

# C40 MEMBERSHIP IN AMSTERDAM

## WHO BENEFITS?



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Who Benefits?

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# Preface

This thesis is written as part of the MSc International Development Studies at Wageningen University & Research, under coordination of dr. ir. Jeroen van der Heijden. It provides findings to the research question 'How and to what extent does Amsterdam benefit from C40 membership?'.

The findings of this study might be relevant for cities similar to Amsterdam or for climate networks comparable to C40 in terms of their exclusive character. The research could be of special interest to people engaged with C40 in cities. Local policymakers, for instance, could benefit from the findings in deciding whether to join a city network. The research also provides insights for C40 staff as to how one of its member cities perceives and uses the network. Lastly, the research can be of interest for scholars researching the relevance and use of city networks in taking climate action.

On a personal level, I quite enjoyed performing this research. I have learnt a lot from for instance interviewing high-level C40 staff. Although I did experience different difficulties in every stage of the research, I am quite satisfied with the result.

I hope you enjoy your reading!

Emmeliën Venselaar  
Wageningen, 28-03-2018

# Abstract

**Background |** Partly because of the criticism on the way national governments tackle climate change, city networks are applauded and as a new revolutionary governance mechanism. To what extent one such a climate club, the Cities Climate Leadership Group 'C40', succeeds in this enterprise is however unclear. To research this, this study takes the viewpoint of C40's member city Amsterdam by taking a club theory perspective.

**Methods |** Insights as to how Amsterdam benefits from and uses its C40 membership were obtained via semi-structured interviews with respondents engaged with C40. A potential contribution to research on climate networks and on C40 has been made by getting access to up until now private C40 documents and information on membership costs and participation standards.

**Results |** Amsterdam considers the benefits that come with C40 membership as very positive. Amsterdam became a C40 member for exchanging information with other cities, but does not actively use the network to do this. After a brief comparison of Amsterdam's experience to Rotterdam's experience, the results suggest that Amsterdam could get more out of its C40 membership if it would become more active in the network. This suggests a discrepancy between the motivation Amsterdam had to join C40, and how by now the membership is actually used in practice.

**Conclusion |** This leads to the careful conclusion that city networks, at least for Amsterdam or cities comparable to Amsterdam, are not a panacea for climate change governance. Even if cities might benefit from their membership, the extent to which the climate does is questionable.

Keywords:

Urban climate change governance, climate city networks, C40 Cities Climate Leadership Group, club theory, climate club

*“We’ll also make a concerted effort to let the world know what C40 and its member cities are doing. And this systematic effort will communicate a very important message, I think, to the rest of the world – that even as other levels of government may falter in meeting their climate responsibilities, or may sidestep them altogether, the world’s cities are pragmatically rising to the challenge. This will raise our visibility, and credibility, on the world stage. And it will help us fill the void of global leadership, and attract the assistance, including the financing, that our cities so desperately need to meet our goals.”*

(Michael Bloomberg, speech, 2010)

Bloomberg was Mayor of New York City from 2002-2013 and Chairman of the C40 Cities Climate Leadership Group from 2010-2013.



# List of Abbreviations

C40	Cities Climate Leadership Group
CCP	Cities for Climate Protection
CO2	carbon dioxide
COP	Conference of the Parties
GHG	greenhouse gas emissions
ICLEI	International Council for Local Environmental Initiatives
IPCC	Intergovernmental Panel on Climate Change
UN	United Nations
UNFCCC	United Nations Framework Convention on Climate Change

# 1. Problem Statement

## 1.1 Introduction

### “Failed global climate governance

Climate change is one of the most significant scientific and political challenges of our society. For years, nation-states were considered the main actors responsible in combating the effects of climate change and engaging in global climate governance (Kern and Moll, 2013). Nation-states engaged in international negotiations forums such as the United Nations Framework Convention on Climate Change (UNFCCC) or G20 in efforts to create effective agreements. As has been argued by many scholars, these formal and top-down attempts have not yet achieved significant results, or have even “failed” (Gordon and Johnson, 2017, Falkner, 2016, Betsill and Bulkeley, 2006, Acuto, 2013, Hovi et al, 2016, Gordon, 2013, Bulkeley, 2010). The reasons given for this by academics and policymakers range from the slow pace at which international agreements come into being (Falkner, 2016), issues around free-riding (Ostrom, 2010), the consensus-rule in the UNFCCC (Hovi et al, 2017), issues around national sovereignty (Chan, 2016) and the lack of legally binding commitments and enforcement mechanisms (Hovi et al, 2016). Apart from the fact that state representatives have become “highly skilled at holding meetings to talk about the need for coordinated action” (Victor, 2015), scholars have argued that these meetings have not the desired effects on tackling climate change. The US’s withdrawal from the Paris Agreement in June 2017 is perhaps exemplary of this. Prospects to reach a coherent international and binding agreement are bleak (Gordon, 2013).

Due to this lack of success, academics, environmentalists and policymakers have tried to come up with new approaches in order to fill the governance gap as left by nation-states (Falkner, 2016, Gordon, 2013, Hovi et al, 2016). A range of non-nation-state actors has become involved in climate governance experiments, partly due to the recognition of the role of non-nation-state actors in the Paris Agreement in 2015. One group of actors now cautiously watched are cities (Chan, 2016, Betsill and Bulkeley, 2006, Bouteligier, 2014, Gordon and Johnson, 2017).

### Enter the stage: cities

More and more cities now address and reduce their greenhouse gas (GHG) emissions (Granberg and Elander, 2007). One of the manners in which cities organize local climate action like this is in climate city networks, also called climate clubs or transnational municipal networks (Hovi et al, 2016, Bansard et al, 2016). Climate city networks are transnational organizations of cities seeking to mitigate the threats of climate change.

City networks try to promote climate action among their members, ranging from mitigation and adaptation to climate engineering and climate compensation (Hovi et al, 2016, Kern and Bulkeley, 2009). A key activity is the promotion of knowledge exchange among their member cities, for instance by providing access to best practice databases. The networks are built on the hope that each member will call attention to new and different knowledge relevant for other members (Keiner and Kim, 2007). In this way, city networks strive towards standing stronger together by enhancing one another’s capabilities addressing climate change (Bulkeley and Betsill, 2013, Gordon, 2016).

In general, city networks share a few characteristics such as the fact that membership is voluntary, implying that cities are free to join and leave. The networks are commonly non-hierarchical, meaning

that there is no higher authority to force, control or sanction members (Kern and Bulkeley, 2009). Examples of city networks are the Cities for Climate Protection program (CCP), the International Council for Local Environmental Initiatives (ICLEI), the Covenant of Mayors and C40 Cities Climate Leadership Group (Bulkeley et al, 2012). Their members consist of municipal governments, or more accurately, representatives of these governments (Lee and Meene, 2012).

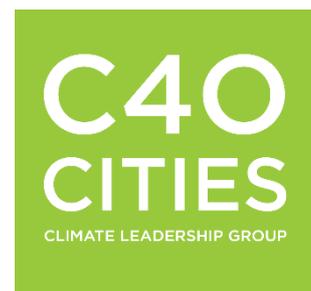
It is only since the 1990s that sustainability-related city networks started to develop (Bulkeley, 2010). Local Agenda 21 is important to mention in this regard. It was only then that cities were firstly highlighted as sites for sustainable development. The local level was considered the level “closest to the people” (Parnell, 2016, Bulkeley and Kern, 2006, Selman, 1998). In the early 2000s, the city network movement grew stronger due to “a growing sense of the failure in international negotiations”. Partly due to the lack of enforcement measures in climate agreements like the Kyoto Protocol, hope settled on cities as new actors in climate governance. Issues that nation-states face in agreeing on climate action, such as national sovereignty, are less of a barrier for cities. It has been argued that cities will not let issues around national interest and sovereignty stand in their way in order to work towards collaboration to tackle climate change. Barber, for instance, writes that city networks will more likely focus on solutions rather than sovereignty (Chan, 2016, Barber, 2014).

The fact that climate clubs can overcome some issues that trouble nation-states has generated a lot of attention. By now, scholars have argued that cities are stronger than ever in positioning themselves as prime locations for climate action (Hodson and Marvin, 2009). Not only do city network members have high expectation of themselves, academics and policymakers have also described cities as “the new climate leaders” (Acuto, 2013, Bansard et al, 2016, Martins and Ferreira, 2011, World Bank, 2010). The focus on cities is becoming a commonplace assertion (Rosenzweig et al, 2011).

### Zooming in on one climate city network

To develop an answer to the question of whether and how city networks are fit to fill the governance gap left by states, this research will zoom in on one city network: the Cities Climate Leadership Group, hereafter referred to as C40.

C40, founded in 2005, currently connects 92 cities (C40 cities, n.d.). The network aims at combating the effects of climate change by stimulating urban climate action that reduces GHG emissions. C40 projects revolve around issues related to energy, transport, waste, water, energy, food and more. The official mission of C40 is as follows: “C40 is a global network of large cities taking action to address climate change by developing and implementing policies and programs that generate measurable reductions in both greenhouse gas emissions and climate risks” (C40, history, n.d.). Their actions range from doing research, organizing summits and providing technical assistance to member cities (C40, 2017, Bulkeley and Betsill, 2013).



C40's logo.

The network is financed by three philanthropic organizations: Bloomberg Philanthropies, an organization by former New York mayor Michael R. Bloomberg, the Children’s Investment Fund Foundation and Realdania. Additional funding comes from partners such as MasterCard, Siemens and the Clinton Foundation (C40 cities, 2015, Aust, 2015).

C40 started as a parallel initiative to the G8 Summit on climate change in 2005 (Bulkeley and Betsill, 2013). The former mayor of London, Ken Livingstone, and his deputy Nick Gavron conducted meetings with several cities parallel to this summit (Gordon, 2016, C40 Lighthouse Case Study, 2014). The C40 started out as a group of 18 cities, built around the idea of an organizational structure similar to the

G8 or G20 (Aust, 2015). The leaders of these cities were worried that “international protocols and treaties regarding climate change were failing to create significant reforms” (Global Solution Network, 2014). Therefore, the cities wanted to cooperatively reduce GHG emissions (Acuto, 2010). The name changed from ‘Large Cities Climate Leadership Group’ to C40 in 2006 (Román, 2010) and has stayed that way, despite the steady increase of membership cities that joined (Aust, 2015, Gordon, 2013, Bouteligier, 2013). By 2018, the number of members has reached 92, although a number of cities have an inactive status. The most recent addition to the network is Tel Aviv (C40 cities, n.d.).

The network distinguishes three membership categories<sup>1</sup>.

- Megacities, like Jakarta or New York, are characterized by their large population (at least 3 million people) or GDP (among the top 25 global cities). This category forms the core of the network, with currently 55 megacities. Only megacities are, at least in theory, eligible for positions in the Steering Committee or the Board (C40 press release, 2012, C40 Lighthouse Case Study, 2014).
- Innovator cities, like Amsterdam or Rotterdam, have demonstrated great leadership in climate change work, but do not meet the GDP and population criteria to be a megacity. Great leadership is defined as being “internationally recognized for barrier-breaking climate work, a leader in the field of environmental sustainability, and a regionally recognized “anchor city” for the relevant metropolitan area” (C40 press release, 2012).
- Observer cities, lastly, are new cities that have not yet met the participation requirements. The only three current observer cities are Beijing, Shanghai and Singapore (C40 Lighthouse Case Study, 2014). Cities that apply for C40 will likely first be an observer city until they meet all the participation requirements (C40 press release, 2012).



Current C40 cities categorized by their membership type.

<sup>1</sup> A complete overview of which cities are member and their membership category is given in Appendix 3.

Apart from these three categories, there are also cities that are ‘temporarily inactive’ (C40 cities, n.d.). Current inactive cities are Cairo, Changwon, Delhi, Dhaka, Heidelberg, Mumbai and Nairobi. What this category further entails is not explained in any C40 publication or online.

## 1.1 Problem statement

C40 draws attention to the potential of cities to address climate change challenges at conferences, in online publications and in award ceremonies. Statements such as “Cities have the power to change the world”, or “Addressing climate change begins in the city” are often heard and repeated (C40, Why Cities, n.d.). Moreover, C40 has often subtly criticized national governments for slow climate action. C40 Chairman and former Mayor of New York City Michael Bloomberg has argued that “we’ve seen how national governments have struggled... to take climate change actions. Cities must learn from that experience. We must be bolder. We must be more collaborative. And we must be more determined. Together, we must fill the vacuum of leadership ourselves” (speech Bloomberg, 2010). Many scholars have followed this train of thought and have suggested that cities can fill the governance gap or - vacuum as left by nation-states. One example is Curtis, who writes that cities are capable to act in the governance vacuum “in which states either cannot or will not” (in: Aust, 2015).

This has raised high expectations. C40 almost seems to represent an international movement for and by cities, which could unlock the revolutionary potential of megacities to address climate change. However, despite C40’s good intentions and its increasing number of member cities, there are still several knowledge gaps.

The first knowledge gap concerns the actual effects climate city networks have on addressing climate change. Critics, such as Green (2015) have argued argue that climate city networks do little more than greenwashing: they help cities claiming they are taking climate action, without actually reducing their GHG emissions. So, what effect can city networks have on climate action?

The second knowledge gap concerns the motivations behind C40 membership, which have not yet been empirically tested. We do not know, for instance, if cities that join these networks are mostly interested in climate-related benefits or in competitive benefits, perhaps related to building a green reputation or attracting businesses to the city. Does cities’ enthusiasm originate from altruism or from something else?

Also, when cities have joined, we do not know in which ways they use the membership. Do cities get what they became a member for, and are the expectations raised by C40 perhaps too high?

## 1.2 Justification

Many academic articles have been devoted to studying city networks, especially since their number has increased (Bouteligier, 2014). Yet, there is an ongoing discussion about the relevance and use of networks for addressing climate change (Fünfgeld, 2015). Academics have pointed to the ‘rhetoric versus reality’ debate, in which the academic discussions about climate clubs remain distanced from the practical reality on the urban ground. They write that, although most scholars agree that “sustainable cities are a desirable policy goal, there is less certainty about what this might mean in



practice” (Betsill and Bulkeley, 2007). Although the ‘rhetoric’ of climate clubs has been studied elaborately, the ‘reality’ aspect has insufficiently been addressed (Betsill and Bulkeley, 2007). Therefore, this research will give an insight into the ‘reality’ of a climate club from a member’s viewpoint. It takes into account both rhetoric and reality, by analysing how C40 presents itself and how members perceive this.

Although it is not the first research to study C40, this thesis can add to the scientific debate on C40 with its qualitative nature. Many scholars have so far employed quantitative research designs when studying C40. They focus on measuring the effect of C40 by reducing its performance to numbers and indicators. Though this is certainly important, we should not forget that the people working with C40 cannot be reduced to numbers. As Whitehead writes, “such work has tended to reduce the analysis of sustainable urban development to a technical matter of institutional restructuring, traffic management, architectural design and the development of green technologies” (Whitehead, 2003). Hence, this qualitative study could be a modest addition to the academic literature on C40. Earlier work on C40, moreover, was constrained by the lack of C40’s documents in the public domain. As Davidson and Gleeson outline, for instance, “The empirical section of the article is constrained by the lack of availability of public documents that articulate the C40’s aims, positioning, and understanding of climate transition strategies” (Davidson and Gleeson, 2015). Román (2010) agrees: “there is still a shortage of empirical data from and analyses of the C40 Group”. Lee and Meene, lastly, also acknowledge this: “information available online is variable in quantity and quality” (2012). C40 stands out from other networks, like ICLEI, EUROCITIES, Energy Cities, 100 Resilient Cities and Climate Alliance, who all have published information on the membership costs, application procedure and statutes<sup>2</sup>. What this study can contribute to these papers is that it will incorporate data from interviews with C40 staff and with people who regularly engage with C40. This study can thus give insights about C40 that have not yet been discussed in academic papers, such as information on participation standards, membership costs and selection criteria.

Conclusions from this research can contribute to the potential of clubs in addressing climate change, something that is not yet fully understood by scholars (Hovi et al, 2016). If the study shows that cities truly benefit from their C40 membership, this can give hope for urban climate governance. The findings of this research can lead to conclusions about the ability of city networks to fill the governance gap as left by national governments (Gordon, 2016).

Another academic debate this research hopes to add to is that on club theory. Club theory has been employed to analyse networks, but only up to a small extent. This research will employ club theory

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<sup>2</sup> Source: websites of these networks.

against the experiences of those that are engaged: the cities themselves. This will eventually make club theory more tangible.

### 1.3 Research aim and objectives

The aim of this research is to investigate how one city, Amsterdam, benefits from its C40 membership. Insights from Rotterdam and, to a lesser extent from Seoul, will be used to mirror Amsterdam's experiences and to find out how unique it is.

The research objective, then, is split up into three sub objectives which each focus on a different aspect: what the research will teach us about the role of climate city networks in global climate governance, about C40 and about Amsterdam's climate action. The first objective relates to the scientific debate whereas the last two objectives are of an empirical nature.

