tax policies Sources: Newspaper articles, qualitative studies and citizen surveys</p>
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<p>Social constructivist policy mode</p>	<p>1. Necessary data: Evidence whether the specific course of action of important political stakeholders can be seen as framing (a positively or negatively created image of the two carbon tax policies)</p> <p>Measured by: References points indicating that important political stakeholders disproportionately praised/promoted or criticized/neglected the carbon tax policies</p> <p>Sources: Scientific studies and newspaper articles</p> <p>2. Necessary data: Evidence about the impact of a potential framing of important political stakeholders on the stance and degree of approval among the citizens</p> <p>Measured by: Reference points indicating the reasons for and influences on the respective course of action and position of the citizens concerning the carbon tax policies</p> <p>Sources: Scientific studies, newspaper articles and citizen surveys</p>
<p>Institutionalist policy mode</p>	<p>BC:</p> <p>1. Necessary data: Evidence of the emergence of negative feedback</p> <p>Measured by: Reference points indicating:</p> <ul style="list-style-type: none"> - Lack of incentives and/or preference of the citizens and the politicians to change the policy status quo - (Too) strong barriers for citizens to change the policy status quo <p>Sources: Newspaper articles and scientific studies</p> <p>AUS:</p> <p>2. Necessary data: Evidence of the emergence of positive feedback</p> <p>Measured by: Reference points indicating:</p> <ul style="list-style-type: none"> - Existence of window of opportunity for important political stakeholders: respective carbon tax policy and its development represents favorable situation/circumstances to implement their agenda and extend their sphere of influence - Using of potential window of opportunity by important political stakeholders: their specific course of action and position concerning the respective carbon tax policy helped them to increase their sphere of interest and to implement their agenda <p>Sources: Newspaper articles and scientific studies</p>

4 Analysis/Discussion of findings

Chapter Four contains the in-depth analysis of the thesis. Thus, the empirical data derived from the case studies of the carbon tax policies in BC and AUS are compared with the predictions derived from the three chosen policy modes, aiming at either confirming or invalidating the predictions. The prediction of the rational mode (4.1) will be discussed first, this is followed by the social constructivist mode in subchapter 4.2 and the institutionalist policy mode in subchapter 4.3. Lastly in subchapter 4.4, results of the three comparisons between the predictions and the empirical data are combined and discussed in order to assess the relative explanatory power of the three applied theories.

4.1 Rational policy mode

4.1.1 Prediction

If the rational policy mode is correct, there will be evidence that the respective course of action and position of important stakeholders has been impacted by the consideration of scientific evaluations of the results and impacts of the two carbon tax policies.

4.1.2 Evidence

BC:

The assessed important stakeholders in case of BC are the citizens and the Liberal party.

Not only the environmental and economic impacts but also other factors such as distribution of income have been in the focus of several academic studies. Murray and Rivers (2015) conducted an overview about studies analyzing the environmental impacts of the BC carbon tax policy. Seven studies were reviewed which were using two different statistical models (i.a. Elgie & McClay, 2013; Rivers & Schaufele, 2012). In the case of a numerical simulation modeling approach two scenarios are simulated: one scenario with the tax and one without the tax. The difference between these two scenarios represents the effect of the tax policy. In the case of an econometric model, usually a difference-in-difference approach is applied by comparing the results from BC before and after the setting up of the tax policy and with results from other provinces as well. Either the reduction of GHG or the reduction of fossil fuels or both were subject to the measurements in the studies. The reduction of fossil fuels was measured as well because the BC carbon tax aims to decrease GHG emissions by limiting the use of fossil fuels (Elgie & McClay, 2013). Murray and Rivers (2015) conclude that these seven studies show that its tax policy led to a reduction of GHG emissions and fuel consumption by around 5 to 15% in BC. Moreover, some economists describe the introduction of a carbon tax as a “cost-effective” tool to decrease GHG emissions and fear that the tax could have negative impacts on the economy, its competitiveness and employment (Murray & Rivers, 2015, 10). However, in accordance with the studies about the environmental tax impacts, Murray and Rivers (2015) reviewed scientific studies (i.a. Elgie & McClay, 2013; Metcalf, 2015) about the economic impacts of the tax policy and found out that “in summary, empirical evidence

on the effects of the BC carbon tax on economic performance (...) suggests little net impact in either direction” (Murray & Rivers, 2015, p. 12). Comparing relative GDP growth rates before and after the implementation of the tax policy, Metcalf (2015) and Elgie and McClay (2013) observe only very limited differences in economic performance - in the case of Metcalf a little higher performance, in the case of Elgie and McClay a little lower performance.¹ By applying an econometric regression for examining the BC GDP between 1999 to 2013 and also controlling other factors possibly influencing the economic performance Metcalf (2015) suggests there is no statistically significant influence of the carbon tax on the BC economic performance (Murray & Rivers, 2015). Elgie and McClay (2013) compare the amount of GHG emissions, changes in fuel consumption and in GDP between BC and the rest of Canada. The change in GDP in BC between 2008 and 2011 is minimal (about 0.1%) and the BC GDP development was very similar to the rest of Canada. Reviewed literature indicates that the tax feature of the revenue-neutrality and all linked measures were a key factor for a prevention of a negative impact of the tax on the BC economy and for the prevention of significant unequal distributional impacts (Elgie & McClay, 2013; Harrison, 2013; Rodio, 2016). Despite the concern that the tax policy would particularly harm low-income and rural households, evidence suggests that all in all the tax impacts on the distribution of income are small (i.a. Beck, Rivers & Yonezawa, 2016; Lee & Sanger, 2008; Murray & Rivers, 2015).

The next step is to analyze whether the particular stance and support for the BC carbon tax policy by the Liberals and the citizens is mainly influenced and based on their consideration of scientific evaluations about the impacts and results of the tax policy. Firstly, it will be looked at the politicians. An important factor for the introduction of the BC carbon tax policy in 2008 was Premier Campbell’s personal commitment to develop and implement the tax policy and the political institutional structure of BC that allowed him to do so (Harrison, 2013). According to the understanding of the rational choice theory, the main motivation of politicians is being re-elected (Peet & Harrison, 2012). So, to actualize and implement their policy goals, it is required for politicians to stay in office (Peet & Harrison, 2012). The Liberals introduced and since then, maintained the tax. However, evidence suggests that this understanding of the rational choice theory becomes to a certain extent visible in the course of action of the Liberals. Based on the reviewed literature it seems to be the case that the Liberals adapted their degree of attention on and their handling of the carbon tax policy to the respective political and socio-economic circumstances and to the needs of the electorate. For example, in the framework of the election campaign of the provincial elections in 2009 when the major concern of the citizens was the global financial crisis and its impacts, the Liberals emphasized economic stability and the carbon tax policy was only rarely on the agenda. Christy Clark, who replaced Campbell as new Premier of BC in year 2011, kept the carbon tax policy. However, a comprehensive review of the carbon tax was announced in 2012, based on pressure from the business community, party colleagues and the growing competition by NDP and

¹ As stated by Elgie and McClay (2013) and Metcalf (2015), it is important to keep in mind that for solid conclusions a “statistically rigorous assessment” (Elgie & McClay, 2013, 3) is necessary which controls for other factors, besides the impact of the carbon tax policy, possibly influencing the economic performance.

BC Conservative Party. With the upcoming provincial elections in 2013 in mind, the Liberals announced to peg the price per ton at CAD 30 for five years to make concessions for the citizens and make the tax policy more predictable (Harrison, 2013). Based on their significant victory in the election, the Liberals emphasized their engagement for a carbon tax policy not only in BC but also on other jurisdictions (Bailey, 2013). Within the course of time after the introduction of the tax policy, more and more scientific studies were indicating a positive impact and results of the BC carbon tax policy (i.a. Elgie & McClay, 2013; Harrison, 2013).

In terms of the citizens, it was important to examine whether the citizens were influenced by scientific evidence. As already indicated, a significant part of the BC citizens was initially quite skeptical towards the carbon tax policy. However, the approval for the tax policy gradually increased. According to Rabe (2010) the widely-spread initial skepticism among the BC citizens can be referred to a certain degree to the novelty of the carbon tax policy tool and the negatives associations towards the term “tax”. The provincial elections in 2009 in BC represent an important event. Among several experts, the elections were seen as a voting on the carbon tax policy (Murray & Rivers, 2015). However, the Liberals and thus the continuity of the carbon tax were favored by the voters over the opposition party NDP that emphasized an abolishment of this tax. As a result, it can be assumed that the impact of the tax on the election was relatively small. This development can be explained by the occurrence of the global financial crisis as it also had an inevitably impact on BC and entire Canada. Respectively, the economic issues became more important for the voters compared to issue of the carbon tax. With reference to economic issues the electorate preferred the ruling Liberals over the NDP party (Harrison, 2013). According to Harrison (2013) “in the end, the Liberals were saved by the recession, and so was the carbon tax” (p. 15). In contrast to the situation at the end of 2008 and the beginning of 2009, in 2012 the supporters of the carbon tax outweigh the tax opponents nearly by about 50%: 64% supported and 34% refused the tax (EnviroNics Institute, 2014). The reasons for the growing public approval for the carbon tax were not explicitly identified but it can be assumed that this topic has taken a backseat in the mind of the voters and they have adjusted to the tax. The number of articles comprising the expressions “carbon tax” and “British Columbia” in the Vancouver Sun, an important newspaper in BC, decreased from 42 in 2008 to less than ten in the four upcoming years (Harrison, 2013).

AUS:

The assessed important stakeholders in the case of AUS are the citizens and as political stakeholders the government around Julia Gillard (followed by Kevin Rudd) and the Liberal party under Tony Abbott, first as opposition and then as government.

Several econometric studies have been modelling the potential impacts of the AUS carbon tax policies, particularly focusing on environmental, economic and distributional aspects. Furthermore, the first announced and then actually implemented repeal of the tax policy by the Liberals under Abbott caused a significant number of newspaper articles addressing the efficiency and appropriateness of the tax policy.

Reviewing the literature showed that the evaluations regarding the impacts and the efficiency of the tax policy are divided and depend on the focus of the respective analysis. In an econometrical model analysis in 2011 the effects of the then announced AUS carbon tax policy on the AUS economy have been modeled. (Siriwardana, Meng & McNeill). The model estimates the following impacts (in the short run): GDP might decrease by around 0.68%, electricity price might increase by about 26%, GHG emissions decrease by around 12% in the first year, tax introduction and the tax burden expected to affect citizens unequally, low-income households will suffer more. According to the authors, any type of carbon pricing mechanism will probably lead to increasing electricity prices and the anticipated reduced GHG emissions would come “at a modest cost to the economy” (Siriwardana et al., 2011, p. 29) regarding the impact of the tax on the GDP growth. O’Gorman and Jotzo (2014) estimate that the carbon tax will lead to a 10% rise in average of nominal retail household electricity prices and a 15% rise in average of industrial electricity prices between July 2012 and June 2014 compared to two years before the introduction of the carbon tax.

Several sources state that in the time period of the carbon tax policy the total GHG emissions in AUS and the GHG emissions from the electricity sector have been decreasing. Several of these sources indicate that other factors, such as “winding down of parts of Australia’s manufacturing base and energy efficiency initiatives” (Milman, 2014, para. 8) were potentially impacting these emission reductions as well (i.a. Arup, 2013; O’Gorman & Jotzo, 2014; Parkinson, 2015; Milman, 2014). According to McKenzie-McHarg, a climate change program manager at the Australian Conservation Foundation, “yes, there was a lot else happening in this time, but it is an indication that the policy was working” (Milman, 2014, para. 12). Another factor possibly showing an impact is the fact that GHG emissions from the electricity sector have been increasing since the repeal of the tax policy in June 2014 (i.a. Parkinson, 2015; Australian AP, 2015; Taylor, 2014). According to the Cedex Carbon Emission Index (The Australia Institute, 2016) the GHG emissions from the electricity sector increased by 2.4% in 2015 compared to the previous year. Furthermore, the GHG emissions rose from their year’s lowest level by 5.1% compared to the level of June 2014 as the carbon tax was repealed. O’Gorman and Jotzo (2014) have analyzed the impact of the carbon tax on the Australian electricity market between July 2012 and June 2014, basically the whole life cycle of the carbon tax as it was repealed on the 17th of July 2014. O’Gorman and Jotzo (2014) conclude that in the examined time period overall emissions from the electricity sector decreased by 8.2% and the emission intensity of the electricity supply by 4.6% compared to the two years before the implementation of the carbon tax. Despite the issue of identifying the actual impacts of the carbon

tax on observed data changes, the two scientists state that the carbon tax fulfilled its short-term expectations. However, it is stated that a longer, more stable policy framework is required that a carbon pricing instrument can “have its full effect” (O’Gorman & Jotzo, 2014, p. 1).