This research will contribute to the debate of whether city networks are rightly presented as the new leaders in global climate governance. The study hopes to contribute to the question of who is best capable to take climate action, in the light of the government to governance debate and the recent criticism on nation-state climate inaction. In the end, the research will help answer question on the capacity of city networks to substitute or supplement traditional nation-state climate action.

This research will empirically examine to what extent C40 delivers on how it presents membership to potential member cities. This will lead to careful conclusions about the value of C40 membership for cities and about the necessity of C40 membership for undertaking climate action. In the end, it will help answer questions about how much we can expect from C40.

This research will empirically examine why a city would choose to become a C40 member, focusing on club benefits. This will give insights in whether these benefits are mostly related to climate (such as GHG emission reduction) or rather to other benefits (such as reputational benefits). This will help answer questions if and how a city like Amsterdam can benefit from C40 membership.

### 1.4 Research questions

Three sub questions have been formulated under one main question.

RQ. How and to what extent does Amsterdam benefit from C40 membership?

1. How are club benefits presented by C40?

2. Why did Amsterdam become a C40 member?

3. How is C40 membership experienced by Amsterdam?

The first sub question addresses C40's presentation and is based on an analysis of academic and grey literature. It is only in the second and third sub question that the perspective of the city of Amsterdam is taken into account, providing insights from the interviews. Before proceeding to chapter 1, we will now first consider the conceptual framework underlying this study.

## 2. Conceptual Framework

This chapter explains how the theory of polycentric governance can help understand the emergence and governance within city networks. After that, club theory is introduced as a framework complementary to polycentric governance, seeking to fill in some of the blank spots left by polycentric governance theory. Combined, polycentric governance and club theory provide a heuristic framework that helps drawing insights from the case study presented in the chapters that follow.

### 2.1 Explaining polycentric governance



Polycentric governance is more popular than ever (Carlise and Gruby, 2017). As the name already suggests, a polycentric governance system incorporates multiple self-organized centres of decision-making (Ostrom, 2010, Bauwens, 2017). The idea emerged when scholars noticed forms of steering within organizations that were not exactly top-down, in contrast to hierarchical governance modes where national governments make choices that must be followed by lower levels. Instead, there are other centres of decision-making beyond for instance national governments such as businesses, NGOs and cities. These actors are needed for mobilising additional resources of political support (Cole, 2015, Ostrom, 2010, Fünfgeld, 2015). Instead of a nation-state that dictates activities, institutions in polycentric governance govern themselves. This means that there is no formal authority to coerce or compel. According to Ostrom, this approach has several advantages over more traditional top-down governance structures, including opportunities for more innovation, experimentation, and solutions that better fit local circumstances (Ostrom, 2010, Homsy and Warner, 2014).

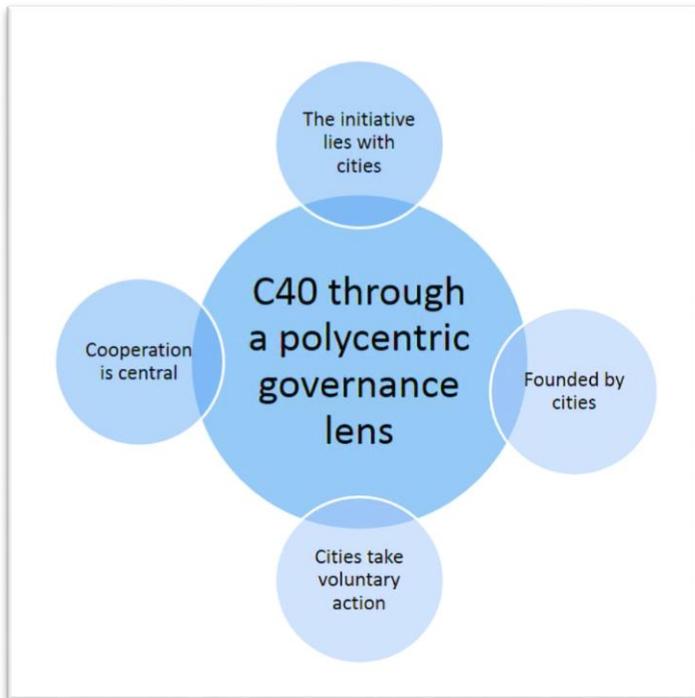


The application of polycentricism in governance originates from an essay by Michael Polanyi in the 1950s, as a concept “to describe a method of social organization in which individuals are free to pursue their objectives, within a general system of rules” (in: Carlisle and Gruby, 2017). Vincent Ostrom picked up the concept a decade later, arguing that a polycentric system could achieve greater efficiency compared to a centralized system (Carlise and Gruby, 2017). In the 1980s, political economist Elinor Ostrom later applied the concept to the management of resources and, more specifically, to climate change governance (Homsy and Warner, 2014). Since a decade, she has started to apply polycentric ideas to climate change. Over the past decades, the concept of polycentric governance has been applied from fields ranging from social organization, water industry performance to resource management (Ostrom, 2010).

It has been argued that polycentric governance theory is normative in assuming that polycentric systems are more effective than centralized governance systems (Pahl-Wostl, 2015, Bauwens, 2017). An example is the assumption that resources are governed better when more actors share the responsibility, rather than when the nation-state is the sole actor responsible. The theory also assumes that members will be internally motivated, since they have chosen to engage in the system voluntarily. Because of this high internal motivation, in place of being summoned to do something, the resource management is assumed to benefit (Homsy and Warner, 2014).

## 2.2 C40 through a polycentric governance lens

It could be argued that climate city networks, and C40 in particular, have evolved in a polycentric system. Yet, as I will show, this reasoning is not entirely correct. This section will first consider why certain characteristics of C40 can be understood using a polycentric governance lens. After that, we will now consider the ways in which polycentric governance does not perfectly match with C40.



The main insights from using a polycentric governance lens on C40.

Drawing insights from polycentric governance is especially helpful using the central concept of ‘self-organization’. Self-organization refers to the ability of a system to function without steering by either external drivers or forces from higher up in the hierarchy (Ostrom, 1961, Bauwens, 2017). This concept of self-organization can also be seen in C40.

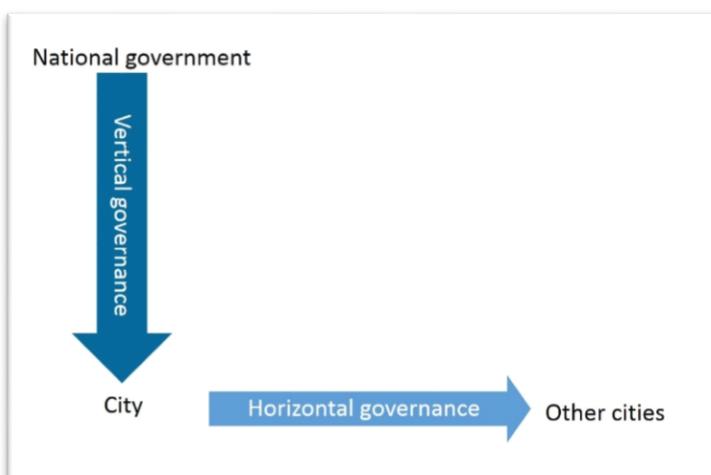
First, the initiative for founding C40 lied with the cities themselves, and not by for instance a nation-state: C40 was founded by a Mayor, the leader of a city. C40 strongly emphasizes the by-cities and for-cities idea: it has been “created and led by cities” (about C40, n.d.). Rather than waiting for nation-states to take action, the initiative is meant to lie with cities (Johnson, Toly and Schroeder, 2017). This demonstrates that self-organization is present and deemed important within C40.

Secondly, self-organization is present in the fact that many cities have responded enthusiastically upon C40’s request for taking voluntary climate action. This is remarkable given that climate action is expensive, so one would not expect cities to voluntarily spend extra time and money on it. Again, there is a lack of steering by a higher order, since for instance national governments are left out of the picture (Homsy and Warner, 2014).

Lastly, self-organization is an important factor within the network. C40 finds it very important that cities take all sorts of initiatives to take climate action. As we will later see, the more initiative cities take, by for instance co-hosting international summits or organizing webinars, the higher they score with C40.

These three aspects of self-organization, a core concept in polycentric governance, thus help understand C40. However, this only works up to a certain extent. We will now consider the ways in which polycentric governance does not match with C40. The key argument here is that C40 has no horizontal governance structure, as polycentric governance assumes, but a vertical governance structure. A horizontal structure entails that there is no hierarchy and no steering. In the case of C40, however, there is a hierarchy and steering does take place, implying a vertical structure.

Firstly, C40 has incorporated a hierarchical structure. C40's vertical structure does not match the polycentric idea of a network without a formal authority who coerces or compels (Bauwens, 2017). C40 is governed vertically by a Steering Committee and Board of Directors. These organs take decisions that influence its members directly. An example is that not just any city can join the network; instead, the Steering Committee decides which cities may join. This illustrates that, although a network may have evolved in a self-organizing manner, there might still be need for at least some top-down guidance (Bauwens, 2017).



Simplified clarification of horizontal and vertical governance.

A second manner in which self-organization is not completely reflected in C40 is the fact that C40 has to actively motivate its members to take sufficient climate action. The Steering Committee has installed a score system in order to monitor the level of participation from its members (Smith, interview, 2018, Meijer, interview, 2017). If members do not take enough action, according to the levels set by the Steering Committee, sanctions will follow. An example of this is that the initiative for best practice guides or other official C40 reports usually lies with the C40. In case information is required for a new report, C40 will ask its member cities to send in data. Here again, the initiative does not lie with the cities, as in a self-steering organization, but with C40. This shows that there is no complete self-organization possible: without the score system and the (threat of) sanctions, member cities could opt for free riding. C40 thus has to make sure that it coordinates and sanctions the behaviour of individual member cities (Homsy and Warner, 2017). This is something that polycentric governance does not extensively address. It remains unclear whether a polycentric organization would actually be effective, especially considering the tendency of individual members to free ride on the efforts of others. If C40 would not motivate the cities to send in these best practices, perhaps nothing would happen.

A third factor concerns which actors or cities are attracted to C40. Polycentric governance assumes that cities voluntarily take action, which does indeed happen. From practice it appears, however, that pioneering cities engage in C40: only cities that have already exhibited climate leadership join the network. So, not just any municipality is interested in voluntarily joining a network and taking climate action: only those who are scoring 'high' on climate action do so. This results in the fact that laggards do not join (Homsy and Warner, 2014). This suggests that it is irrational to wait for self-organizing cities

to take climate action: only those who are already enthusiastic about taking climate action at the local level will likely become involved.

So, various aspects of polycentric governance, such as self-organization, are reflected in C40. However, as described above, C40 cannot be considered a perfect polycentric governance system, for it has still incorporated forms of steering. Because of this mix, C40 has been considered 'polycentric governance light' (van der Heijden, 2017). What this means is that cities act, indeed, independent from national governments, yet the cities operate in a vertical governance structure (van der Heijden, 2017). For the purpose of this research, addressing how a member city benefits from its C40 membership, polycentric governance is helpful as a starting point, suitable to understand the emergence of and the idea behind city networks. Another theory will now be considered to help shed light on the reasons and motivations why cities are interested in joining climate clubs.

### 2.3 Explaining club theory

While polycentric governance helps explaining the emergence of city networks, club theory helps understanding how city networks practically work. Club theory considers a club as a group of actors who derive benefits from sharing the costs of producing an activity that has public-good characteristics. The benefits of membership outweigh the costs of paying a membership fee and adhering to club standards and rules (Nordhaus, 2015). The main underlying assumption of club theory is that club members are rational actors, meaning they make cost-benefit analysis before taking a decision. Actors will consider their self-interest first (Prakash and Potoski, 2007, Hovi et al, 2016).

Club theory is now approximately 50 years old. The origins of club theory can be traced back to the work of Pigou and Knight on congested roads. In this work, the authors describe two roads, one being a high quality but congested road and the other being a poor quality and accordingly uncongested road. In their example, they installed a toll on the congested highway. In essence, the toll would restrict drivers from choosing the congested highway, and thereby creating a club of drivers willing to pay for the congested highway. In this case, the benefit or club good is access to the higher quality road (Cornes and Sandler, 1996). Other publications followed, but the most influential work stems from Olsen and Buchanan. Especially Buchanan's work, titled 'An Economic Theory of Clubs', is considered the start of academic inquiries into club theory. Since then, club theory has been used predominantly for economics (Sandler and Tschirhart, 1997). Club theory has also been applied to issues ranging from military alliances, highways to national parks (Hovi et al, 2016).

Since club theory is essentially an economic theory, as the title of Buchanan's work already suggests, many articles and books written since then focus on economic models. Although club theory also explains issues that are outside the scope of this research, such as optimal club size and bargaining efficiency (Buchanan, 1965), it still proves useful for this thesis. We will now consider four core characteristics of clubs more closely.

The first important characteristic of a club is that membership is voluntary. Members choose to accept an invitation, apply or belong to the club, and are free to leave whenever they choose to. Leaving the club is, moreover, costless (Cornes and Sandler, 1996). Of course, a requirement for a successful club would be that no or not too many members want to leave (Nordhaus, 2015). What is very interesting is that members choose to join a club and incur costs not required by law, although the benefits of joining such a club might not be directly visible. Even more remarkable is that sometimes members undertake even more action than what is formally or legally required from them (Hovi et al, 2016, Prakash and Potoski, 2007).





Secondly, membership to the club is finite, which entails that there is a maximum to the number of members. This is installed in order to prevent crowding. Crowding, a process that occurs in the case of too many members, could lead to longer waits, slower services, less benefits per member or a less exclusive club (Cornes and Sandler, 1996).



Thirdly, there is an exclusion mechanism, preventing non-members from enjoying the benefits received by members. If this exclusion mechanism would not be in place, members would have no incentive to pay fees or do effort: they could just as well enjoy the benefits without paying. In classic examples in club theory, such as cinemas or golf courses, an exclusion mechanism is very visible: it could be a ticket booth, a fence or a guard (Cornes and Sandler, 1996). In the case of a climate club, however, this mechanism is less tangible. Besides banning non-members from enjoying the benefits of being a member, the exclusion mechanism also monitors the members (Sandler and Tschirhart, 1997).



Lastly and most importantly, members get rewards in the form of club goods as a compensation for their efforts. These benefits are only available to members, and are therefore an important incentive to join the club in the first place (Prakash and Potoski, 2007, Hovi et al, 2016). The benefits are excludable; non-members do not get the chance to enjoy them. An example is reputational benefits as a result of membership (Prakash and Potoski, 2007). Apart from encouraging new members to join, the benefits can also persuade current members to take more climate action. Also, the provision of club goods creates incentives for acceptance of the club's standards (Hovi et al, 2016, Buchanan, 1965, Potoski and Prakash, 2005). Prior to becoming a member, an actor or organization will likely draw a comparison between the exclusive benefits and the costs of joining. It will only join the club if the benefits are at least equal to the costs of membership, or in other words: if they anticipate benefits that are attractive enough (Yi et al, 2016, Sandler and Tschirhart, 1997, Cornes and Sandler, 1996).

## 2.4 C40 through a club theory lens

C40 can be considered a climate club. As club theory predicts, C40 was started as a small group of enthusiastic actors that were willing to “undertake emissions beyond what maximizes their self-interest”. It tries to encourage local governments to undertake more climate action than what is required from them under frameworks like the UNFCCC or simply in absence of the club. In return for their efforts, cities get rewards in the form of club benefits such as access to member-only events (Hovi et al, 2016, Prakash and Potoski, 2007, Hovi et al, 2016).



The main insights from using a club theory lens on C40.

As club theory predicts, C40 practices exclusivity in various ways. C40 has a restricted member size, firstly. Although the club has largely expanded since its foundation in 2005, from 18 to 92 cities, it still does not accept any city to join. Secondly, C40 has set selection criteria on the basis of which they invite or accept new members. Cities have to go through a selection procedure and may have to start as an observer city first (Lighthouse Case Study, 2014). This sets C40 apart from other city networks like ICLEI, who have a more open character (Aust, 2015). Moreover, C40 excludes non-members from their events and activities, and has a member-only login portal on their websites.

Club theory has steered the focus of the research towards club benefits. It has also helped to distinguish between benefits based on addressing climate change or benefits that lean more towards greenwashing. Consider this hypothetical example: a city could join C40 and receive the club benefits, such as reputational benefits, while not undertaking more climate action. Being a C40 member would then only be symbolic. Club theory will then help drawing conclusions about the effect of C40 on actual climate action, which in this example might be lower than expected.

## 3. Research Design

This chapter outlines the various methods of data collection employed to answer the main research question: ‘How and to what extent does Amsterdam benefit from C40 membership?’ Because this research is interested in how the people engaged with C40 perceive that, a qualitative approach was chosen.

### 3.1 Methods

#### Academic and grey literature

Literature was used in various stages of the research to research the topic and to triangulate findings from the respondents. In the first stage of proposal writing, academic literature was used to read into urban climate governance, climate city networks and C40 specifically. Insights from the literature helped formulating research questions and objectives. Articles were obtained via extensive searches in online databases such as Google Scholar and Scopus. Citation mining was employed in order to systematically analyse the sources of relevant articles. Also, all sources from relevant articles were read. Complementary to academic literature, grey literature was consulted such as conference papers, speeches by C40 staff members, newsletters from the Municipality of Amsterdam and C40 fact sheets. In the second stage of interviewing, academic literature was used to carefully inform interview questions. Later, in the third stage of data analysis, academic literature was once again used to triangulate statements made by respondents.

#### Semi-structured interviews

The second method of this research are semi-structured qualitative interviews. Semi-structured interviews are characterized by their open character, leaving enough room for improvised question on themes suggested by the respondent. Instead of a fixed list of questions, such as in structured interviews, a topic list is used (Cohen et al, 2007). Another benefit of semi-structured interviewing is that once a respondent mentions something interesting, the researcher can probe to obtain more in-depth information on that matter (Kumar, 2010).

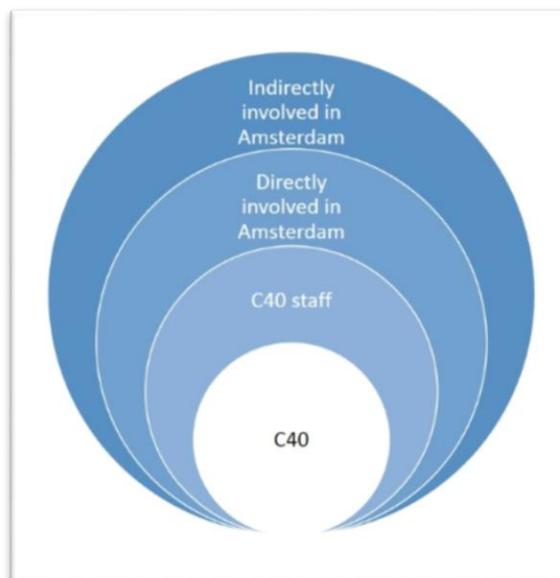
Semi-structured interviews best fit this research, because often the link between the respondent and C40 was not perfectly clear. Hardly ever, specific information on the link between a respondent and C40 was available. The flexible nature of semi-structured interviews enabled quick adaptation of the questions after establishing the link between the respondent and C40. This would not have been possible using a fixed interview questions list or a questionnaire. Also, a relatively small group of people worked on C40 in Amsterdam, reducing the chance of getting valuable data with a method such as questionnaires. Questionnaires after all require a large sampling group in order to produce reliable information (Kumar, 2010).

Ten interviews was performed with respondents from various backgrounds (see Appendix 1). The respondents were obtained via different sampling techniques. Right at the start of the research, someone working for the Amsterdam Metropolitan Solutions Institute was contacted who brought me in touch with several people who were directly engaged with C40 in Amsterdam. Without this person, getting access to them would have been harder or even impossible. The same counts for the

respondent in Seoul, whom I could reach out to via a researcher at the Environmental Policy chair group at WUR. Another sampling method employed was the snowball technique. After each interview, I asked for contact details of other potential respondents. Other times, I emailed people on my own account, because I for instance came across their names in C40 reports. This proved to be less efficient.

The sample of respondents covers, to my knowledge, almost all relevant individuals working on and with C40 in Amsterdam. Therefore, it was not the goal of this research to collect as many views on C40 as possible; it was more important to talk to relevant actors who actually have a view on C40. Therefore, there were two selection requirements for respondents: they needed to know C40 and they needed to have some experience with C40 membership. Scholars, for instance, were not interviewed: they did know C40 but had no personal experiences with membership.

Most interviews were performed via Skype using video, since the respondents preferred this or because that was most practical due to residence in another country. Although I offered to meet in person in Amsterdam, Skyping was much more efficient. Most interviews were conducted in Dutch. This meant that they were also transcribed in Dutch. In order to adequately present direct quotes, assistance was searched from a native English speaker. All respondents were interviewed once, although in two cases additional questions were asked via e-mail.



Overview of the types of respondents.

The list of questions was not fixed throughout the research. Initially, the questions were open since little was yet known about C40. In a later stage of the research, the questions became more in-depth and precise. The list of interview questions was updated after each interview and adapted to each respondent. In practice, it was also more of an item list than a list of questions, due to the semi-structured nature of the interviews. I distinguished between questions that were adequately answered after one interview (e.g. “in which year did Amsterdam become a C40 member?”) and questions that had to be asked to multiple respondents in order to triangulate the results (“what do you perceive as the biggest benefit of membership?”). In asking the same question to multiple respondents, I sometimes had to pretend as if I did not already know the answer. All questions asked were open-ended, which means “the possible responses are not given” (Kumar, 2010). This was especially important for the sub question about ‘benefits’. If I had started about specific benefits, it would have been easy for the respondents to simply agree. When respondents come up with benefits on their own account, this info is more valuable.

Some interview topics were slightly sensitive, especially those related to a city’s reputation. Therefore, I looked for ways to ask indirect questions on these matters. Instead of simply asking, “Did your reputation improve thanks to your C40 membership?” I asked my way around it by for instance asking, “Do you identify as an ‘innovator city’, as C40 has categorized Amsterdam?” In addition, I therefore saved those questions for a later stage of the interview, because I assumed I had by then developed a level of trust and friendliness between the respondent and me. This would then hopefully lead to a respondent feeling at ease with sharing (sensitive) information. To guarantee that respondents felt at ease sharing their experiences with C40, I also made sure to anonymize their names. This was

especially relevant when people were critical about C40. Lastly, respondents were informed about the goal of my research prior to the interview, in order to guarantee informed consent.

### 3.2 Data analysis

A difference was made between valuable and less valuable interviews. Especially the interviews with C40 staff members and with people directly involved with C40 in Amsterdam were highly informative. However, they were biased towards the positive aspects of C40. Therefore, additional respondents were consulted in search for a more critical perspective. The interview with Seoul was employed to mirror the experiences in Amsterdam.

The main method used for analysing the interviews was transcribing them right after the conversation had taken place. This made sure that the right nuances were still remembered. After the interview had taken place, remarkable answers were highlighted, such as answers that were not compatible with what other respondents had said, answers that were completely new to me or responses that surprised me. After this, the interviews were coded by assigning themes to answers. Coding, or the interpretation of unstructured data, enabled easier analysis (Kumar, 2010). After having decided on the codes, they hardly changed anymore due to their strong link with the research questions (see Appendix 4). The next step was to classify the responses under the main themes, following the approach set out by Kumar (2010). I did this manually without a coding computer program. After this step, I integrated the responses into separate chapters. Because the codes mirrored the RQs, responses under a combination of codes led to an answer to the RQs.

After six interviews had been conducted, I was able to start on a list of provisional conclusions based on those interviews. These conclusions guided the rest of the interviews, for this practice had demonstrated the findings and knowledge gaps. The stage of saturation, when the researcher has collected enough data to answer the research question (Kumar, 2010), was reached after the ninth interview. Here, the information given by the respondent began to sound very familiar. I then decided to cease attempts at finding additional respondents.

### 3.3 Scope: why Amsterdam and why C40?

In this research, C40 is studied by means of a case study in Amsterdam, the Netherlands. Amsterdam, situated in the province of North Holland, is the largest municipality in the Netherlands. The responsibility for contact with C40 has been given to the Economic Services Department, the division of Planning and Sustainability. Apart from its C40 membership, Amsterdam is also a member of climate city network ICLEI (Amsterdam.nl, n.d.).

One city was chosen in order to narrow the research down and to enable an in-depth study. It was also practical: policy officials in Amsterdam were easier to reach than in other countries due to the lack of a language barrier, the closeness of the city and the network of my thesis supervisor via the Amsterdam Institute for Advanced Metropolitan Solutions. Second, the fact that Amsterdam has been a member for almost a decade enabled me to meaningfully research how this membership is experienced. Additionally, Amsterdam is an 'innovator city' according to C40, implicating it has demonstrated great leadership in climate change work. This would plausibly mean that C40 has had an impact in Amsterdam, enabling me to research how the city government has experienced this. This enables generalization of the results to other 'innovator cities' similar to Amsterdam, such as Rotterdam. What makes Amsterdam also interesting, lastly, is that there is little information available on its C40 membership. The text describing Amsterdam's connection to C40 on the Municipality's website is copied one to one from a C40 webpage (Gemeente Amsterdam, C40, n.d.). The other way around too,

Amsterdam is hardly mentioned on the C40 website (C40, Amsterdam City Snapshot, n.d.). This suggests that little is yet known or researched on C40 membership in Amsterdam.

This thesis specifically focuses on one city climate network: the Cities Climate Leadership Group, because C40's influence has been growing. Academics have considered it as a "good example" of international networks for local governments (Lee and Koski, 2014), or even as a "representative" of the recent influence of climate city networks (Davidson and Gleeson, 2015). Secondly, membership in C40 is exclusive: C40 has set a maximum for its membership base and has strict selection criteria. This distinguishes C40 from more open city networks such as ICLEI (Aust, 2015), which has more than one thousand member cities. The assumption here is that networks with fewer members have a larger impact, since they are harder to get into or stay in. This exclusivity of C40 enables an analysis with club theory, since club theory focuses on groups of limited size (Sandler and Tschirhart, 1997). Thirdly, C40 is very vocal about the impact it has on climate action in its member. It seems to present itself as a city network offering concrete and actionable advice to its member cities. This suggests that member cities can truly benefit from their membership. Nevertheless, to what extent that is really the case has not yet been researched. Lastly, a lot is still unknown about C40, despite the fact that many academics have turned their attention towards the city network. This research hopes to contribute to that knowledge gap by performing an in-depth investigation on how a city perceives its C40 membership.

Conclusions about C40 might be relevant for other climate city networks as well. By focusing on one city network specifically, understanding can also be increased about similar networks such as EUROCIITIES, ICLEI or Energy Cities. Although these networks focus on Europe rather than the entire world, they do have a similar number of members and likewise focus on cities (Bansard et al, 2016).

### 3.4 Limitations of the Research Design

Inevitably, the chosen research design also has some limitations. These are important to be aware of, especially in qualitative research (Kumar, 2010). Six different limitations are outlined, also providing information of how the author dealt with these. A first limitation of this research relates to its qualitative nature. To study the benefits of C40 membership for a city, a comparison with a completely similar non-member city would have been very valuable. The treatment would then be the membership of the network. Differences between the member and non-member city could then (partly) be attributed to C40. In reality, however, identifying the counterfactual is hardly possible (Potoski and Prakash, 2013). Selecting a city identical to Amsterdam is already difficult, for starters. Also, establishing direct causal links between a city's climate action and the non-member or membership are hard to establish. Other variables could intervene and distort the conclusion (Andresen, 2015). Lastly, concepts such as 'benefits' or 'reputation' are very hard to quantitatively measure. Different people may perceive the concepts differently. How people experience C40 is subjective by definition. So, although in theory, a quantitative design could have been helpful, the reality is otherwise. Therefore, this study has taken a qualitative approach, identifying the benefits of membership by basing questions on for instance 'reputation' on academic literature and by engaging with stakeholders involved in C40 to triangulate this.

A second limitation of the research design concerns the respondents that were used to verify and supplement the results from the literature research. The research focused on people engaged with C40, in order to get an in-depth view of how they perceived C40. Therefore, most respondents were positive about C40 simply *because* they worked with C40, leading to somewhat distorted results of excessively positive opinions. Although this positive view could be a respondent's reality, it could also point to a tendency to perceive your own work as useful or to an unwillingness to admit it is less useful. This limitation was hard to deal with. I tried to get access to cities who applied for C40 but were not

accepted. I also tried to find cities who were invited to the network, but who had actively declined. Similarly, I tried to find cities who had been in the network, but had left it. None of these efforts led to successful outcomes. Other attempts were more successful. Firstly, respondents were searched that worked indirectly with C40, or whose connection to C40 was less obvious. Here, the assumption was that they had a little more distance to C40, enabling them to speak freely. Although people with this outsider perspective were hard to reach, I managed to talk to a few 'outsider' respondents, who were indeed able to provide a more critical perspective on Amsterdam's C40 membership. Another attempt was to mirror the experiences of respondents in Amsterdam to respondents in other C40 cities. I managed to talk to one respondent in Rotterdam and one in Seoul, enabling reflection on the answers from respondents in Amsterdam.

Another limitation is the limited number of respondents for the interviews. It soon turned out that only one person was responsible for C40 in Amsterdam. This immediately limited the pool of respondents, but not only that. Often, when people could certainly contribute to my research, they replied that I would better talk to the official person in charge. They felt that they could not contribute much compared to the official responsible person. Of course, not knowing everything about C40 did not mean that these people would not have been interesting to talk to. Convincing them of this fact was sometimes hard, despite efforts of trying to explain the relevance of my research for them. Although the limited number of interviews is certainly a limitation, it also leads to an insight: although C40 seemed to suggest that it has a huge impact on Municipalities, it appeared that only one person was locally actively working on the network.

The order in which I talked to the respondents was not completely optimal. In the very beginning, I already had an interview with the main person responsible for C40 in Amsterdam. Talking to this respondent at a later stage would have proven more useful. Interviews with the C40 staff members, however, were purposefully scheduled at the end of the data collection process, in order to triangulate results from other interviews with them. In addition, I wanted to be well informed on C40 before talking to people high up in the network.

Another limitation was the little information available in terms of official C40 documents. C40 has limited the availability of documents such as the official participation standards or statutes. This complicated and delayed the initial literature research. If for instance the participation standards had been available, an easier link with club theory could have been made right at the start. Also, knowing about the participation standards at an earlier stage would have made the interviews more interesting. In that case, respondents could have been asked how they for instance perceive the stringency of the standards, leading to interesting conclusions on the costs of membership for Amsterdam. I dealt with this limitation by focusing on alternative research methods such as YouTube videos of C40 staff members' speeches and by attributing a lot of value to the insights obtained via the interviews.

A last limitation considers the choice of club theory for the analysis of the data. Club theory is in essence an economic theory. Therefore, not all aspects of its were as useful for the purpose of this research. I dealt with this by making sure not to engage too much, in 'cherry picking', which is choosing only the concepts that verify collected data. The theoretical chapter was written and finalized before engaging with the respondents, so it would not be steered by the answers of the respondents. Also, I made sure to systematically use the concepts from club theory in the interviews, in order to integrate theoretical concepts and the practical reality. I did this by directly linking interview questions to concepts from club theory. So, club theory steered my view in a traceable manner.

### 3.5 Validity and reliability

Validity and reliability are extremely important in both quantitative and qualitative research. In qualitative research, however, it has been argued that establishing the validity and reliability of the study is less clear (Guba, 1981). Interviews are for example of a different nature than experiments and are therefore harder to repeat. According to Professor of education Guba, the criteria to determine the validity and reliability of a study are more set towards quantitative research (1981). He therefore proposed an alternative approach specifically designed for qualitative research, a popular approach. Guba established four principles that can together criteria the level of reliability and validity: credibility, transferability, dependability and confirmability. For each of these principles, a variety of strategies can be employed to ensure trustworthiness (Guba, 1981, Shenton, 2004).

The first criteria is credibility. In quantitative research, this is called internal validity, or ensuring that the conclusions can actually be drawn from the data (Shenton, 2004). I dealt with credibility in three different manners. I used triangulation in order to compensate for the potential limitations of individual methods. By studying the same question with a variety of methods, the collected data can be validated (Shenton, 2004). An iterative process was adopted, starting with the academic and grey literature, then checked the findings of the literature with interviews, and then again verified the findings of the interviews back with the literature. This process ruled out some limitations of literature research and interviewing. It also ensured that my findings were more or less congruent with those of past studies. Triangulation was also employed by comparing and contrasting the interviews with one another. By asking the same question to multiple interviewees, the collected data was validated. This sometimes led to the discovery of false or incomplete statements from respondents. Lastly, I also performed site triangulation, meaning that I talked to respondents at different sites. I incorporated the views of respondents from different organizations, not limiting myself to the Municipality of Amsterdam. This increases the credibility of a research, since findings from one site can be confirmed at another site. These three manners of triangulation increase the credibility of the research (Shenton, 2004, Guba, 1981).

Another method employed to guarantee the credibility of the research as to let others check the conclusions. Shenton calls this the “peer scrutiny of the research project” (2004). The advantage of this is that readers may bring a fresh, outsider perspective (Shenton, 2004). They are still able to read the research with some detachment, an ability that the researcher may lose along the way. Readers that checked my conclusions are my supervisor, colleagues writing on C40 as well and MSc students from the social seminar course at WUR.

The second criteria is the transferability to other context or settings. This is known as the external validity in quantitative research. External validity is considered important, since the findings of a research must be applicable to a wider population in quantitative research. In qualitative research, however, the findings are only relevant to a specific environment or group of people (Shenton, 2004, Guba, 1981). I addressed the transferability of this research by describing in detail what the context of C40 and Amsterdam was. This guarantees that readers of the research are careful with transferring the conclusions of this research to another. Also, I was careful with generalizations of the findings of this study to other cities or city networks.

The third criteria employed by Guba is dependability. In quantitative research, this concept refers to how reliable the data are: would we obtain the same results if the study would have been done twice? This is also problematic in qualitative research, because the phenomena studied can change. I dealt with this by keeping a detailed record of the research process and by continuously reflecting on the effectiveness of the process. Triangulation was also employed, in order to review conclusions from one method with another method (Shenton, 2004, Guba, 1981).