According to a report of the policy think tank Per Capita (2014) the severe harm on the Australian economy by the tax policy, as predicted by the Liberals, did not happen. As stated by Per Capita the unemployment rate has been below 6% and the Australian economy denoted a steady growth during the time the tax policy existed. In an ABC article from July 2013 Koukoulas concluded that the carbon tax had no significant influence on the macro economy and that the inflation rate remained low despite fears of a rising inflation rate and harmful effects on the economy, reinforced by statements of the Liberals such as that the carbon would “act as a wrecking ball” (para. 8). According to the World Bank (2017a) the annual GDP growth in Australia before, during and after the carbon tax was 2.37% (2011), 3.63% (2012), 2.57% (2013), 2.60% (2014) and 2.42% (2015). These numbers show that after the introduction of the carbon tax in July 2012 the annual GDP growth decreased. However, after the repeal of the carbon tax in July 2014 the GDP growth rate decreased in 2015 too. Based on this development and also as a result of other examined factors it is hardly possible to draw a causal relation between the carbon tax and the Australian GDP growth.

According to the Australian Environmental Department (Department of the Environment, 2014), the repeal of the carbon tax would reduce the annual electricity costs of households from 2014 to 2015 by AUD 200 and the reduced amount for businesses would be even higher under the government of Abbott in 2014. In an economic analysis of the Australian carbon tax Robson (2014) states that the carbon tax did not reduce GHG emissions and led to a strong rise of electricity costs for business and households. According to Robson (2014) the carbon tax policy was “poorly thought through, badly implemented” (p. 35) and already unpopular when it was implemented.

Several reasons for the public disapproval and divided feedback regarding the tax policy were repeatedly mentioned. One factor that was often stated is that Gillard introduced the tax policy despite previously announcing not to do so (i.a. Gelineau & McGuirk, 2013, Wente, 2014). According to Gelineau and McGuirk (2013) the “broken promise triggered protest rallies across the nation and mortally damaged Gillard's government in opinion polls” (para 21). Another point is that many citizens were confused about the actual design and the impacts of the tax policy (i.a. Gelineau & McGuirk, 2013; Per Capita 2012). Based on a survey asking 1442 Australians about their stance to several tax and public spending issues in 2012 the Australian think tank Per Capita observed several misunderstandings about the tax policy among the citizens. 54% of respondents stated that fuel prices have increased resulting from the tax policy despite the fact that the tax does not apply to fuel. 29% of respondents indicated being unsure about how the carbon tax worked. Around half of the interviewed citizens stated to have not been compensated by the government despite 90% of Australian households are actually being compensated

in a certain way (Per Capita, 2012). Furthermore, after the introduction of the tax policy households were faced with significantly higher electricity prices and many citizens attributed the increasing costs to the tax policy (i.a. Gelineau & McGuirk, 2013; Per Capita, 2014; Wentz, 2014). In a survey conducted by the Australian policy think tank Per Capita in 2014, the “most contested element of the public debate around the carbon tax” (p. 23) consisted in possible impacts of the tax policy on electricity and living costs. In the framework of the survey the citizens (n=1445) have been asked how much their living costs have been increased as a result of the tax policy. The major part of the respondents (22.6%) stated the amount of AUD 20-50 per week, followed by (17.8%) saying with less than AUD 20 per week.

As already discussed in Chapter Two, public opinion towards the tax policy was divided and led to significant disapproval from then opposition parties and several interest groups. As previously mentioned the Liberals under Abbott heavily criticized the tax policy and its impacts. Reviewing the literature shows that Abbott and the Liberals based their critique to a large extent on factors such as increased electricity prices, certain distributional inequalities and others which potentially can be impacted by the tax policy. However, it seems that Abbott and the Liberals often used exaggerated statements or explained observed developments in their favor (i.a. Taylor, 2014). For example, the Liberals said the carbon tax achieved only minor emission reduction while leading to a high burden on the Australian economy and increasing electricity households’ bills (Milman, 2014). More specifically, environment minister Greg Hunt stated that the major part of the small amount of reduced emissions reductions was due to a decreased demand in electricity resulting from a loss of key manufacturing industry sectors under the Labor government. Furthermore, he attributed the small emissions reductions to the observation that electricity consumption has already been decreasing before the introduction of the tax policy and would continue decreasing after the end of the tax (Milman, 2014). Taylor (2014) describes Abbott’s election campaign in 2014 including his approach towards the carbon tax policy as “strong on rhetoric and light on detail” (para. 6).

4.1.3 Confirmation or disconfirmation

The analysis did not find enough evidence to confirm the prediction about the role of the consideration of scientific evaluation on the respective course of action and position of important stakeholders in BC in AUS.

In BC, a significant impact of the consideration of scientific evaluations of positive impacts and results of the BC carbon tax policy on the support and maintenance of the tax policy by the Liberals and the increasing approval among the citizens cannot be confirmed.

In AUS, evidence suggests that the citizens’ stance towards the carbon tax was more influenced by the behavior and communication of the Gillard government than by negative scientific evaluations of the carbon tax policy. Abbott and the Liberals link their statements to factors that could have been impacted

by the tax policy, however, these statements cannot be really scientifically validated and seem to be exaggerating.

4.2 Social constructivist policy mode

4.2.1 Prediction

If the social constructivist policy mode is correct, there will be evidence to show that the respective framing of the carbon tax policies by important political stakeholders of the policy influenced the position and degree of approval concerning the carbon tax policies among the citizens in BC and AUS.

4.2.2 Evidence

BC:

The assessed important political stakeholders in the case of BC are the Liberals.

As already stated, after its introduction the carbon tax policy was not very popular among the BC citizens. In this context, it is argued that the tax policy could last because Campbell strongly linked his political career to the carbon tax policy (Harrison, 2013; Palmer 2009). According to Palmer (2009), Campbell not only faced opposition towards the tax policy by the electorate but also by members from his own party as he told them he would resign if the tax was repealed. Palmer (2009) states that the tax policy “would never have survived the initial backlash without one stubborn leader using his power to keep it alive” (para. 23). Concerning the criticism from the electorate, it was interesting to assess the Liberal’s stance and administration of the carbon tax issue with respect to the provincial elections in BC in 2009. With regard to the world economic crisis and the focus of the electorate on the economy, the Liberals emphasized topics such as economic stability and confidence. The topic of the carbon tax policy received only limited attention and was rarely mentioned. In 2011, Christy Clark became the new Liberal BC Premier. The leadership change could have been the chance for a policy shift regarding the carbon tax policy. Under Clark the planned increase of the carbon tax price in 2012 was implemented, “but neither did she (Clark) commit to the fate of the tax thereafter” (Harrison, 2013, p. 17). Increasing support by the citizens for the NDP and the BC Conservative Party and pressure from own party colleagues led Clark to undertake a comprehensive review of the carbon tax and first concessions towards the business community in the context of competitiveness issues. At a party convention of the Liberals in 2012 around 75% of the Liberals voted in favor of keeping the tax (MacLeod, 2012). According to Harrison (2013) and MacLeod (2012) this can be seen as an increasing dependence on the tax policy as revenue stream. The carbon tax policy became again a significant factor in the provincial elections in 2013. In contrast to the elections in 2009, the NDP emphasized an extension of the tax policy whereas the Liberals planned to peg the price at CAD 30 per ton for the upcoming five years to make concessions to the citizens and make the tax more convenient for the electorate. Motivated and affirmed by the victory in the provincial elections in 2013, the Liberals focused their engagement for a carbon tax not only on BC

but also on other Northern American jurisdictions. Emphasizing the positive development of the BC carbon tax the Liberals tried to convince other Northern American regions to apply carbon pricing mechanism as stated by BC Environment Minister Mary Polak (Bailey, 2013).