Finally, the last criteria is confirmability. This refers to the objectivity or neutrality of the research (Shenton, 2004). Of course, in qualitative research it is impossible to be completely objective. I addressed this by extensively practicing reflexivity. I constantly tried to be aware of my own assumptions and underpinning beliefs. For example, I tried not to let my preference for a respondent steer the extent to which I valued his or her answers. This ensured a focus on the respondents' answers, rather than on my personal preferences. Another technique used was to write down personal reflective notes on the interview right after it had taken place. These focused on for instance a reflection on the extent to which my questions had been steering (Shenton, 2004, Guba, 1981).

## 4. C40's Narrative

C40 has attracted a lot of attention from scholars and the media. One manner in which it has done this is by employing a specific narrative. This narrative has raised high expectations. This chapter will research what exactly this narrative of C40 entails and how C40 thus presents its membership to cities. This is a start to addressing a knowledge gap: does the enthusiasm from cities to engage with C40 originate from altruism, or are they perhaps interested in something else? By establishing five frames that are employed by C40, the benefits that C40 grants its members become clearer. Each frame corresponds to a club benefit, as predicted by club theory. This will give insights in why cities are interested in joining C40, and opens possibilities for verification of the frames in interviews with respondents in Amsterdam.

In this research, framing is considered as a tool to identify the implicit and explicit presentation of C40. Framing is employed as a method and not as a comprehensive theory. Framing is often of an agenda-setting character, as it tries to define what is true and what is not (Fünfgeld and McEvoy, 2014) and because it tries to influence decision-making (Fünfgeld, 2011). Frames are very relevant in climate change governance, since scientists, politicians, residents and businesses interpret climate change differently. The large variety of actors involved in climate change governance makes it more likely that different interpretations coexist, leading to great complexity (Fünfgeld, 2011). Assumptions on for instance who is responsible for addressing climate change are often not made explicit (Fünfgeld, 2011, Fünfgeld and McEvoy, 2014). The way different actors view climate change affects the way they talk about it. Similarly, this influences the public debate on climate change. We will now consider the five most important frames employed by C40.

This chapter was established by combining an analysis of C40 documents such as speeches, blogs, press releases, interviews, reports and best practice guides with an academic article on the framing of climate change by M. Mintrom and J. Luetjens (2017). In this article, Mintrom and Luetjens take C40 as one of the two cases to illustrate how 'policy entrepreneur' Ken Livingstone has framed C40's efforts to present cities as key actors in climate governance. Nevertheless, the focus was on how C40 presents itself, not on how academic authors perceive this. The table below already gives a quick overview of the frames and their corresponding benefits.

<b>Nr.</b>	<b>Frame</b>	<b>Corresponding benefit</b>
1	Cities as the new climate leaders	Political influence
2	Climate change as a fundamental issue for cities	Green reputation
3	Cities as delivering practical action	Assistance to cities
4	Cities do not compete- they collaborate	Exchanging knowledge
5	Cities as achieving both climate action and economic growth	Business opportunities

## 4.1 C40's frames and benefits

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### Political influence

Frame 1: Cities as the new climate leaders.

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Benefit: Political influence.

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The first and most essential frame employed by C40 is positioning themselves as new the new climate leaders since, according to them; nation-states are failing in their climate action (Mintrom and Luetjens, 2017). Nation-states have not sufficiently taken up their responsibilities and if they have, their climate action has been slow, ineffective and bureaucratic. Ken Livingstone, the first chair of C40, presents cities as new agents of climate governance (Gordon, 2013). C40 has repeatedly argued that despite the fact that nation-states are the formal leaders in climate change, they are not equipped to put all their talking into practical action (speech Bloomberg, 2010). C40 presents the lack of climate leadership by nation-states as a void that can potentially be filled up by cities (Bulkeley, 2010, Gordon, 2016). It has taken the rhetoric of a 'policy vacuum' to argue that national governments are missing in the fight against climate change. Mayors instead are presented as key actors or as "the real participants", who can achieve the COP 21 goals even "without their national government" (speech Bloomberg, 2017). This frame is also visible in the often-quoted line "while nations talk cities act" (C40, 2015, Gordon, 2013).

C40 goes on to argue that it is essential that nation-states acknowledge the potential of cities. The world, and nation-states in specific, need to know "what C40 and its members are doing" (speech Bloomberg, 2010). C40 is helping cities to define and amplify "their call to national governments for greater support and autonomy in creating a sustainable future" (C40, Why Cities, n.d.). Anne Hidalgo, the current chair, emphasized this too: "Today, on behalf of us all, I wish to clearly tell the states and international organizations that, as cities, we have enormous abilities: give us the freedom to use them and you will not regret it! Free the cities and you will free the future!" (speech Hidalgo, 2016).

When C40 staff members are turning towards this frame, they are trying to position cities as key actors in climate governance. Now that cities are present and vocal in climate governance, perhaps partly due to policy entrepreneurs such as Ken Livingstone, they are striving for recognition on the global stage. With this first frame, C40 thus tries to reframe who should govern climate change.



Potential C40 members could feel attracted to this frame as it poses that C40 members exhibit political influence. Political influence refers to the fact that C40 cities can together pressure external parties, such as national governments, sponsors, potential new members and perhaps the public. Through their C40 membership, cities can collaboratively have an impact on the political debate, agenda setting and decision-making on climate change. It might be interesting for a city to belong to a pool of cities that have global influence at for instance COPs. Operating together will have greater political influence than cities operating individually (Lee, 2013, Gordon, 2013). Political influence not only refers to leverage on external actors. Cities can also exert political influence within their organizations. C40 membership could, for instance, give a strong message to their Municipality that they are taking climate change seriously (Bulkeley and Betsill, 2013). This might be a reason for cities to join C40.

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## Reputation

Frame 2: Climate change as a fundamental issue for cities.

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Benefit: Green reputation.

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A second frame is that C40 frames climate change as a fundamental issue for cities (Mintrom and Luetjens, 2017). Cities are presented as major victims, since for instance they are often built next to coasts or rivers, making them prone to floods resulting from global warming. C40 emphasizes this victim role for instance as follows: “some of the greatest hazards of climate change – such as rising sea levels and increasingly extreme and destructive weather patterns – threaten our cities most directly” (speech Bloomberg, 2010). Indeed, cities are vulnerable to climate change (Hodson and Marvin, 2009). Cities are also presented as the main source of climate change issues. This has been emphasized time and again by C40 staff members by repeating what has become the ‘70% mantra’ (Aust, 2015). This entails that cities are responsible for 70% of the GHG emissions, despite housing half of the world’s population (speech Bloomberg, 2010). Cities “together account for more than 70 percent of the world’s greenhouse gas production” (speeches by Bloomberg, 2010 and 2015 and Tsang, 2010, C40 and Arup, 2017). Cities are also sites of “intense burning of fossil fuels” (speech Bloomberg, 2010). This leads to a variety of problems such as air and water pollution (Keiner and Kim, 2007, Betsill and Bulkeley, 2006, Lee and Koski, 2014).

Exactly because of these two reasons, cities are then presented as fit to address climate change, for cities are “centres of new thinking and policy innovation” (Reddy, 2010). Their concentration of resources and population cities offers a site welcoming experiments (Hodson and Marvin, 2009). So, cities as “creative territories come up with the solutions to face these...challenges” (Hidalgo, blog, 2016).

By framing climate change an issue fundamental to cities, cities are also brought to the foreground when it comes to solutions. This makes cities seem reliable since they take responsibilities for their own GHG emissions, something perhaps nation-states have not always done. This ‘rhetoric of responsibility’ (Gordon, 2016) makes the case for cities as key actors in climate governance even stronger, as it explains why cities are fit to address climate change.



Potential C40 cities can feel attracted to this frame because participation in a climate city network can provide members with a certain status or reputation associated with being at the centre of a strong network (James and Verrest, 2015, Bulkeley and Betsill, 2013). Sustainability has been one of the ways in which a city tries to profile itself in a distinct way, by profiling a city as modern, liveable, clean, carbon-neutral and green (Anderberg and Clark, 2017). Cooperation with other cities and with a city network opens a possibility to create a positive image of a city as a pioneer in climate action (Gustavsson and Elander, 2012, Granberg and Elander, 2007). The network can thus be used as a way to tell a story about the city, in this case a green story.

One concrete manner in which C40 membership can enhance a city’s reputation is by the award ceremonies it organizes. It is a public recognition for a good performance. Winning an award can help improve a city’s image, as it generates great media attention and publicity (van der Heijden, 2016). C40 has an annual awarding ceremony, the Climate Change Leadership Awards, which as can be read on their website, “provides global recognition for cities that are demonstrating climate action leadership” (C40, Bloomberg Philanthropies Awards, n.d.). The praise of an award and the accompanying media attention can affirm a city’s green reputation.

Having a positive, green image and being recognized ‘as the next sustainability hub’ (Bouteligier, 2014) is favourable for a city for various reasons. A green reputation may attract investments from the private sector and from public funding to bring about sustainable development (Granberg and Elander,

2007). Also, branding can attract new residents that are inspired by the green image of the city. Being considered a frontrunner in climate action might also attract visitors from outside the city interested in learning and inspiration for their own work. Internally, the communication of a place as ‘green’ can create pride and support among its citizens (Andersson, 2016, Gustavsson and Elander, 2012). When residents are proud of their green city, they can function as ambassadors of the place-brand (Affolderbach and Schulz, 2017).

One side note is that benefitting from a club’s reputation is only possible when the brand of the club is sufficiently strong and known to external actors. If the club has a high value brand, because of for instance the stringent participation standards it sets, this will lead to higher reputational benefits for engaged cities.

Assistance from C40

Frame: Cities as delivering practical action.

Benefit: Assistance from C40.

C40 emphasizes that the focus of climate governance should be on practical action on the ground, presenting cities as well equipped to do this (Mintrom and Luetjens, 2017). Cities’ concrete solutions are contrasted to doing more studies, surveys and just talking about sustainable development (Mintrom and Luetjens, 2017, Acuto, 2013). As put by Bloomberg at the 2012 Rio+20 Summit: “as mayors – the great pragmatists of the world’s stage...we don’t have the luxury of simply talking about change but not delivering it” (in: Gordon, 2013). Lawrence, C40's Director of Global Initiatives, agrees: “It is not just political leadership that mayors are offering; it is tangible solutions to reduce emissions, mitigate climate risks and deliver sustainable growth for their cities” (C40, blog, 2016). In delivering practical action on the ground, mayors are able to take climate action in the short run. The C40 is presented as having an immediate impact on reducing GHG emissions (Mintrom and Luetjens, 2017).

Rather than emphasizing who should govern climate change, this frame emphasizes how it should be done. C40’s method to climate action is presented as completely different from traditional nation-state based approaches. Rather than having more formal meetings in the IPCC, C40 proposes practical action. It is hereby implied that nation-states have not achieved much and that more can be expected from cities.



Potential C40 members could feel attracted to this frame since C40 aims to help cities to deliver practical action. This is done in various manners, ranging from technical assistance to measure, account for and disclose GHG emissions to attracting financial assistance via for instance the World Bank (Gordon, 2016). According to C40 itself, cities across the network have access to direct assistance via C40’s “dedicated staff” (C40, what we do for cities, n.d.). Cities could feel attracted to this as collaborating in a network can help them identify opportunities for cost savings and maximizing return on investments (Gordon, 2016). Cities might feel that by becoming a member it will be easier to undertake practical action than without C40 membership.

Exchanging knowledge

Frame 4: Cities do not compete- they collaborate.

Benefit: Exchanging knowledge.

C40 concentrates on information sharing within the network, assuming that progress can be made the best when cities learn from each other (Mintrom and Luetjens, 2017). Information sharing on best practices is one of the key benefits of C40 (Reddy, 2010). “We need to get those examples [of GHG

reducing projects] up and running and then use them as a catalyst for other cities so they can follow suit” as said by C40's then executive director Simon Reddy (2010). As Bloomberg argued: it is our strategy to make “the C40 Climate Group nothing less than the most authoritative source of information and analysis on all the climate change actions taking place in all the world’s great cities” (speech Bloomberg, 2010).

The way C40 manages the knowledge available from its member cities throughout the network is by organizing face-to-face meetings and by providing information online. The C40 hosts a biannual Mayor’s Summit, regional summits and C40 Cities Awards (C40 and Arup, 2017). According to C40’s Executive Director Simon Reddy, these meetings lead to the fact that... “Cities are better equipped to make decisions about their own future needs” (2010). Online, cities get access to good or best practice guides outlining successful approaches for reducing GHG emissions and climate risk (C40 good practice guide, climate positive development, 2016). Best practices, or good practices, are “an initiative, policy measure, procedure or programme”, selected because they meet certain sustainability criteria (Bulkeley, 2006). The aim of best practice exchange is that cities learn from and motivate one another. According to C40, best practice exchange will motivate cities to take climate action that is “more quickly, at a lower cost and achieve greater impact than if they were acting alone” (C40, Good Practice Guides, n.d.). The value of best practice exchange could thus be that it prevents members from reinventing the wheel; instead, they can copy-paste the practices that work in other cities. Indeed, as C40 writes: “Stealing each other’s ideas” enables cities to save resources (C40 Good Practice Guides, n.d.).

This frame emphasizes the collaboration within networks. The cities emphasize what they have in common, in place of focusing on conflictual interests. The underlying idea is that cities have more in common than have nation-states (Chan, 2016).



The biannual Mayor's Summit in 2016.



Potential C40 members could feel attracted to this frame of sharing information and collaborating, since it would prevent them from needing to reinvent the wheel and thereby thus saving transaction costs. Cities might really enjoy networking events where then can meet like-minded cities and learn from their experiences. Potential members also want to benefit from other cities’ knowledge and might therefore join C40 (C40, what we do for cities, n.d.).

A last important frame employed by C40 is its narrative that climate action will come with economic opportunities, rather than coming at the expense of economic growth. C40 has a dominant focus on neoliberalism as a means of governance. It understands improving the environment as compatible with driving business growth. Environmental quality might even improve with economic growth (Davidson and Gleeson, 2015). Because of this frame, collaboration with the private sector is deemed essential. C40 for instance collaborates with corporate partners such as Microsoft and Siemens, aiming at developing software or tools for smart cities (Bouteligier, 2013, Bulkeley, 2013, Bulkeley and Betsill, 2013, Aust, 2015).

The focus on economic growth is heavily emphasized in C40 reports such as *Deadline 2020* (C40 and Arup, 2017) and in speeches by seminal figures. As Bloomberg said: “We do not need to choose between preventing climate change on the one hand, and promoting growth and development on the other” (speech Bloomberg, 2007). When cities take climate action, this might make them more attractive places for economic investments. “Cities that lead the transition to new alternatives will become more attractive places for economic investment” (speech Bloomberg, 2010). In this, collaboration with private actors is deemed essential: “Our call out to private initiative is absolutely clear: Help us transform the world!” (speech Hidalgo, 2016).

This frame has been considered the most controversial of the five. C40 has been criticized by scholars for its focus on neoliberalism as the way to go for the climate (Davidson and Gleeson, 2015, Bouteligier, 2013, Aust, 2015). It has been debated whether economic growth and sustainable development can even be achieved simultaneously. A group of scholars and activists have argued that we should not look for sustainable solutions within the neoliberal system, but rather opt for more radical non-economic approaches that actually limit overconsumption. Climate change solutions can hardly have desired effects as long as they focus on economic profit and replicability. Close collaboration between C40 and private actors, they argue, will keep the neoliberal system tightly in place. Moreover, the economic focus on climate action risks ignoring social consequences. Equality and justice are for instance hardly measured in C40’s reports (Davidson and Gleeson, 2015, Bouteligier, 2013, 2014).



Still, potential C40 members could feel attracted to this frame as it presents climate action as a win-win situation: both beneficial for the climate and for business. The underlying assumption is that cities may assume that climate action is too expensive for them. When climate action is presented in an economic way, it might be convincing for cities to finally get engaged. The benefit is thus that cities do not have to compromise when it comes to economic objectives, and that climate action even comes with business opportunities.

## 4.2 Sub conclusion

Like every organization, C40 employs a certain narrative which is crucial in understanding how C40 is perceived by new and current members. What the frames have in common is their emphasis on how cities, instead of nation-states, are well equipped to take quick and practical action on the ground. It is through this narrative that C40 has managed to set themselves apart from nation states’ climate action, suggesting that they are approaching climate governance differently.

Some frames employed by C40 are also seen in other climate organizations, such as in the Cities for Climate Protection Campaign (CCP). Here too, the city is seen as the most vulnerable to climate change, justifying the need for climate action at the city level (Lindseth, 2004). Other climate organizations on

their turn emphasize different frames. The Carbon Disclosure Project, for instance, stresses the need to report information. Here, disclosing an organization's emissions is believed to promote behavioural change (Mintrom and Luetjens). C40, on the other hand, does not emphasize publicly disclosing and reporting on city's progress. What this shows is that, although certainly every organization employs framing, specific frames are chosen per organization. This can have consequences for which parties are attracted to the organization and how they perceive the organization.