Evidence suggests that the administration and the degree of consideration of the subject by the Liberals cannot be described as clear positive framing. Accordingly, a systematic framing of the BC carbon tax policy by the Liberals could not have been an important factor for the approval among the BC citizens. As indicated in the analysis about the rational policy mode, it seems that external factors such as the world economic crisis and its impacts and the simple adjustment to the tax policy within the course of time were more decisive for the approval rates among the BC citizens.

AUS:

The assessed important political stakeholders in the case of AUS are particularly the government around Julia Gillard and then Rudd and the Liberal party under Tony Abbott, first as opposition and then as government.

In 2014, Canadian economist Sheikh (2014) criticized statements and the general attitude of Abbott and then Canadian Premier Harper that carbon taxes would generally harm economies and would not automatically have beneficial environmental effects. Sheikh (2014) claims that Harper and Abbott would repudiate economic theory about environmental taxations which has been comprehensively studied for decades. Sheikh (2014) concludes that “perhaps, the two prime ministers know of empirical evidence that economists have ignored” (para. 1). According to Milman (2014), Abbott and the Liberals argued that the carbon tax policy did not fulfil its purpose. Furthermore, it is stated that Abbott and the Liberals claimed that the small amount of reduced GHG emissions must be rather attributed to other factors including the falling energy demand that has already been decreasing for several years before the tax implementation. As stated by Meng, Siriwardana and McNeill (2014) the impacts of the tax policy, according to Abbott and the Liberals, are “large economic contraction, high unemployment, higher electricity prices and the demise of the coal industry” (p. 16). According to Rootes (2014) the Liberals under Abbott significantly criticized and opposed the Gillard government and described the Gillard government as “the worst Australian government ever” (p. 166). According to an ABC article from July 2013 Abbott stated that the carbon tax will “act as a wrecking ball across the economy” (Koukoulas, 2013, para. 8). Rootes (2014) argues that the Liberals’ strong criticism of the carbon tax policy could be explained by the assumption that “Abbott simply opportunistically wielded the stick gifted him by Labor’s prevarication over the issue” (p. 171). According to Taylor (2014) the Liberals described the economic burden of the tax policy as “almost unimaginable” (para. 19). Taylor (2014) argues that in the framework of Abbott’s election campaign in 2013 and in his critical approach towards the tax policy the focus was rather on a strong rhetoric and a simplification of the subject than on its actual content and realistic policy strategies.

As already discussed in the analysis of the rational policy mode several reasons are perceived as influential for the low or only mixed feedback among the citizens. However, three factors have been repeatedly mentioned among scholars and journalists: the introduction of the tax policy by Gillard government despite promising not to do so, public misunderstanding and confusion about the mechanism and impacts of tax policy and the anticipated influence of the tax policy on rising electricity costs. Based on the reviewed literature it is possible that the critique and significant opposition of Abbott and the Liberals have reinforced these factors as their critical statements about the tax policy have been addressing these points as well. Relating to the three above mentioned points, evidence suggests that the mixed or low public feedback for the tax policy and also generally for the Gillard government and the defeat in the federal elections in 2013 can rather be attributed to the political actions and communication of the Gillard government itself than to the actions of the Liberals and particularly their criticism towards the tax policy (i.a. Taylor, 2014; Bailey, MacGill, Passay & Compston, 2012).

Generally, it seems to be the case that the public approval of the tax policy and the approval for Gillard and her government were significantly linked. According to Robson (2014) the carbon tax policy represented one of the key topics in the federal elections in September 2013. Rootes (2014) argues that the tax policy has not been specifically emphasized in the election campaigns of the federal elections in September 2013 of Rudd and Abbott. However, Abbott has been significantly criticizing the carbon tax policy during Gillard's government and also Rudd's plan to accelerate the transition of the carbon tax into a cap-and-trade system. Furthermore, during the last week before the elections Abbott described the election as a "referendum on the carbon tax" (Rootes, 2014, p. 170). Taylor (2014) summarizes the explanation for the victory of the Liberals in the 2013 federal election and subsequent repeal of the tax policy in 2014 as "Labor having rendered itself unelectable, a strong majority of voters chose to hope for something better" (para. 6). Two days before the federal elections in 2013 Gelineau and McGuirk (2013) anticipated that the presumptive defeat of the Labor party in the elections would be mainly due to the unpopularity of the carbon tax policy among the citizens. Bailey et al. (2012) assume that in case of a repeal of the carbon tax policy "shortcomings in two key political strategies - communication and political leadership - will again have contributed to the failure to sustain a carbon price." (p. 708).

4.2.3 Confirmation or disconfirmation

The prediction about the influence of a potential framing by important political stakeholders on the position and degree of approval concerning the carbon tax policy among the citizens in BC and AUS can only be confirmed to a very limited degree.

Based on the analysis, it can be concluded that the maintenance of the BC carbon tax policy by the Liberals cannot be identified as strategic positive framing. It seems that the Liberals - first under Campbell, then Clark - could maintain the policy but rather adjusted their handling of and degree of attention on the tax policy to the specific political and socio-economic situation and the needs of stakeholders.

Evidence suggests that the growing approval for the carbon tax policy among the citizens is mainly due to the fact that the citizens got used to the tax in the course of time and did not paid a lot of attention to the topic.

In AUS, evidence suggests that the Liberals under Abbott systematically and purposely framed the carbon tax policy in a negative way. By contrast, evidence suggests that the Gillard government was not able to effectively communicate and promote the carbon tax policy among the citizens. Thus, the promotion and communication of the carbon tax policy by the Gillard government cannot be seen as positive framing whereas it seems that an adequate and systematic positive communication and promotion would have been needed to make the tax policy more popular and understandable. Evidence suggests that the lack of an effective and adequate positive framing of the AUS carbon tax policy by the Gillard government was more influential for the mixed or low public approval concerning the carbon tax policy and the defeat of the of the Gillard government in the federal elections in 2013 than the negative framing by Abbott and the Liberals.