High expectations are raised based on how C40 presents itself online. C40 has managed to create an image of itself as a revolutionary movement that will change the climate governance landscape. Whether this is rightfully so or merely smart marketing will be investigated in chapter 2 by analysing to what extent the frames used by C40 are recognized by Amsterdam. The findings of this chapter will enable a comparison between the presentation of C40 and the experience of Amsterdam. First though, it is necessary to explain C40's membership procedure.

## 5. Amsterdam's Membership

Now that we understand what could potentially attract cities to C40, it is time to dive into the case study. This will provide insights on how exactly Amsterdam became a member, how many people are currently working on C40 in Amsterdam and what the motivation for joining was. The main research method employed for this chapter are semi-structured interviews. Data from the interviews was triangulated by analysing literature on club theory and documents on and by the Municipality of Amsterdam.

It is important to emphasize again how club theory steered the data collection for this chapter. Since club theory describes that a club can decide on who may join, the research here focuses on the admission procedure of C40. In addition, club theory describes that members need to be offered attractive benefits in return for their commitment to the club, leading to a section on club benefits (Cornes and Sandler, 1996).

### 5.1 The membership procedure

Initially, Ken Livingstone invited cities he wanted to set up the network with. The first 18 mayors were selected for they were the “the most globally influential and economically powerful mayors of global megacities” (Davidson and Gleeson, 2015, C40, history, n.d.). Amsterdam was invited by Livingstone right at the beginning, but did not accept the invitation right away. It was not until van Dijk got on the job that something was done with the invitation (van Dijk, interview, 2017).

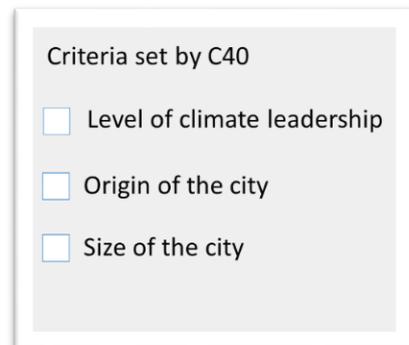
Although in the beginning of C40, the membership was on an invitation-only basis, this changed in 2005 (Smith, interview, 2018). By now, mayors can express their interest in joining C40 by writing a Letter of Intention to the network (Smith, interview, 2018). The Steering Committee then reviews this letter but also carefully considers the environmental performance of the city (Min, interview, 2018). Yet, becoming a C40 member has become harder since the network was founded. First, C40 has set a maximum number of members, precisely following club theory, limiting the possibility of entering the network. According to C40's own standard, the network is now more or less full: C40 staff mentioned a number between 90 and 110 cities as the maximum number of cities in the network (Meijer, interview, 2017, Smith, interview, 2018). The reason for this, according to one C40 staff member, is that a smaller network creates more intimacy and makes it easy for members to connect with one another (Meijer, interview, 2017). Due to the installed maximum number of cities, there is now a waiting list of cities interested in C40 (Smith, interview, 2018). Put simply, the demand for new cities is low while the supply is high. This puts C40 in a favourable position. It allows C40 to demand a lot from its members. In the case of inadequate performance of a city, C40 can easily replace that city by another. So, even though there are other cities that meet the criteria, C40 has chosen to keep a maximum in order to keep the club manageable.

Secondly, C40 now makes sure to keep a proper balance between the countries that are represented in the network. This makes it harder for cities from Europe, for instance, to enter the network. C40 distinguishes seven geographical regions, ranging from Europe (19) and North America (19, of which 12 in the USA) to Africa (8) and Central East Asia (9, of which all are from China) (see Appendix 2). From certain regions, such as Europe, no more cities are accepted into the network even if they would have a great motivation and climate performance. C40 has strategically chosen for this because it wants to maintain a good balance between cities from the Global North and South. Cities from other countries or regions, such as from China, currently have a better possibility of getting into the network

than cities from Europe. In the case that the Steering Committee would want an additional city from Europe, a European city would first have to exit (Smith, interview, 2018, Meijer, interview, 2017).

Thirdly, the requirements for new members have changed too. In the beginning of the network, multiple smaller cities like Basel, Rotterdam and Amsterdam also entered. This is striking, considering that C40 was set up for only megacities. Remarkably, none of the respondents, not even the C40 staff members, could explain why these smaller cities were invited by Livingstone. One educated guess is that these smaller cities had demonstrated pioneering climate leadership, attracting Livingstone's attention. Since C40 centres around sharing knowledge and learning from one another, Livingstone might have considered these smaller cities as leaders others could learn from. Once the first batch of cities entered the network, however, the membership requirements became stricter. Now only megacities are allowed (Smith, interview, 2018). "If Rotterdam would apply now, it would not qualify", explains one respondent (Meijer, interview, 2017). The same might count for Amsterdam.

So, potential members have to meet various requirements that are set by C40. These criteria have developed as C40 evolved over the years. Right now, a city's size and population matters, the region they come from is taken into account, and they have to qualify as climate leaders (Meijer, interview, 2017, Smith, interview, 2018). Together, these three criteria are possibly problematic for cities interested in joining, especially if they are from the Netherlands: they are from Europe, are too small and the network is deemed full by C40.



## 5.2 Why did Amsterdam become a C40 member?

This section will research for what reasons a city might accept the C40 membership, considering that it might take time, money and effort and that it is not formally required from them. The main research method was semi-structured interviews with respondents at the Municipality of Amsterdam. To research whether Amsterdam's answers were unique, respondents from Rotterdam and Seoul were asked similar questions.

### Extrinsic motivation

As prescribed by club theory, did Amsterdam indeed consider which benefits and costs it would incur by joining C40. The largest benefit Amsterdam expected was to collaborate with other cities facing similar issues. This is indeed one of the five benefits employed by C40, as outlined in Chapter 1. Engaging in C40 would provide the opportunity to learn from other cities. Already then, it was acknowledged that Amsterdam would not only learn from engaging with other cities; it would also need to invest in it. It was expected that the membership was partly about acquiring knowledge, but also about bringing knowledge and helping other cities (van Dijk, interview, 2017, Putten, interview, 2017).

Interestingly, respondents from Rotterdam and Seoul mentioned this aspect as the most important as well. Rotterdam emphasized they wanted to learn from cities in similar conditions as them: below sea level. Meijer: "There must be something there we that we can learn from each other, all of the cities are in the same boat after all". Seoul also wanted to get in touch and collaborate with other cities in similar conditions. For them it was not the aspect of living in a city below sea level, but living in a megacity of almost 10 million people. Min: "What differentiates C40 from other city organisations that

Seoul joins is that C40 focuses on megacities...our city government saw that becoming a member was at our interest, because at the city level we also work on various environmental issues including climate change”.

Rotterdam furthermore openly mentioned that reputation was also a large factor to join C40 and to become active in a subnetwork. Meijer: “Rotterdam likes to profile itself as worldwide leader in the field of adaptation. We do this by being a part of the C40 and by being chair of a sub network, which is good for our image”. Indeed, the website of the Rotterdam Climate Initiative (an alliance between the Municipality, the Port and several environmental protection agencies) mentions the three pillars of its climate strategy, of which profiling itself as “an inspiring example for other delta cities” is one (Rotterdam Climate Initiative, n.d.). Amsterdam did not have a similar motivation considering reputation.

So, respondents from Amsterdam, Rotterdam and Seoul actively recognized C40’s frame that cities can collaborate and learn from each other, although they differed on the added value of reputational benefits.

### Intrinsic motivation

Respondents also mentioned arguments for joining C40 that reveal an intrinsic motivation. What is meant here is that cities might also have a drive to engage with climate action, because they truly conceive it as important. The first aspect is, according to a respondent from Rotterdam, an international responsibility to share their knowledge to make other cities climate proof too (Meijer, interview, 2017). An outsider respondent from Amsterdam takes this thought even further, by mentioning that sharing Amsterdam’s knowledge could be considered some sort of development aid. “We, as a city, are so rich and we have so many ideas: we need to share these experiences with the rest of the world. I think this also plays a part” (Vries, interview, 2018).

A second aspect is that cities may also feel the urge to share what they have accomplished so far. Of course, sharing what you have achieved is rewarding. “It stems from a kind of pride to be able to share what we have achieved in Amsterdam. And there’s a lot of good and interesting things there. So yes, it is nice to talk about it, all the while hoping that someone may do something with it” (Vries, interview, 2018).

A last aspect is that both Amsterdam and Rotterdam feel they are frontrunners when it comes to climate action or climate adaptation, at least according to some respondents. They realise how important the topic is, and feel the necessity and urgency to convince other cities of this too. This can also be a drive to get involved in C40. Meijer: “We were one of the first cities that realised how important it was ... there is a sort of passion and drive behind our work because we deem it so important.”

## 5.3 Who works on C40 in Amsterdam?

C40 is “created and led by cities”, so the target group for C40 are city representatives, primarily mayors. The Mayor then represents the city in C40. Other focal points are people who work for the international relations department and people who coordinate the technical activities of the city, which is usually someone from the environment department (Smith, interview, 2018).

What makes Amsterdam stand out from most other C40 cities is the fact that cities in the Netherlands do not have an elected mayor. Instead, mayors are appointed by the national government. A city is

governed by an elected municipal council, a municipal executive board, together with the mayor. The mayor is a member of the municipal executive board, but also has separate tasks in maintaining public order. Therefore, the responsibility for engaging with C40 comes is shared with Aldermen and sustainability policy makers (van Dijk, interview, 2017, Rheijne, interview, 2017). Compared to other cities, Aldermen have a more powerful position (van Dijk, interview, 2017). The mayor of Amsterdam thus has less power than in other C40 cities. They for instance do not have the authority to decide on financial matters (Rheijne, interview, 2017). So, it differs per city how much authority a city government has over climate action.

The number of people engaged with C40 in Amsterdam can be counted on one hand. Working on and for C40 is only one of their tasks. Van Dijk, for instance, the main person responsible for keeping in touch with C40, is also responsible for ICLEI and topics like the circular economy (van Dijk, interview, 2017). Apart from her, a few people from Waternet are engaged in subnetworks from C40. But, within the Municipality, not many people could be found who knew of C40's existence or had even heard about it (Vries, interview, 2018, Rheijne, interview, 2017). This does not mean that not more people are working on climate, sustainability or international collaboration, but it does illustrate that engaging with C40 is an administrative and specialized task (van Dijk, interview, 2017).

Local representatives in Amsterdam did not see a need to raise awareness about C40 in the Municipality or in Waternet (van Dijk, interview, 2017, Putten, interview, 2017). Putten: "C40 is not something you issue press releases about" (Putten, interview, 2018). Other member cities, who are perhaps more active in C40 in various subnetworks, may have more people employed on C40. The number of people working with C40 thus depends on how engaged cities are. London, for example, is active in eight subnetworks, and logically will have more people working on C40 (Smith, interview, 2018).

Based on C40's documents and publications, this thesis had anticipated that a large number of people would be working on C40 at the local level. However: in Amsterdam, this number only adds up to a hand full. What does it tell us? One conclusion could consider the discrepancy between C40's target audience and the people who actually implement climate action. C40 targets policy makers who can influence local climate policies. But, C40 presents itself using best practices, case studies and evidence from the ground, something that policy makers can perhaps relate less to. As two respondents explained, there is a big difference between the policy and the action level at the municipality, or the 'do-club' and the 'talking shop' as one respondent put it (Jansen, interview, 2018). Although this is perhaps a simplified manner of looking at the organization, it does create useful insights. According to two respondents, the policy level is only talking, discussing and briefing. Jansen: a climate network's work "is often based on policy with a wish to realise things, but it does not trickle down to the people who commission the realisation" (Jansen, interview, 2018). One respondent names an example: "I certainly do not see the point more talks and meetings... but in the meantime, I am the one who will replace the ordinary lights with led lights in the city", something that will reduce the city's GHG emissions (Rheijne, interview, 2017). The policy level thus has a hard time "translating" C40's information to the action level, without actually contributing themselves to the solutions (Rheijne, interview, 2017, Jansen, interview, 2018). This could lead to a discussion whether C40 targets the right group of local representatives, and whether more effect could be accomplished when the action level would be engaged.

## 5.4 Barriers to join C40

Besides looking into the motivation behind cities to join C40, it would also be useful to research why other cities have consciously declined the membership or who have decided against applying. Since these cities were impossible to find, this section will now theorize why cities *might* not join C40. Based on interviews with respondents that were critical of C40, there are multiple barriers to join C40.

First, as argued by multiple respondents, a city might not want to join because it believes the problems that it has are completely different in other cities. Especially because C40 focuses on megacities, some respondents did not see added value in collaborating with them. Jansen for example, argued that the problems of New Delhi or Rio de Janeiro differed too much from those in Amsterdam to be of any help. Another respondent agreed: “Megacities have to deal with completely different issues” (Rheijne, interview, 2017).

Another often-heard criticism on C40 concerned the fact that C40 is not sufficiently action-orientated. Two respondents argued that C40 focuses too much on reports, instead of focusing on the actual realization of all these ideas. This could also be a reason not to join (Jansen, interview, 2018, Rheijne, interview, 2017).

One more factor concerns the competition with other city networks, since C40 is not the only climate city network. Most respondents referred to EUROCITIES, ICLEI or 100 Resilient Cities in their answers, which confirms that the time and effort that is put into C40 has to be shared with other city networks: “the city constantly gets involved with new bilateral and multilateral partnerships” (Jansen, interview, 2018).

A last aspect considers the commitments that C40 demands from its members. Some cities may not have the time and effort that is requested by C40. Also, they might consider the participation standards too demanding (interview, Meijer, 2017).

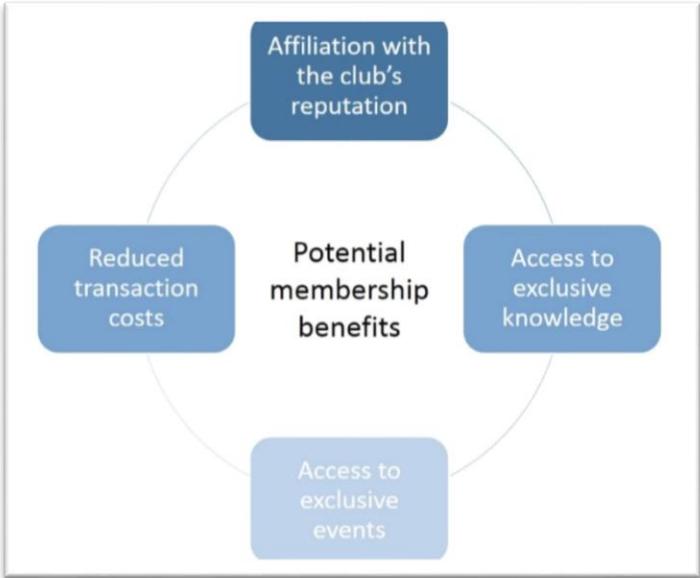
## 5.5 Sub conclusion

This chapter has clarified which criteria cities have to meet in order to join C40. It has also shown that, under the current requirements, cities like Amsterdam would not be accepted anymore. Although Amsterdam joined C40 with high motivations, it appears that in practice only one person is actively working on this. This validates that at least for Amsterdam there is a discrepancy between the way C40 presents itself, as a grand and influential organization, and the way a member uses C40. The next chapter will consider what happens once cities have agreed to join C40.

# 6. Membership Experience: the Benefits

By now we have established why new member can feel attracted to C40. The next two chapters will investigate the next phase: the membership itself. The membership experience has been split up in the benefits (this chapter) and the costs (chapter 7). The main research method employed for this chapter are semi-structured interviews with people at the Municipality of Amsterdam, or 'outsider' respondents who are also engaged with Amsterdam's C40 membership. There will first be a reflection on the frames that were established in chapter 1, trying to analyse whether the narrative from C40 resonates in Amsterdam. So, do respondents bring up these frames themselves, do they use a similar language as C40 and do they emphasize the same matters? In the second section of this chapter, the extent to which the benefits presented by C40 were recognized by Amsterdam is considered. Because the research is informed by club theory, the interviews focused more on the benefits than on the frames, although there is of course overlap.

Club benefits are here considered as the rewards members get in return for their commitment to the club. In economic theory they are also referred to as 'club goods'. Club goods are characterized by their excludable and non-rival nature. This means that the benefits are only for those who join and pay, and are withheld from others (excludability) and that what one actor consumes is still available for other to consumer as well (non-rivalry). A benefit can for instance consider reputational benefits (Prakash and Potoski, 2007, Hovi et al, 2016).



Potential membership benefits, following club theory.<sup>3</sup>

<sup>3</sup> Based on Prakash and Potoski, 2007 and Potoski, 2015.

## 6.1 Frames

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Frame 1: Cities as the new climate leaders.

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Benefit: Political influence.

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C40's most essential frame is to position themselves as the new climate leaders because nation-states have so far failed in taking their responsibility (Mintrom and Luetjens, 2017). C40 officials have repeatedly emphasized that 'while nations talk cities act (C40, 2015, Gordon, 2013).