4.3 Institutional policy mode

4.3.1 Prediction

If the institutional policy mode is correct, there will be evidence that the policy continuation in BC and the policy repeal in AUS were significantly impacted by the emergence of negative (BC) or positive (AUS) feedback. In the case of the emergence of positive feedback, there will have been evidence that important political stakeholders used a window of opportunity.

4.3.2 Evidence

BC:

As already identified in the analysis about the social constructivist policy mode, it seems to be the case that the handling of the carbon tax policy by the Liberals cannot really be described as a continuous exaggerated positive framing. It rather seems that the tax policy gradually became a stable component of their party program. Depending on the specific political or economic situation, the Liberals adjusted their handling of the carbon tax policy, e.g. to the provincial elections in 2009 and 2013. In this context, the question arises whether there have been incentives and motivations of the Liberals to change the status quo of the policy. With respect to the understanding of the rational choice theory that the main motivation by politicians is to get re-elected, it can be assumed that the Liberals had no significant incentives to repeal the carbon tax policy as the factors possibly speaking for a tax repeal were not significant enough compared to the benefits of keeping the tax. However, there are indications that the Liberals adjusted their administration of the carbon tax policy to the political and socio-economic situation to keep both the tax policy and to address the needs of the electorate. The span of the carbon tax policy under Premier Campbell from 2008 to 2011 was strongly marked by his leadership and personal

engagement for the tax policy. Despite considerable opposition among the citizens and even from party colleagues, Campbell held on to his position. With respect to the criticism among his party colleagues, Campbell announced that he would withdraw in case of an abandonment of the tax policy by the Liberals (Palmer, 2009).

In the pre-election time period in 2009, the topic of the carbon tax policy was mentioned rarely by the Liberals. Instead, their focus was clearly on economic stability and confidence, knowing the voters' fears and insecurities regarding the world economic crisis. In 2011, Christy Clark became the new Liberal Premier of BC. This transition could have been an opportunity for a significant policy shift of the carbon tax, as so far, the tax policy was closely associated with Campbell. The political institutional structure of BC would allow the new Premier to alter the status quo of the policy. Clark maintained the tax policy but in 2012 a comprehensive review of the carbon tax was announced, based on pressure from the business community, party colleagues and the growing competition by NDP and BC Conservative Party. In view of the upcoming provincial elections in 2013, the Liberals announced to peg the price per ton at CAD 30 for five years to make concessions for the citizens and make the tax policy more convenient (Harrison, 2013). Supported by a clear victory the Liberals emphasized their engagement for a carbon tax policy not only on BC but also on other Northern American jurisdictions (Bailey, 2013). Despite the announcement of the revenue neutrality in 2012 the revenues from the tax policy contributed with 3% to the provincial budget. Thus, this can be seen as another factor for the Liberals for maintaining the tax policy.

In a next step, the analysis will turn to the citizens. Similar to the situation of the Liberals, the citizens had incentives and occasions to redirect their stance but limited influence to modify the status quo of the policy. In the provincial elections in 2009, the electorate could have voted for the NDP most likely this would have led to a repeal of the tax policy. However, the Liberals in combination with a maintenance of the carbon tax policy were favored. Despite the initial opposition and criticism towards the tax policy among the citizens, the approval for the tax policy increased within the course of time. As it was difficult to identify the explicit reasons for the growing tax approval, several studies assume that the citizens might just adapted gradually to the carbon tax and did not pay much attention to the topic (i.a. Harrison, 2013; Murray & Rivers, 2015). Another factor suggesting that the BC citizens adapted to the carbon tax policy citizens can be seen in the fact that the NDP aligned its approach towards the tax policy with the one of the Liberals in the framework of the election campaign for the provincial elections in BC in 2013 (Murray & Rivers, 2015).

AUS:

As already stated in the background chapter, the topic of climate change mitigation measures and carbon pricing instruments have been a sensitive topic in AUS for several years and the carbon tax policy under Gillard has mostly received only mixed or low public approval (i.a. Bailey et al., 2012). Based on the

analysis of the two other policy modes it seems to be the case that the approval rates of the carbon tax and the approval rates for Gillard have been considerably linked. Evidence suggests that particularly three factors have been decisive for the overall critical stance towards the Gillard government and the tax policy among the citizens: lack of adequate communication and explaining of the mechanism and impacts of the tax policy by the Gillard government leading to misunderstanding and confusion among the citizens, the introduction of the tax policy by Gillard government despite promising not to do so, and the anticipated influence of the tax policy on rising electricity costs. With respect to the upcoming federal elections in September 2013 it seems that several factors have been beneficial for Abbott and the Liberals: the rather low support for the carbon tax policy among the citizens and the overall low support for the government under Gillard and then under Rudd.

As previously discussed, the time period before the federal elections in September 2013 seems to have been quite beneficial for Abbott and the Liberals. With respect to the upcoming federal elections the Liberals were naturally aiming to win the elections and increasing their sphere of influence. In order to confirm or disconfirm the prediction it is necessary to assess whether the Liberals used the assumed window of opportunity and acted as policy entrepreneurs or whether other factors have been more decisive for their victory. As identified in the analysis about the social constructivist policy mode evidence suggests that Abbott and the Liberals have negatively framed the carbon tax policy and the general government under Gillard. Based on the reviewed literature it seems that Abbott and the Liberals tried to present an alternative to the Gillard government and the carbon tax policy. Thus, based on the low feedback for the Gillard government and the carbon tax it was an overall convenient situation for Abbott and the Liberals to develop a contrarious policy program which considered the overall attitude among the citizens. Ultimately, the Liberals won the elections. It can be concluded that the Liberals used the window of opportunity and adapted their policy program to the overall public opinion of the carbon tax policy and the Gillard government. However, based on the analysis of the rational and the social constructivist mode evidence suggests that the behavior and actions by the Gillard government were more influential for the overall rather critical public feedback for the Gillard government and the tax policy than by the actions and approach of the Liberals (i.a. Taylor, 2014; Bailey et al., 2012).

4.3.3 Confirmation or disconfirmation

Based on the conducted analysis the prediction about the influence of positive or negative feedback on the fates of the carbon tax policies in BC and AUS cannot be confirmed completely but instead to a considerable degree.