This frame did not come up in interviews with the respondents in Amsterdam. The discussion about who has the responsibility to take climate action, or where the most effective climate action can be expected from, was not a theme in the interviews. This suggests that, at least in Amsterdam, the need for C40 membership is different from how C40 explains it itself. Amsterdam did not convince that climate action could also be taken at the local level. C40's emphasis on for instance 'Cities have the power to change the world' (C40, Why Cities, n.d.) did thus not correlate with how respondents viewed themselves and their membership in C40.

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Frame 2: Climate change as a fundamental issue for cities.

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Benefit: Green reputation.

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Although probably most respondents would agree that climate change is a fundamental issue for cities, the rhetoric of C40 did not resonate locally. Amsterdam was already working on climate action before it became a C40 member. The fact that climate action should take place in cities because they are the main victim and main source of GHG emissions did not come up once. Amsterdam does again not need convincing considering this point.

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Frame: Cities as delivering practical action.

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Benefit: Assistance from C40.

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Interestingly, this frame of C40 leads to discussion in Amsterdam. Although C40 presents itself focusing on practical action, it is exactly this that the main criticism on C40 is about. Various respondents in Amsterdam who were indirectly engaged criticized C40 for not focusing adequately and sufficiently on practical action. They argued that C40 is too much focused on policymakers, preventing it from having practical impact on the ground (Vries, interview, 2018, Rheijne, interview, 2017, Jansen, interview, 2018). They argued that even though C40 might promote its work by emphasizing practical action, it only offers more reports and policies (Jansen, interview, 2018).

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Frame 4: Cities do not compete- they collaborate.

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Benefit: Exchanging knowledge.

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This frame, on the other hand, does resonate in Amsterdam. Directly involved respondents emphasized that this frame is what attracted them to C40 in the first place. They liked the idea of

“cities helping one another” (van Dijk, interview, 2017). What other respondents argued, however, is that Amsterdam does not need C40 for this. Exchanging knowledge and collaborating occurs without C40: “Do you need C40 for that? I don’t think so” (Jansen, interview, 2018).

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Frame 5: Cities as achieving both climate action and economic growth.

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Benefit: Business opportunities.

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This frame, although elaborately criticized by a few academic authors, did not resonate in Amsterdam. No one at the Municipality mentioned it. The only respondent who did discuss it was the C40 staff member. She emphasized the independence of C40, explaining that consultants or large companies are not allowed at C40’s meetings, for the discussions would then be different (Meijer, interview, 2017).

## 6.2 Benefits

Now that we have established how Amsterdam perceives the presentation of C40, this section will consider how Amsterdam perceives the benefits that come with membership. It will proceed by going through the benefits that are outlined in chapter 1. Apart from these five, one additional benefit is detailed: the events that C40 offers its members.

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**Political influence**      Frame 1: Cities as the new climate leaders.

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Benefit: Political influence.

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Finding: Not a major benefit for Amsterdam.

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Through C40, cities can influence the political debate, agenda setting and decision-making on climate change. What C40 cities do can “set the agenda for people everywhere” (Bloomberg, 2011, in: Acuto, 2012). Climate adaptation, for instance, is a topic that C40 wants to put on the international agenda (Meijer, interview, 2017).

Does Amsterdam view this as a benefit of its membership too? Remarkably, van Dijk did not acknowledge that Amsterdam exerts more political influence because of its membership. She did argue that many cities do use their membership in that way, but that this was not a necessity in Amsterdam since Amsterdam uses the membership more pragmatically (van Dijk, interview, 2017). Putten, engaged in one of C40’s subnetworks, disagreed. He has noticed the active involvement of C40 at COPs, although he did not mention how he could benefit from this (Putten, interview, 2017).

Internally, however, C40 membership can help influencing people within the organization. Putten explained that his engagement with C40 helps to present his managers that his work is legitimate. It justifies his projects, since he can show that Amsterdam is not the only city working on climate (Putten, interview, 2017). Rheijne, a respondent from the ‘side-line’, also explained that Amsterdam’s membership could persuade others to similarly reckon climate change is an important topic, although he did criticize the simplicity of this reasoning. If the mayor affiliates with sustainability, he goes on to

explain, this is a sign to the rest of the organization that others have to consider it important too: “It forces people to think, oh, apparently this *is* an important topic” (Rheijne, interview, 2017).

Seoul has a different experience than Amsterdam. Min explained that Seoul actively seeks political influence through its membership. Seoul is active in the Steering Committee of C40, through which it tries to raise the profile of both the Mayor and the city. “Our mayor wants to show the world that when mayors bring their resources together they can better fight against climate change” (Min, interview, 2018). The difference between Amsterdam’s and Seoul’s approach could thus be, among other things, Seoul’s active role in C40.

So: C40 can, on behalf of its members, exert political influence on climate governance, but Amsterdam does not recognize this as a major benefit. Internally however, Amsterdam uses its membership within the organization to show others that it is worth working on climate action.

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## Reputation

Frame 2: Climate change as a fundamental issue for cities.

Benefit: Green reputation.

Finding: Not a major benefit for Amsterdam.

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Participation in a climate city network can provide cities with a certain status or reputation associated with being at the centre of a strong organization (James and Verrest, 2015, Bulkeley and Betsill, 2013). This can lead to additional media coverage, investments, new residents, visitors and a feeling of pride among the city’s residents (Andersson, 2016). According to academics, C40 has proven to be a good club for cities to strengthen their international reputation and attract positive international attention (Lee, 2013), but how is this experienced locally?

The fact that a city is a C40 member does of course not guarantee a green reputation. This reputation depends on how the city profiles its membership to external actors. As many respondents explained, this is not a priority in Amsterdam. Respondents in Amsterdam indicated that the time and energy that is spent on profiling the city depends on the management, and on especially the mayor. They stated that the current management does not value this very highly (van Dijk, interview, 2017, Putten, interview, 2017).

How different is this for Rotterdam, where profiling the city with C40 membership is a pillar of its climate strategy. Rotterdam is much more open about the image it wants to have than Amsterdam. It values being seen as an inspiring climate leader, especially on climate adaptation (Meijer, interview, 2017). The motivation behind this, however, is not completely clear. According to a C40 staff member who formerly worked for the Municipality of Rotterdam, the city does not track how C40 membership has benefited its reputation (Meijer, interview, 2017). Although Rotterdam has been a C40 member since 2007, it only recently started to work on a report outlining the potential benefits of a green reputation. Meijer named four main benefits that can derive from a green reputation. These points overlap largely with the benefits outlined in the literature, such as in Andersson (2016). First Meijer outlined that being associated with green leadership might encourage firms to settle in Rotterdam. She explained that even though Rotterdam could also have accomplished this *without* C40 membership, it certainly does make it easier. Secondly, organizations now quicker choose Rotterdam for hosting international conferences. In previous years, Rotterdam organized a few large climate adaptation congresses. Now, parties are starting to associate Rotterdam with climate adaptation, resulting in more conferences. Thirdly, many external visitors now knock on Rotterdam’s doors because they are interested in the city. According to Meijer, Rotterdam may welcome about 80

delegations each year. This has beneficial spin-off effects for restaurants and hotels in the city. In addition, it enlarges the network of Rotterdam, enabling the city to set up new linkages between the delegation and Dutch people. Fourthly and lastly, but not mentioned by the academic literature, Rotterdam also mentioned the importance of having a good reputation *within* the network. C40 cities apparently take Rotterdam very seriously. If Rotterdam has a request, other members will quicker help. Meijer: “Rotterdam has a good reputation within C40. When I ask cities by mail which mayors also go to conferences and to get me in touch with them, it’s very easy. Within a week I had contacts with six cities” (Meijer, interview, 2017).

This small sidestep to the experience of Rotterdam led to a new question. If Rotterdam gains reputational benefits from its involvement in C40, why is Amsterdam not as keen on these opportunities? Here again, the opinions differ. Several respondents indicated that Amsterdam’s reputation is fine as it is. It feels less need to publicly claim, like Rotterdam, that it wants to be a climate-proof city (Putten, interview, 2017). None of the respondents in Amsterdam mentioned the opportunity that firms might settle in their city, thanks to its green reputation. The possibility of becoming a host city for international conferences did also not impress Amsterdam. According to the main C40 contact person in Amsterdam, hosting a C40 conference is not as good for the city’s reputation as Rotterdam assumes. According to her, these conferences are intended for the management, and not for the city’s inhabitants. A conference may inform citizens that their city is involved in the network, but “It’s really something for the managers, not for actual citizens” (van Dijk, interview, 2017). As for the third point suggested by Rotterdam of attracting external visitors, Amsterdam also feels less need. Respondents in Amsterdam highlight the popularity of the city when it comes to delegations wanting to visit. As one respondent explains: “We don’t need a better reputation, we’re already hogged by delegations” (Putten, interview, 2017). Another respondent agrees: “There are so many parties in the whole world that want to come by. Amsterdam is a hip and attractive city, so people have always been interested to visit” (Rheijne, interview, 2017). Another respondent does not even see the relevance of these delegations, because they take up time and capacity of the Municipality’s staff. Also, he does not see the relevance for the visitors themselves: “I basically only tell them what they already know” (Rheijne, interview, 2017). Unlike Rotterdam, Amsterdam did mention the opportunity of getting additional media coverage because of its membership. When Amsterdam won the Cities Climate Leadership award, they were trending topic on Twitter for one night, which, according to van Dijk, contributed positively to their reputation (van Dijk, interview, 2017). Lastly, neither Rotterdam nor Amsterdam mentioned attracting new residents, additional funding from the public sector or the creation of a feeling of pride among the city’s respondents.



Logo of Amsterdam's achievement.

It appears from comparing Rotterdam and Amsterdam that not every city sees a green reputation as desirable. What complicates the discussion is the local knowledge gap of exactly how a city can benefit from a positive reputation. But, if we base ourselves on how Rotterdam sees this, a green reputation can greatly benefit a city. It, does, however, require active participation in the network. One respondent was clear about this: “Not to say anything bad about Amsterdam, but Rotterdam has been much more active in the C40. That really makes a difference. We were the first, pull the network and have a mayor that completely supports it. With a little effort, like in Amsterdam, you’re not going to get any spin-offs. You really have to give it your all, then it’ll show...You can’t be like, I’ll do a little and get the benefits.” So, even if Amsterdam would want a better green reputation, it would, according to this respondent, need to be more active in the network first. Merely being a C40 member is not adequate. A certain level of effort might be required before the reputation really sticks on a city.

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## Assistance from C40

Frame: Cities as delivering practical action.

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Benefit: Assistance from C40.

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Finding: Partly beneficial for Amsterdam.

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Getting direct assistance is an important aspect of being a C40 city. According to the webpage ‘What We Do for Cities’, direct assistance or on the ground support is their number one activity. Assistance can be either financially or technically, and occurs through for instance the support of C40’s Regional Directors or City Advisers (C40, what we do for cities, n.d.). We do not know, however, whether and how the cities researched for this study experience this assistance.

Again, whether cities turn to C40 for assistance varies per city. An example is the City Advisers that C40 can provide to a city. Cities need to apply in order to be selected for the allocation of a City Adviser. Although the C40 website indicates that City Advisers are appointed to cities with “the greatest demonstrated need” (C40, City Advisers, n.d.), this in practice comes down to cities in the global south according to a C40 staff member (Meijer, interview, 2017). Currently, eight cities have a City Adviser. The City Advisers are paid by C40 through support of several national governments and philanthropies (Meijer, interview, 2017). Meijer: “Some cities really get a lot, especially in the global South. The cities get a City Adviser and get payed fulltime by the C40 for one to two years.” Amsterdam, indeed had never heard of the City Adviser. One of the respondents actually thought it was her job to be a City Adviser. This demonstrates that Amsterdam is not up to date about the possibility of getting this form of assistance, or that it does not need it. In any case: Amsterdam does not benefit from it.

Another means of support from C40 to its members is in getting them in touch with a Regional Director. Since a few years, each C40 region, loosely based on the continents, has its own Regional Director (van Dijk, interview, 2017). The Regional Directors are responsible for staying in touch with the cities from their region. Several respondents explain that the European Regional Director is very easy to contact. This is beneficial in several cases, for instance if Amsterdam wants to get in touch with a subnetwork (van Dijk, interview, 2017). The experience is similar in Seoul, where a respondent indicated that the Regional Director could easily connect her with other cities to inquire about a specific issue (Min, interview, 2018). Of course, contact could also have been set up without C40, although contact details might sometimes be hard to find. Still, it seems very helpful that it is very easy to connect with other cities within C40 (Mentink, interview, 2018, van Dijk, interview, 2017, Min, interview, 2018). Another respondent disagrees. He is also often in touch with the Regional Director, but never on his own initiative. Yet another respondent, engaged with C40 via a subnetwork, is also not enthusiastic, for the European Regional Director is focused on the city’s mayor and thus less helpful for him (Putten, interview, 2017).

Financial support, a last form of assistance, can be distributed throughout the network via C40’s partnership with the World Bank. None of the respondents in Amsterdam, Rotterdam or Seoul mentioned that they received financial assistance from C40. Meijer indicated that financial assistance is perhaps intended more for cities in the global south.

So, assistance is not considered a major benefit in Amsterdam. Although assistance in the form of contact with the Regional Director is experienced as useful by most respondents, other forms are not used in Amsterdam. The technical and financial assistance C40 provides in the form of City Advisers or funding seem to focus on cities in the global South. Although this is perhaps rightly so, due to a relative lack of for instance financial capacity, it is striking that C40 presents the technical and financial

opportunities as being available for *any* C40 city. Although it is most likely that Amsterdam is in less need of financial and technical support than a megacity in a developing country, it seems remarkable that it is not even aware of the possibilities of technical and financial assistance.

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Exchanging  
knowledge

Frame 4: Cities do not compete- they collaborate.

Benefit: Exchanging knowledge.

Finding: Not a major benefit for Amsterdam.

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According to C40, best practice exchange will motivate cities to take climate action that is “more quickly, at a lower cost and achieve greater impact than if they were acting alone” (C40, Good Practice Guides, n.d.). The value of best practice is in theory that it prevents members from reinventing the wheel. C40 is not unique in its focus on best practice exchange: best practices are an important form of knowledge exchange in urban networks in general, and in urban climate networks in specific (James and Verrest, 2015). In C40, best practices are spread through best practice guides. After deciding on a theme for a best practice guide, such as ‘sustainable solid waste systems’ or ‘low emission vehicles’ (C40, Good Practice Guides, n.d.), member states are approached that could provide input for the guide. So, the initiative for a new best practice guide comes from C40 itself, not from the member cities (Vries, interview, 2018).

Hardly any of the respondents in Amsterdam consult the best practice guides for inspiration about their co-members, not even if they have provided input for it themselves. Remarkably, some of them did emphasize the use of best practice exchange, such as the opportunity to “learn from one another’s mistakes” (Putten, interview, 2017). Also, remember that one of the reasons for joining C40 was “collecting and bringing information” (van Dijk, interview, 2017), which is exactly what the guides are about. However, hardly any respondent acted upon this and consulted the guides. What is more, the respondents declared that they had never been approached by another city following the publication of a best practice from Amsterdam. This does not suggest a large uptake of the best practices that are published (Bijltjes, interview, 2017, Vries, interview, 2018). The only respondent actually enthusiastic about best practice exchange was a C40 staff member.

Both in academic literature and on the ground, there is a big discussion about the use of best practice exchange. The main argument opposing best practice exchange is that the differences between cities and countries are simply too large for the best practices to be useful. Some academics have therefore argued that it is impossible to simply implement a best practice from one city in another city. Respondents in Amsterdam mostly agreed with this reasoning. Several respondents indicated that they preferred exchanging knowledge with a city comparable to Amsterdam (Putten, interview, 2017, Jansen, interview, 2018, Rheijne, interview, 2017). Important factors are the size of the city, the level of economic development (Jansen, interview, 2018), the nature of their climate-related issues (Putten, interview, 2017, Jansen, interview, 2018), the extent to which the Municipality has room for manoeuvre (Rheijne, interview, 2017, Putten, interview, 2017) and their level climate leadership (Meijer, interview, 2017). Several respondents named for instance New York, for it is also a seaside city with similar safety risks (Jansen, interview, 2018, Putten, interview, 2017). London, Milan and Copenhagen were also mentioned a couple of times (van Dijk, interview, 2017, Putten, interview, 2017, Jansen, interview, 2018). Remarkably, other respondents completely disagree: “It does not help me in any way to know how New York or Berlin or London or Paris deal with their problems. Their issues are of a completely different nature than ours” (Rheijne, interview, 2017). Other respondents agreed or even went as far as to oppose best practice exchange with any city. They argued that each city is

completely different, even within the Netherlands, resulting in completely different problems (Rheijne, interview, 2017).

Other reasons why best practice guides are not extensively used in Amsterdam are of a practical nature. For some people, the fact that the guides are in English is a problem (van Dijk, interview, 2017). Also, people at the Municipality simply do not have enough time on their hands to get inspired. They have enough on their plate as it is.