The reviewed literature indicates the emergence of negative feedback and the continuation of the BC carbon tax policy is strongly impacted by the emergence of negative feedback. It seems to be the case that there were incentives and occasions to alter the status quo of the tax policy. These incentives were for example the initial opposition among the citizens, the growing opposition by the business community

and party internal pressure. Examples for occasions to redirect the policy status quo are the provincial elections in 2009 and 2013 and the transition from Campbell to Clark as Liberal Premier. However, it seems that these incentives were not significant enough. Thus, the Liberals preferred to maintain the tax policy, the status quo, and to only slightly modify the policy approach. Within the course of time, according to Harrison (2013) “it has become easier to keep the existing tax than to risk renewed public ire by replacing it” (p. 3).

Based on the increasing public approval of the carbon tax policy, it seems to be the case that the citizens had no significant incentives or motivations to change the status quo, thus their approval towards the tax policy. Academics rather assume that the citizens got used to the tax and did not pay much attention to the topic. Despite the strong opposition among the citizens in the initial phase of the tax, the barriers for a change of the status quo of the tax policy with regard to the provincial elections in 2009 were too high. The program of the Liberals regarding the global economic crisis in combination with a maintenance of the tax policy were preferred compared to the NDP which emphasized a repeal of the tax policy. Thus, the implications of the world economic crisis were more decisive than the topic of the tax policy.

Looking at the AUS carbon tax policy, the impact of the emergence of positive feedback on the discontinuation of the policy can only be confirmed partially. Evidence suggests that the rather low support for the AUS carbon tax policy and the Gillard and then Rudd government and generally sensitive topic of carbon pricing instruments in AUS were beneficial for the Liberals under Abbott and can be seen as a window of opportunity for the Liberals, particularly with respect to the upcoming federal elections in September 2013. Evidence suggests that Abbott and the Liberals used the window of opportunity by representing themselves as an alternative to the Gillard government by responding to the low and mixed approval of the carbon tax policy and the Gillard government among the citizens. However, evidence suggests that the election result was rather a vote against the Gillard government than a vote for Abbott and the Liberals. In other words, the Liberals were able to win the election and later to repeal the carbon tax and to increase their sphere of interest, but this was mainly a result of the course of action of the Gillard government and not a result of the course of action of the Liberals under Abbott themselves.

Looking at the Gillard government it seems that the overall situation represented only a small window of opportunity. Due to the result of the federal election in August 2010 and the required support of one Green MP, Gillard agreed to introduce a carbon-pricing instrument. The Gillard government had the chance to try to effectively communicate and promote the carbon tax among the citizens. Potentially, this could have led to higher public approval rates of the Gillard government and the avoidance of the defeat in the federal elections in 2013 and by this the loss of power. However, it is important to keep in mind that the carbon pricing instruments generally have been a sensitive topic in AUS for a long time.

Furthermore, the carbon tax has only been one among several important factors impacting the elections results in 2013.

4.4 Discussion of findings

Based on the conducted analyses the suitability and strength of the three policy theories to explain the differing fates of the carbon tax policies in BC and AUS will be discussed. Following the structure of the CON analysis, the policy mode with the strongest prediction ought to be the one with the highest explanatory power. In the following part of the chapter, the confirmation or disconfirmation of the predictions and their implications on the explanatory power of the three policy modes will be discussed. At first, the rational policy mode will be discussed, followed by the social constructivist and then the institutional policy mode.

4.4.1 Rational policy mode

The analysis about the rational prediction did not find enough evidence to confirm the prediction. Based on the conducted analysis a significant impact of the consideration of scientific evaluations of the results and impacts of the carbon tax policies on the respective course of action and position of important political stakeholders cannot be confirmed. Altogether, the prediction can only contribute to a limited degree to the explanatory power of the rational policy as the prediction cannot be confirmed to a large degree.

4.4.2 Social constructivist policy mode

The analysis of the evaluation of the social constructivist prediction shows a very similar result as the one of the rational prediction. The reviewed literature does not contain sufficient evidence to confirm the prediction. Therefore, the prediction can only contribute to a very limited degree to the explanatory power of the social constructivist policy mode.

4.4.3 Institutional policy mode

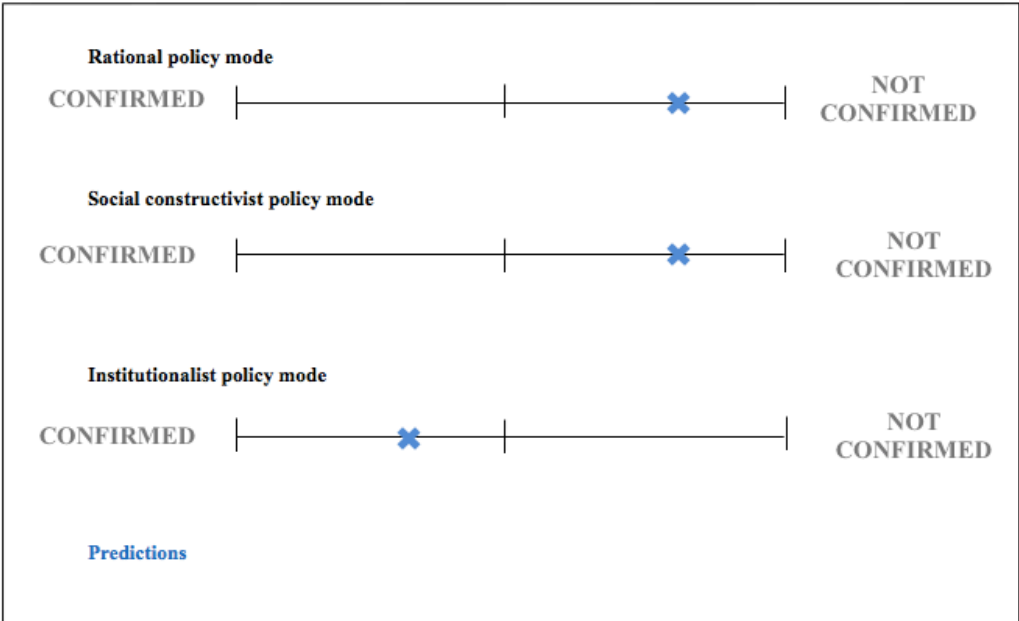
Due to the conducted analysis, the prediction about the influence of positive or negative feedback on the fates of the carbon tax policies in BC and AUS cannot be confirmed completely but to a considerable extent. Evidence suggests that the emergence of negative feedback had a strong impact on the policy continuation in BC. The impact of the emergence of positive feedback and the using of a window of opportunity by important political stakeholders on the policy discontinuation in AUS can only partially be confirmed. As a result of the fact the prediction can be confirmed to a considerable extent, the prediction is able to contribute to the explanation power of the institutionalist policy mode.