Even if C40 claims that best practice exchange is the core of their operation, the local reality is once again unruly. In Amsterdam, the best practice guides are hardly consulted, despite that the opportunity to exchange knowledge was what attracted Amsterdam to C40. So, there is a gap between the spreading of best practices by C40 and the extent to which they are consulted. This raises questions about the uptake and implementation of best practices in other C40 cities. It is easy to distribute best practice guides, but whether they lead to better, cheaper and quicker climate action, as C40 claims, is the question. In C40's defence, there may be additional reasons to spread best practice. The fact that people engaged with C40 in Amsterdam do not consult the guides does of course not mean that they do not get inspired from C40 cities. This proved, however, hard to discover.

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#### Business Opportunities

Frame 5: Cities as achieving both climate action and economic growth.

Benefit: Business opportunities.

Finding: Not a major benefit for Amsterdam.

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Membership could come with new opportunities for businesses. Although it is not explicitly mentioned as a service for member cities, C40 suggest that membership comes with fortunate business deals in other publications. One of the key findings in a 2013 C40 and CDP report is that 62% of the urban climate actions potentially can "attract new business investments and grow the economy" (Wealthier, Healthier Cities, CDP, 2013). This suggest a direct benefit from C40 membership in the form of more business opportunities.

None of the respondents in Amsterdam explicitly mentioned that they experienced additional business opportunities. Some respondents, however, did briefly touch upon the fact that C40 has partnerships with businesses (van Dijk, interview, 2017, Putten, interview, 2017). One respondent mentioned that it is convenient that C40 talks to companies such as Alliander in the name of its member cities: "Big companies aren't really excited about different parties telling them to work on climate adaption. That's why it would be better for C40 to do it" (Putten, interview, 2017). But, in this particular case, the goal was convincing a company to take more climate adaptation measures, and not to get Amsterdam a good business deal. Another aspect worth mentioning is that several respondents mentioned the possibility of linking a visit to a C40 conference with a trade mission. This can potentially lead to new business opportunities, although Amsterdam could not name an example of this (van Dijk, interview, 2017, Putten, interview, 2017).

Upon comparing the experience of Amsterdam to Rotterdam, it becomes clear that once again Rotterdam has a clearer vision on this benefit. Rotterdam mentioned that partly because of its C40 membership, new businesses settle in the city. Similar to Amsterdam, the trade missions were also mentioned as a plus (Meijer, interview, 2017). Even though C40 membership might lead to additional business opportunities in Amsterdam, none of the respondents explicitly mentioned this. This leads to the finding that it is not a major benefit for Amsterdam.

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## Events

Frame: -

Benefit: -

Finding: A benefit for Amsterdam.

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Apart from the benefits outlined above, an additional benefit came to the fore after several interviews. Almost all respondents emphasized the added value of the multiple events C40 organizes. These events range from conferences and Summits, to webinars and workshops. Since multiple respondents mentioned events as a benefit, in lieu as for instance a means, 'events' was added as a benefit.

Most scholars agree that events, such as conferences, can be an essential part of a climate change network. They enable members to socialize with and inspire one another. By telling about their own climate achievements, they can perhaps motivate others to take (additional) climate action too. These events are thus an important facilitator of knowledge exchange (Lee, 2013, Rashidi and Patt, 2017, Bouteligier, 2014).

C40 distinguishes between face-to-face events and virtual events (C40, what we do for cities, n.d.). Face to face events give members the opportunity to "engage in peer-to-peer sharing, collaboration, and agenda-setting", as C40 describes on its own website (C40, events, n.d.). C40 organizes a variety of face-to-face events, of which the biannual Mayor's Summit is the most important. The Mayor's Summit is invitation-only and mandatory for member cities (Meijer, interview, 2017). Only if the mayor is not able to come, an Alderman may come instead (van Dijk, interview, 2017). C40 makes sure that every mayor has a role during the summit, for instance in a panel discussion on stage or by giving a workshop (van Dijk, interview, 2017). Van Dijk highlighted the value of the Mayor's Summit, explaining that the conference is an exciting part of being a member. According to this respondent, visiting conferences abroad is simply always inspiring. She also valued conferences as a useful opportunity to set up new contacts. She went on to explain that conferences are useful occasions to set up side meetings with other parties. In this way, Amsterdam can combine a C40 conference with other meetings (van Dijk, interview, 2017).

Another respondent highlighted that attending a conference can give a certain signal to other people in the Municipality. When the Mayor visits a conference on sustainability, this has an effect on the organization: "Because the mayor attended the conference and started to associate with sustainability, the whole organisation started to find it important too. So, if the mayor thinks something is important, we should all probably think it's important too" (Rheijne, interview, 2017).

Yet another respondent had a more critical stance towards conferences. Of course, visiting conferences is fun, he says. "All the aldermen and mayors are suddenly interested when we can all go to Rio de Janeiro or Seoul..." He suggested that these people believe that being a member should not be too much of an effort, but that of course "the far trips will work out" (Vries, interview, 2018). This suggests that attending a C40 conference is perhaps more interesting for personal reasons, than perhaps for climate purposes.

Hosting a conference, not a mandatory participation standard, is also a possibility for a city. Amsterdam is, nevertheless, not interested in this. According to van Dijk, organizing a C40 event takes up time and money, and does not directly benefit the city (van Dijk, interview, 2017). The respondent from Rotterdam disagreed with this, and argued that organizing a conference can lead to several benefits for the city. Ever since Rotterdam has organized a few international conferences, it became more known for climate adaptation. As a result, other parties are now also able to find Rotterdam better if

they are planning an event themselves, which leads to dozens of delegations visiting Rotterdam on a yearly basis. This has “a direct spin-off for restaurants and hotels” (Meijer, interview, 2017). Amsterdam did not see this relevance (van Dijk, interview, 2017).

So, C40 stresses the importance of conferences by for instance making the biannual Mayor’s Summit a mandatory aspect of membership. The people in Amsterdam who had attended these conferences were positive about them, for they provided opportunities to network and socialize. Actual benefits for taking climate action, however, were not mentioned. Other respondents suggested that people would always be satisfied if they get the chance to go on an excursion abroad. Considering that money is spent on organizing, hosting and visiting conferences, one could argue that this money should be spent on climate action itself.

### 6.3 Sub conclusion

The way member city Amsterdam perceives its membership is different from how C40 presents it. The findings suggest a mismatch between the rhetoric of C40 and the local reality in Amsterdam. The only respondents who elaborately discussed the frames were the C40 staff. Four out of five of these frames employed do not resonate in Amsterdam. The only frame that was recognized was the fourth frame, focusing on collaboration between cities.



This frame was, however, recognized by a respondent directly engaged with C40. Other respondents criticized this frame, claiming that collaboration also occurs without C40 (Jansen, interview, 2018). Some respondents even actively criticized the entire narrative of C40, stating that it only uses this narrative to justify its own work: “...otherwise they would go bankrupt. That is a whole different need than the climate” (Vries, interview, 2018). The fact that the frames do not resonate does not mean that the respondents do not agree with C40. C40’s narrative might still have influenced their views, perhaps giving them a sense of purpose to their work (McEvoy, Fünfgeld and Bosomworth, 2013). It does show that the grandiloquence of C40 does not influence how Amsterdam views C40.

There is also a mismatch between what C40 perceives as the benefits it offers and how Amsterdam experiences and uses these. Political influence and additional business opportunities, for instance, were not acknowledged as a major benefit. Amsterdam does benefit from its membership by often being in contact with the European Regional Director and by being able to easily contact other C40 cities. Events, such as the mandatory Mayor’s Summit, also come to the fore. Remarkably, the main factor Amsterdam joined C40 for, exchanging knowledge, was not intensely used. Respondents in Amsterdam highlighted that they bring in more information to the network than they acquire. Moreover, exchanging knowledge was only deemed useful with cities that are similar to Amsterdam. Numerous respondents did not even see the relevance of best practice exchange. There was little evidence that best practices were read, let alone implemented. This suggests that how C40 presents the use of best practice exchange, as leading to better, cheaper and quicker climate action, is too simple.

Still, despite the fact that Amsterdam does not benefit from its membership the way C40 foresees, it decides to stay in the network. This implies that it gains more from the network than that it loses, if we follow club theory. This asks for a deeper understanding of C40’s membership costs.

## 7. Membership Experience: the Costs

One of the reasons why a city would choose not to join a club are the costs, which is exactly what this chapter will further look into. Finding data for this chapter was difficult considering the data available on the costs of C40 membership. Several authors for instance outlined that they could not find any evidence of mandatory reporting procedures in C40 (Bansard et al, 2017, Bouteligier, 2013, Mintrom and Luetjens, 2017). The interviews with C40 staff members were therefore essential to obtain information on this matter.

Costs are here defined as both financial and nonfinancial, and are installed to deter free riding within the club. If no costs would be installed at all, many cities could decide to free ride and benefit from the actions of others, potentially resulting in an imbalance in commitment and efforts. Financial costs could include a membership fee, whereas nonfinancial costs could be the 'costs' of committing to membership standards (Prakash and Potoski, 2007, Ostrom, 2010).



Potential membership costs, following club theory<sup>4</sup>

### 7.1 Financial costs: no membership fee

Club theory prescribes that clubs can charge monetary costs for members, such as a membership fee or a per-visit toll (Prakash and Potoski, 2007). In the case of C40, however, there is no membership fee for members, contrary to what academic authors have written (for instance Rashidi and Patt, 2017) (Putten, interview, 2017, van Dijk, interview, 2017). It is no wonder that academic authors assume that there is a membership fee. Firstly, there is no information available on this matter. One C40 staff member mentioned that the fact that these documents are not public “is not on purpose” (Smith, interview, 2018). Although multiple respondents were asked for the motivation behind this, none of them could give a satisfactory answer. One respondent guessed that this is possible because of C40’s multiple partnerships with private companies (van Dijk, interview, 2017), but that is speculation. The

<sup>4</sup> Based on Prakash and Potoski, 2007 and Potoski, 2015.

second reason why many have assumed that C40 charges a membership fee is that several other climate clubs do charge a membership fee. These fees are sometimes differentiated to the size of the city or the rate of development of the city. C40, however, has decided not to install such a fee. A C40 staff member explained that the organization has investigated whether it would be feasible to ask cities for a fee, but found that cities are not willing to pay (Meijer, interview, 2017).

Predictably, the absence of a membership fee is experienced as positive by Amsterdam. Van Dijk highlighted the fact that other climate networks, such as ICLEI, do cost money, whereas C40 does not (van Dijk, interview, 2017).

## 7.2 Nonfinancial costs: participation standards

Besides financial costs, club theory prescribes that a club can expect commitment in yet another form. Clubs can set participation standards to which the members must adhere. They can relate to for instance environmental performance or the requirement that members consult regularly with one another (Prakash and Potoski, 2007).

These standards are important, because they can function as a signal to a club's members: they need to be aware of what is expected from them. Especially if the standards are stringent, members must be up to date about what they have to do. On the other hand, the standards are also signal to external stakeholders, such as sponsors of the program or businesses that consider working with the club. If the standards are relatively easy to comply with, this informs stakeholders how many externalities the members will generate, which then affects how much reputational benefits the members get from stakeholders (Prakash and Potoski, 2007). Also, the academic literature describes standards as a mechanism to hold cities accountable for meeting certain climate targets (Gordon, 2016).

C40 has set nine mandatory and four recommended participation standards<sup>5</sup>. The network differentiates between participation standards that apply for megacities and innovator cities, two different membership categories. Megacities have to comply to nine participation standards, whereas innovator cities have one extra. Innovator cities are thus "asked to do a little bit more" (Smith, interview, 2018). The rationale behind this is that non-megacities need to prove they are climate leaders.

Of the thirteen participation standards, the respondents highlighted two. They consider data collecting and reporting, and C40's subnetworks.

### Obligatory data collection and reporting

The most essential standards consider the mandatory reporting to C40. This entails that each C40 city has to yearly report on its progress. The obligation of annual disclosure of GHG emissions has been installed in the 2011 C40 Summit in Sao Paulo (Gordon, 2013). At first, reporting focused on GHG inventories, but later developed to include questions on climate adaptation, transport, waste processing and more. The enquiries are regularly elaborated, using, how a C40 staff member describes it, "...the salami-technique: every time, we ask them to do a little bit more" (Meijer, interview, 2017).

As Mark Watts, Executive Director of the network once said, according to Meijer: rather than paying a membership fee, cities actually pay with data (Meijer, interview, 2017). C40 has installed this participation standard to underwrite their name as the 'Leadership Group'. As Meijer explains: "We are a club formed by pioneers. So: then you have to be and act like a pioneer" (Meijer, interview, 2017). Data sent in by members enables the network to show stakeholders how much progress cities are

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<sup>5</sup> See Appendix 3.

making, perhaps thanks to C40. It enables C40 to claim that “cities act while nations talk” (Gordon, 2016). A concrete example of how the data are used is the claim that 70% of C40’s cities already experience the burden of climate change and is insufficiently equipped to take action. Claims like these can potentially attract new sponsors to the network. Another reason why C40 collects data is that it helps them give technical assistance to their cities. The data can thus eventually also benefit the cities themselves, for C40 might use it to develop new instruments (Meijer, interview, 2017).

Amsterdam experiences the participation standards as positive. No respondents mentioned that they perceived this standard as too much work. Van Dijk was even glad that the standards had become more stringent recently. She considered it positive that the obligation to yearly report a city’s CO2 emissions is now anchored in the network’s standards (van Dijk, interview, 2017).

### Obligatory participation in subnetworks

Another important participation standard considers C40’s subnetworks. Starting in 2007, C40 began to develop issue-specific subnetworks (Gordon, 2013). Here, groups of cities facing a similar challenge or sharing a similar interest can collaborate (C40, what we do for cities, n.d.). Examples are the Sustainable Solid Waste Systems Network, led by Durban and Delhi, or the Green Growth Network, led by Copenhagen. As of now, there are 17 sub networks (C40, Networks, n.d.). According to C40, 70% of its cities have “implemented new, better or faster” climate actions due to collaborating with other cities in subnetworks (C40, Networks, n.d.). Therefore, cities are stimulated to actively participate in these collaborations. C40 also makes sure to assist network leaders to compensate their efforts (Mentink, interview, 2018).

If cities are involved in not enough subnetworks, they are encouraged to do so by their Regional Director. As Putten explains: “The Regional Director of Europe was very glad I got involved with the Climate Change Risk Assessment network, because up until then, we had only been involved with one topic. It was applauded that Amsterdam would get involved in other networks” (Putten, interview, 2017). But: simply being part of a subnetwork is not sufficient. Members also need to participate actively, though this might take up their time.

Amsterdam is a member of the Green Growth Network and the Climate Change Risk Assessment Network, but does not lead any of these networks (van Dijk, interview, 2017). This might have a financial reason. Leading a subnetwork involves bringing in some money, which is “not an option” for Amsterdam (Mentink, interview, 2018). Also, van Dijk does not see the point of leading a subnetwork, as it would take a lot of time. These findings suggest that Amsterdam does achieve this participation standard, but that it is not willing to invest additional time or money in making more of the subnetworks.

### Commitment to the participation standards

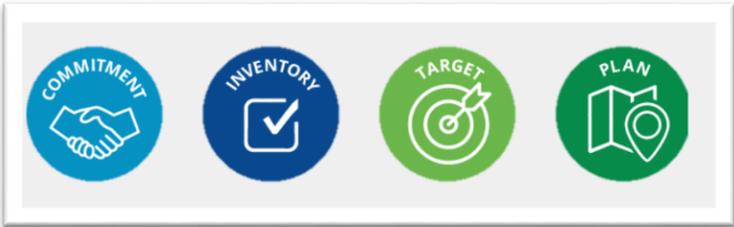
So, how does C40 ensure that its members take the participation standards seriously and comply with them? Apart from giving cities some benefits in return for their commitments, C40 also employs other techniques. Firstly, C40 makes sure that cities know what they sign up for when they become a member. The European Regional Director confirmed this, by emphasizing it is her job to make absolutely sure that cities know what is expected of them: “We do not want cities to exit the network because they did not comply and did not know the standards” (Smith, interview, 2018). One C40 staff member described that in the case of Tel Aviv, the most recent addition to the network, she had meetings with the Mayor preceding the city’s accession to the network. The goal of these talks was to carefully explain the participation standards and requirements, so that C40 could be sure the city knew what was expected of them (Smith, interview, 2018).

Secondly, C40 is willing to provide assistance if cities want to take the initiative of leading a subnetwork or organizing a C40 activity. One recommended participation standards for instance suggest that cities can offer to host C40 workshop. Since this could take up additional time from a Municipality, C40 then offers help (Meijer, interview, 2017). Mentink acknowledges this: he is assisted with organizing matters in setting up a new subnetwork (Mentink, interview, 2018).

Thirdly, C40 makes sure to carefully monitor the performance of cities (Smith, interview, 2018, Meijer, interview, 2017). Monitoring is important here, since it enables a club to screen how its members are performing and to take measures if it turns out that not enough is done (Prakash and Potoski, 2007). The Regional Directors keep track of the performance of cities by giving out scores to their progress (Meijer, interview, 2017). Additional points can be earned by fulfilling the recommended participation standards.