4.4.4 Policy mode with the highest explanatory power

The aim of the analysis was to test the predictions about the fate of the carbon tax policies in BC and AUS which have been derived from the rational, the social constructivist and the institutionalist policy

mode. For both carbon tax policies, a prediction has been derived from each public policy mode. The aim of this master thesis is to identify the theory that can explain best the differing fates of the AUS and BC carbon tax policies. In the framework of the analysis the predictions have been tested and afterwards the results have been discussed. As discussed in chapter 4.2 the different levels of congruence between the predictions and the empirical data derived from the two cases are the base for the confirmation or disconfirmation of the predictions and consequently the explanation power of the three different policy modes.

Figure 1 Approximation of the level of confirmation of the predictions



Source: Own elaboration

Figure 1 shows an approximation of the level of confirmation of the predictions of the three policy modes. The blue markings indicate the level of confirmation. As figure 1 illustrates, the prediction of the institutionalist policy mode was clearly confirmed to a larger extent than the prediction of the rational and the social constructivist mode. The level of confirmation of the predictions of the social constructivist and the rational policy mode is nearly the same. The level of congruence between the prediction and the empirical data derived from the two cases is higher for the institutionalist policy mode than for the rational and the social constructivist policy mode. Therefore, it can be concluded that the institutionalist policy mode has a higher explanatory power for the differing fates of the BC and AUS carbon tax policy than the rational and the social constructivist policy mode.

5 Conclusion

The final chapter represents the conclusion of this study. Firstly, the main research question and the sub research questions of this thesis will be answered. This is followed by discussing research limitations of the study as well as theoretical implications derived from the analysis. Finally, policy and academic implications of the master thesis will be assessed.

5.1 Answers to sub research questions and main research question

The aim of this study is to identify the theory with the highest explanation power for the differing fates of the AUS and BC carbon tax policy. A CON analysis has been chosen as research design to assess whether the rational, the social constructivist or the institutional policy mode can explain best the differing fates of the two carbon tax policies. Propositions have been established on the base of the three theories. Then the propositions have been developed into testable predictions. To assess the explanation power of the three theories for the differing fates of the two carbon tax policies, the analysis assessed to what degree the different predictions could be confirmed. In the following, the four sub research questions of the thesis will be addressed and eventually the main research question will be answered.

Sub research question 1: *Which elements of the three applied theories are relevant to analyze the differing fates of the carbon tax policies in AUS and BC?*

Based on the reviewed literature certain elements and concepts of the rational, the social constructivist and the institutionalist policy have been identified of being relevant and adequate to describe and analyze the differing fates of the carbon tax policies in BC and AUS. In the framework of the rational policy mode it was assessed that it should be tested to what extent the policy continuation in BC and the policy discontinuation in AUS can be referred back to evidence derived from policy evaluations and scientifically proven evident facts. With regard to the social constructivist policy mode, the concept framing was emphasized to analyze the differing policy fates. In this context, especially the active framing and interpretation of the topic carbon tax by important political stakeholders were examined. Concerning the historical equilibrium framework (institutionalist policy mode), the concepts window of opportunity and positive and negative feedback are relevant to analyze the differing policy fates. In the case of AUS, it was examined whether important political stakeholders used windows of opportunity to change the status quo and to implement their agenda. In the case of the BC carbon tax policy, it was analyzed whether the policy stability was impacted by the emergence of negative feedback. In the case of AUS carbon tax policy, it was analyzed whether the policy repeal was impacted by the emergence of positive feedback, triggered by important political stakeholders using a window of opportunity.

Sub research question 2: *How can the rational policy mode explain the continuation of the carbon tax policy in BC and the non-continuation in AUS?*

The analysis about the prediction of the rational policy mode did not find enough evidence to confirm the prediction. Therefore, the prediction can only contribute to a very limited degree to the explanatory power of the rational policy. It can be concluded that the rational policy mode is not a suitable policy mode to explain the differing fates of the two carbon tax policies.

Sub research question 3: How can the social constructivist policy mode explain the continuation of the carbon tax policy in BC and the non-continuation in AUS?

The prediction of the social constructivist policy mode could not be confirmed. Hence, the prediction can only contribute to a very limited degree to the explanatory power of the social constructivist policy mode. As the rational policy mode, the social constructivist policy mode is not an appropriate policy mode to explain the differing fates of the carbon tax policies.

Sub research question 4: How can the institutionalist policy mode explain the continuation of the carbon tax policy in BC and the non-continuation in AUS?

In contrast to the predictions yielded by the rational and social constructivist policy modes, the institutionalist prediction can be confirmed to a considerable extent. Hence, it can be concluded that the institutionalist policy mode is suitable to explain the differing fates of the two carbon tax policies in BC and AUS. The institutionalist theory elements of positive and negative feedback were applied to assess the capability of the institutionalist policy to explain the policy continuation in BC and the policy discontinuation in AUS.

Evidence suggests that the emergence of negative feedback has considerably impacted the continuation of the carbon tax policy in BC. It seems that there existed incentives and opportunities for the BC government and the citizens to alter the status quo of the tax policy. However, it seems that these incentives were not significant enough and the barriers to change the status quo of the policy too high. The influence of the emergence of positive feedback on the repeal of the carbon tax policy in AUS could only be confirmed partially. The analysis suggests that Abbott and the Liberals tried to use a window of opportunity and act as policy entrepreneurs. By heavily criticizing and promising to repeal the carbon tax policy, Abbott and the Liberals positioned themselves as an alternative to the then government under Gillard and subsequently Rudd, the initiators of the carbon tax. Notwithstanding, evidence suggests that the result of the AUS federal elections in September 2013 was rather a vote against the Gillard government than a vote for Abbott and the Liberals. The Liberals used the window of opportunity - which represents another element of the institutionalist policy mode - in the sense that they could win the election and by this increase their sphere of interest. However, this was mainly a result of the course of action on the side of the Gillard government, and not of the specific actions of the Liberals under Abbott. The analysis indicates that the AUS government under Gillard and then Rudd did not efficiently use the carbon tax policy in order to increase their sphere of influence and, thereby, to act as policy entrepreneurs. The Gillard government could have tried to effectively communicate with and promote the carbon

tax among the citizens. Potentially, this would have led to higher public approval rates for the Gillard government and, therefore, the avoidance of the defeat in the federal elections in 2013 and by this the loss of power.

***Main research question:** How can the different fates of the carbon tax policies in BC (continuation) and AUS (non-continuation) be explained best?*

Based on the conducted analysis it can be finally concluded that the differing fates of the BC and AUS carbon tax policy can be explained best by the institutionalist policy mode compared to the rational and the social constructivist policy mode. As discussed in subchapter 5.4.4, this conclusion results from the fact that the prediction of the institutional policy could have been confirmed to a larger degree than the prediction of the rational and the social constructivist policy mode.

5.2 Research limitations

One proposition and one prediction respectively according to each of the three policy modes have been applied for the research. One weakness of the study is that for each of the three applied policy modes only one prediction has been established and tested. A higher number of propositions for each theory enables to assess the explanation power of the respective theory for the analyzed case in a more detailed way.

Another research limitation of the study is that the stakeholder of the group business community has not been included in the analysis. Despite being an important stakeholder of carbon tax policies, it was decided to only focus on the stakeholder groups of the citizens and political actors. This is mainly due to the limited scope and time frame of this master thesis.

As the number of existing carbon taxes is relatively small so far, the academic attention on the case of established carbon tax policies is limited. The AUS carbon tax policy is the only repealed carbon tax policy so far. Therefore, the body of literature about factors leading to either the continuation or discontinuation of established carbon tax policies is very limited or non-existent. In this context, it was not possible to compare the results this master thesis with other studies that address factors leading to either the continuation or discontinuation of established carbon tax policies.

It can be concluded that overall the scope and available time of this study were limited. Notwithstanding, the general topic of introducing carbon tax policies and the specific case of the differing fates of the AUS and BC carbon tax policy imply several further avenues of research which will be discussed and recommended in the final part of this chapter.

5.3 Theoretical implications

As discussed in Chapter Three, a CON analysis is mainly used either to contribute to the scholastic debate about the relevance of competing theories or to explain one or several socially important special cases. In this study, the latter mainly applied. The central aim of this thesis was, then, to identify a suitable policy mode to explain the differing fates of the carbon tax policies in BC and AUS. Thus, the

research focus lied on the explanation of the cases and not on the determination of the relevance and explanatory power of the three applied policy modes. However, by applying the three theories the potential of the three theories to explain different policy fates was tested. Notwithstanding, it is important to analyze this potential of the three theories in the specific context of the assessed policies, in this case the carbon tax policies in BC and AUS.

Based on the conducted analysis it was concluded that the institutionalist policy mode is more suitable to explain the differing fates of the AUS and BC carbon tax policies than the rational and the social constructivist policy mode. In this context, it can be assumed that the institutionalist policy mode is a relevant and suitable policy mode to assess and explain the policy development of implemented carbon tax policies. In contrast, the rational and social constructivist policy modes were identified as not relevant to examine the fate of established carbon tax policies. To affirm the result of this thesis regarding the relevance of the three applied theories for explaining the fates of established carbon tax policies, more studies are needed. The focus of this study was particularly on determining factors leading to different developments of established carbon tax policies such as policy continuation and policy discontinuation.

5.4 Policy implications

The conclusion that the institutionalist policy mode is more suitable to explain the two differing policy fates than the rational and the social constructivist policy modes leads to the identification of important policy implications concerning the fate of established carbon tax policies.

In the case of the BC carbon tax policy, the analysis and identification of the institutionalist policy mode having the highest explanatory power was relatively clear compared to the other two policy modes. Evidence suggests that the particular behavior and actions by the electorate and the Labor government regarding the carbon tax policy can be ascribed to the emergence of negative feedback. Besides the several opportunities and incentives to change the status quo of the carbon tax policy, it seems that these incentives were not significant enough and the barriers too high for the Liberal government and the citizens to change the status quo. The Liberal government, first under Campbell and then under Clark, could maintain the carbon tax policy from the implementation of the carbon tax policy until 2017 when the Liberals in the government have been replaced by a minority coalition of the NDP and the Greens. Overall, the Liberal generally adjusted their administration of and extent of attention to the carbon tax policy to the specific political and socio-economic situation and the needs of stakeholders such as the citizens and the business community. The analysis concluded that after an initial strong public position towards the tax policy the BC citizens got used to the carbon tax within the course of time and the topic lost in importance for the electorate.

In the case of the AUS carbon tax policy, the result of the analysis was not as distinct as the one of the BC carbon tax policy. The analysis found sufficient evidence to confirm that Abbott and the Liberals

used the window of opportunity of the predominantly critical stance towards the AUS carbon tax policy and the Gillard government in combination with the upcoming federal elections in 2013. However, evidence suggests that the communication and administration of the carbon tax policy by the Gillard and the Rudd government was more pivotal for the repeal of the tax policy than the negative framing of Abbott and the Liberals.

It can be concluded that an adequate communication and explanation about the mechanism and the impacts of the carbon tax policy on key stakeholders, such as citizens and companies, is significant for the policy actors in charge to successfully maintain a carbon tax policy. Furthermore, the implication can be drawn that respective policy stakeholders should strategically adapt their program and degree of attention of the carbon tax policy to the respective needs of the citizens and the particular socio-economic situation.

In order to address climate change and particularly to fulfill the Paris Agreement diverse instruments and policies, including carbon pricing instruments such as carbon taxes and cap-and-trade systems, will be applied (World Bank, 2016). The growing importance of carbon pricing instruments can be derived from the increasing number of jurisdictions already applying or planning to implement carbon pricing instruments. The AUS carbon tax policy is the only one that has been repealed so far. The example of the carbon tax policy in AUS showed the difficulties of maintaining a carbon tax policy. In order to promote the development of carbon taxes and to improve the administration of established carbon tax policies, it is important to learn from cases both of maintained and repealed carbon tax policies.

5.5 Academic implications

Due to the complexity of the analyzed cases, the differing fates of two carbon tax policies in two different countries, three theories have been chosen to cover a broad variety of factors possibly impacting the differing fates of the policies. The differing fates of the BC and the AUS carbon tax policy presents an attractive object to study as the BC carbon tax policy is generally seen as one of the most successful carbon tax policies and the AUS carbon tax policy is the only carbon tax policy which has been repealed so far. To allow a more comprehensive analysis of the differing fates of the two assessed carbon tax policies covering a broader variety or other factors possibly impacting the differing fates, other policy theories could be applied to analyze the same case.

Further studies could assess factors impacting the continuation and discontinuation of established carbon tax policies due to several reasons. The topic of carbon pricing instruments and carbon taxes respectively is increasingly becoming more important. Furthermore, the number of implemented carbon taxes is growing. However, the number of studies about the fate of established carbon taxes is limited. Particularly there is a significant lack of studies addressing factors leading to a continuation or discontinuation of established carbon taxes. In order to prevent further repeals of and improve the administration of

established carbon tax policies, it is crucial to analyze factors impacting a continuation or discontinuation of an established carbon tax and consider the lessons learnt.

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