Apart from these monitoring mechanisms, clubs can also install sanctioning mechanism. Possible sanctions can be fines, withdrawal from the club, changing the states of the member from active to inactive or withdrawal of membership rights (Falkner, 2016). C40 has installed nonmonetary sanctions if cities do not commit to the participation standards. A city will get an official warning, a so-called yellow or orange card, if it is lagging behind on its commitments on the mandatory commitments. In that case, the city would get six months to make sure it complies. If not, it can be categorized as inactive. Although it has never occurred before, cities might eventually be expelled from the network if they still have not managed to comply with the standards after another six months. The threat of this exclusion mechanism might motivate them to get their scores on track again. Meijer seemed to suggest that rather sooner than later, the first city might be expelled from the network. As she explains: “A city can join a hundred webinars, but if that is all you contribute and you don’t actually work on reducing your emissions: you are out” (Meijer, interview, 2017). Although these sanctions seem serious, membership is of course still voluntary and non-binding. This means that the commitments that cities sign up to are not anchored in laws. Cities are free to leave whenever they want, although this has never happened yet (Meijer, interview, 2017, Smith, interview, 2018).

Strikingly, none of the respondents in Amsterdam mentioned the score system. It was only when upon interviewing the C40 staff members that I was informed of this mechanism. Amsterdam, however, has nothing to be ashamed of: according to one C40 staff member, Amsterdam does a good job on the participation standards (Smith, interview, 2018). Checking this is hard, since the performance reports are again not public. According to the other C40 staff member, however, Amsterdam is not as active in the network as Rotterdam. She stated that Amsterdam only contribute minimally. Rotterdam, on the other hand, commits more actively to the participation standards. (Meijer, interview, 2017).



Icons on the C40 website demonstrating Amsterdam's compliance with C40 as of 2016.

### 7.3 Sub conclusion

Although C40 has not installed a membership fee, and will probably not do so in the near future, it has installed thirteen participation standards. A real level of commitment is expected, otherwise sanctions will follow after a few warning. The networks monitors its members using a score system and by requiring them to submit data. If a city is less committed to C40, this will be reflected in its score. Sanctions, such as the possibility of being kicked out of the network, further decrease the chances of free riding. The participation standards can be considered as a signal to external stakeholders of how serious the group takes climate change. The standards could be, however, much more stringent. C40 has not for instance installed third party monitoring, nor does it publicly disclose the scores that cities get according to their score system. C40's monitoring mechanisms are only for internal purposes.

## 8. Discussion and Conclusion

This thesis investigated how and to what extent C40 member Amsterdam experiences benefits from its C40 membership, based on semi-structured interviews, a grey- and academic literature analysis. It considered climate city network C40 as a club, following club theory, and thereby focused on the benefits and costs that come with membership. Its main contribution has been an in-depth investigation how one city uses and benefits from being a C40 member, thereby adding to the debate on the use of climate city networks. New insights were obtained by getting access to up till now private C40 documents and by getting new information via interviews with C40 staff, such as information on C40's membership costs and participation standards.

This last chapter will start with presenting the findings that were specific for Amsterdam, continuing with the findings for C40 and ending with some brief conclusions about the role of city networks in climate governance. Furthermore, the theoretical implications of this research and some recommendations are given. Lastly, some ideas for future research on C40 and city networks are suggested.

### 8.1 Amsterdam's experience: rhetoric versus reality

To research the benefits that a membership city could obtain, it first needed to become clear how C40 presents these benefits to potential and current members. From an elaborate analysis of speeches, videos, press releases and reports it appeared that C40 has employed a narrative emphasizing how cities are the new climate leaders. This rhetoric, however, is not extensively recognized in Amsterdam. The only respondents who did discuss and recognize the frames were the C40 staff themselves. Some respondents in Amsterdam even actively criticized C40's narrative. This suggests a mismatch between C40's rhetoric and Amsterdam's reality.

Amsterdam city decided to join C40 expecting opportunities to exchange knowledge with other cities. The research found, however, that Amsterdam does not completely receive and gain what it originally became a member for. Although exchanging knowledge and best practices is indeed the core of C40's operation, it appears that Amsterdam is not so active on this matter. There are multiple reasons for this. Respondents in Amsterdam believe that cities can mostly exchange knowledge with and learn from similar cities. They believe that the C40 cities differ too much to fruitfully exchange knowledge and expertise. Several respondents indicated that in place of exchanging information, Amsterdam mostly engages in bringing information. The balance of bringing and acquiring knowledge and experiences is thus off.

That Amsterdam does not get what it joined C40 for does not automatically lead to the conclusion that membership is of no use. On the contrary. Amsterdam especially considers the events that C40 organizes as very valuable. However: other benefits that C40 offers such as technical assistance or additional business opportunities were not recognized at the local level, although C40 presents these as very valuable aspects of membership. C40 thus offers its members a variety of benefits, but Amsterdam does not seem to actively use these. This leads to the careful conclusion that the way Amsterdam perceives its membership is different from how C40 presents the membership to be.

Naturally, each C40 city will likely employ and value the membership another way. A brief comparison from Amsterdam's experience to Rotterdam's experience illustrated how the cities use and value the

membership differently. Rotterdam itself suggests that it is more active in the network, and therefore argues that it reaps more benefits from the membership. This finding could have value for other C40 cities too. A general rule seems that a city can greatly benefit from C40 membership, but only if it actively contributes by for instance co-hosting conferences, leading a subnetwork or submitting best practices for a guide. This suggests that putting in an effort will pay off, since other cities will likely realise what you are working on and get in touch for knowledge exchange. Still, different cities will benefit differently from the membership. A large factor is the nature of the problems that a city experiences. Cities that are less experienced with climate action yet face serious threat of climate change might benefit more from C40 than a city like Amsterdam or Rotterdam, who have worked on climate change for years and are already considered 'innovator cities' within but not limited to the network.

I would not go as far as to argue that C40 membership is a necessity or even indispensable for Amsterdam. Amsterdam extensively collaborates with other cities on climate change and already did so before it joined C40. Also, C40 is not the only climate city network that Amsterdam is engaged in. This might suggest competition between the various networks that cities can choose from, such as ICLEI or 100 Resilient Cities. The extent to which Amsterdam is active in C40 seems to depend on the personal preferences of the local municipal workers active on the climate dossier.

Unsurprisingly, C40 does present itself as indispensable for cities and for climate governance in more general. Some respondents suggested that this narrative is perhaps a matter of justifying its own existence. This leads to questions on how the one matter this is all about, the climate, really benefits. Indeed: C40's goal is not to let its members thrive from membership, but to actually address climate change. Remarkably, the climate was not addressed in the interviews, almost suggesting that climate action is of lesser importance than for instance attending international conferences. This leads to questions about the ability of C40 to actually address climate change.

## 8.2 C40: not a panacea

How much should we expect from C40, based on these brief conclusions? It is evident that C40 has attracted a lot of attention from academic scholars and the media, being increasingly considered as a relevant actor in global climate governance. This can be regarded as impressive, especially since the organization has only existed since 2005. I would argue, however, that we need to be careful with expectations towards C40, since those are perhaps partially based on how the organization presents itself. Although C40 has managed to anchor itself as an innovative and influential organization, this research has given insights in the small effects it actually has in and on Amsterdam. Remember for instance that only one person within the Municipality of Amsterdam is working on C40, part-time. The way C40 presents itself raises expectations about its uptake and impact, which it might in fact not live up to. Although this might be different in other C40 cities, I would call the impact of C40 in Amsterdam much smaller than expected.

Some scholars have suggested that C40 is merely smart marketing or even a greenwash. Some aspects of C40 membership that this research found counter this view, such as the mandatory participation standards. The mandatory participation standards might lower chances of free riding, increase member's engagement with the organization and enable cities to make a case with for instance sponsors, national governments or multinationals. Still, careful understanding is prerequisite of how C40 succeeds in letting their members undertake more, quicker or better climate action than without them. Before we applaud city networks as the new leaders in global climate governance, more in depth research would be of aid.

### 8.3 Climate change governance: learning from city networks?

Upon comparing city networks to more traditional, nation-state based approaches to addressing climate change, a few matters stand out. City networks approach climate action differently, for starters, in working with actors that are actually motivated about taking climate action. They work with enthusiastic cities that see the benefits of undertaking climate action and might even go as far as to take more action than what is legally or formally required from them. Whenever the members decide that their involvement in the network does not provide them with sufficient benefits anymore, they can decide to leave without consequences. This voluntary nature offers advantages over the nation-state approach. Because of these and other advantages, scholars have applauded climate city networks as a new actor in climate governance.

What should not be forgotten, nonetheless, is that city networks have their own flaws. Firstly, when cities engage in a city network, a leadership delusion may be created. The city and the network create an account that suggests that successful climate action is taken, while this may not exactly be the case. The reality is slightly concealed by highlighting local best practices and obscuring poor performances. Other parties might, based on this narrative, expect that sufficient climate actions are already taken, preventing them from taking additional action. This will distract political and societal attention from the climate challenge (van der Heijden, 2017). Another potential flaw is that there might be many investments involved with city networks. Cities, for example, are required to send in extensive datasets or spend part of their financial budget on attending international conferences. If it turns out that city networks are not greatly successful in tackling climate change, one might argue that the time and money should rather be spent on actions directly benefitting the climate. Yet another flaw is possibly that cities might be less interested in addressing climate change than in the reputational benefits that come with affiliating with a network. Although it is fair that cities are positively associated with the network, this should probably not be the main reason to join an organization. A last flaw is the fact that networks often focus on pioneering cities, so cities that have already shown climate leadership. Working with cities that are already active in climate action could be considered as plucking the proverbial low-hanging fruit and can potentially create an elite-club.

Hence, in preference of claiming that either city networks or nation-state governance are better equipped to tackle climate change at the local level, this research proposes a nuanced conclusion: we should recognize the flaws and benefits of each approach, while recognizing that they are not in conflict with one another. Certainly for as long as nation-state action experiences difficulties thanks to issues around free-riding or national sovereignty, we can learn from the different approach that climate city networks have chosen. Nation-states could for instance be inspired by the fact that their cities are voluntarily taking climate action. As long as we recognize that climate city networks are not a panacea for all the problems that nation-state governance experiences, we should certainly keep an eye on climate city networks.

### 8.4 Implications for theory

Combining insights from polycentric governance theory and club theory has been useful for this research. Polycentric governance focused the research on the extent to which C40 is a self-steering organization. Created and led by cities, C40 can be considered as an organization within a polycentric system. Authors have described it as bottom-up, since the cities have self-organized themselves around climate action. Polycentric governance thus helps explaining why and how city networks have evolved. C40's organization, however, does not completely reflect a polycentric system. Through the Steering Committee and Regional Directors, C40 actively needs to motivate and encourage its members to take initiative. This gave insights in how complex a self-steering organization is. Based on

this brief research, it seems that once an organization is setup, there is always some steering necessary. An example of this is that the initiative for best practice guides and for conference calls constantly lies with C40, and not with the member cities themselves. Although cities might want to contribute, they do need encouragement by a higher body. Cities might not take much initiative without a body like the Steering Committee. One could then argue that we do not have the time to sit back and wait for these organizations to get self-organized. Instead, there are advantages to a certain level of hierarchy within an organization, such as mechanisms that encourage cities to take action. It could be more effective to give an authority a level of responsibility, in order to prevent a situation in which no one feels responsible for the outcome. Although it counters the ideas of self-organization as suggested by polycentric governance, I do see the advantages of stringent, though not too stringent, participation standards, monitoring and enforcing by a governing body within the organization. At least for C40, the organization will probably function better because of these top-down mechanisms.

Additional insights were by linking the ideas behind polycentric governance to club theory. Unlike polycentric governance, club theory does assume that steering is essential in an organization. According to club theory, the club has to set rules or requirements in order prevent free riding. This was a useful insight for this research, as it steered to the focus of the research towards participation standards that C40 has set. Another aspect in which club theory differs from polycentric governance is that club theory assumes that cities act on a self-interested basis. In the case of C40, this is a realistic starting point. Rather than assuming that actors are only internally motivated to set up an organization, club theory argues there has to be something in it for them.

Club theory provided this thesis with a heuristic framework. Rather than testing club theory, the research used club theory as a lens to increase understanding about the network. Club theory has steered the focus of the research and the research questions by for instance focusing on benefits such as reputation and costs such as adhering to membership standards. Some aspects of club theory did, however, not surface during the research. Club theory's assumption that actors would join a purely club for reputational benefits or that a club will need to charge membership to deter free-riding were not affirmed. Also, the exclusiveness of the benefits C40 provides to its members can also be questioned. This has consequences for the extent to which scholars could and should consider climate networks such as C40 as "pure" clubs. Yet, climate clubs as described in club theory might never exist in their pure form. Club theory can still be useful for analysing city networks. Scholars could consider climate clubs as a blueprint that can be used to interpret how climate clubs might work in practice.

Nevertheless, many insights from Amsterdam did indeed mirror aspects of club theory. Amsterdam does, for instance, continuously track whether the membership still yields them enough benefits, or knowledge, to stay in the network. Club theory also fits from C40's perspective, for instance in the fact that C40 has decided that there is a maximum to its members of in the mandatory participation standards it has installed. These examples show the extent to which club theory has steered this research.

## 8.5 Recommendations

Based on these findings, this research proposes three brief recommendations. First, C40 member cities who want to make the most of their membership truly have to contribute to the network. This recommendation is not only relevant for current members, but also for cities who are considering joining C40. Input, in terms of for instance leading a subnetwork, is output, for example in getting reputational benefits. It appeared from comparing Amsterdam's experience to Rotterdam's and Seoul's experience that if cities contribute minimally, they also benefit minimally. Therefore, it pays to

make sure that there are people available at the Municipality who are committed to working on C40. The findings suggested that there has to be a certain passion or enthusiasm at the city level.

A second recommendation concerns the expectations scholars might have towards climate city networks. Based on the findings, it seems wise to be aware just how climate clubs present themselves. There are of course reasons to be optimistic about city networks, yet these should not be based on how the networks present themselves. Expectations of the networks should be based on research addressing their use rather than how a network markets itself.

Third, one way to overcome being accused of a 'talking-club' as some respondents did, it to make sure that its publications, such as best practice guides, trickle down from Mayors and Aldermen to lower levels at Municipalities. Multiple respondents indicated that they consider it a pity that many of C40's publications only reach policymakers. The best practice guides, for instance, do not always reach the right people. They are sent to policy workers, since those are the ones directly in touch with C40, but are specifically about practical lessons. Those practicalities might be fun to read for mayors or Aldermen, but are not in their best interest.

## 8.6 Future research

It would be worthwhile performing a similar research in a city that is completely different from Amsterdam, in order to see how they would use the membership. That city could for instance have shown less climate leadership, in order to research if C40's effect would be larger. If it appears that other, less pioneering cities do greatly benefit from their C40 membership, this could lead to a different conclusion about the potential of climate city networks. In addition, the research could be replicated in cities that have consciously not applied for C40 membership, who have chosen not to accept the invitation of Livingstone, or who have been expelled from the network. These cities could shine light on the motivation behind not getting active in C40. This could produce useful insights into what we can further expect from city networks, since perhaps only the most enthusiastic cities have joined.

Another matter on which I would have liked to spend more time is a city's reputation. Multiple respondents highlighted the importance of a green reputation, but were unable to exactly explain why or to whom this mattered. Concretely, a research could be performed on the effect of for instance winning a Climate Leadership Award.

In any case: this study is worth a review in a few years' time, to investigate whether the experience of Amsterdam has changed. Once the municipal officials are, for instance, replaced by other people, the whole experience might be different.



## Appendix 1: Respondents

Organization	Link with C40	Surname (anonymized)
Municipality of Amsterdam, department of Public Spaces and Sustainability.	Local contact person and main responsible for C40	van Dijk
Municipality of Amsterdam, researcher.	Indirectly involved with C40 via sending in a best practice and giving webinars.	Bijltjes
Municipality of Amsterdam, department of Traffic and Public Spaces.	Indirectly involved with C40.	Rheijne
Engineering company 'Ingenieursbureau', Amsterdam.	Indirectly involved as lead buyer for the Municipality of Amsterdam, active in various climate city networks.	Jansen
Self-employed, Municipality of Amsterdam.	Indirectly involved with C40 via his project: the Amsterdam Sustainability Fund (won the Climate Leadership Award in 2014 and was a C40 best practice).	Vries
Public water company 'Waternet', Amsterdam.	Active in C40 in a sub network: the Climate Change Risk Assessment Network.	Putten
Public water company 'Waternet', Amsterdam.	Active in C40 in a sub networks under development: the Solid Waste and Wastewater network (still in development).	Mentink
C40 staff.	Head of Adaptation and Planning of C40, involved in sub network Connecting Delta Cities.	Meijer
C40 staff.	Regional Director for C40 Europe.	Smith
Seoul Metropolitan Government, Environmental Policy Division.	Main responsible and local contact person for C40.	Min
<b>TOTAL</b>		<b>10</b>

## Appendix 2: C40 Member Cities<sup>6</sup>

City	Country	Region	Membership category
Accra	Ghana	Africa	Megacity
Addis Ababa	Ethiopia	Africa	Megacity
Cape Town	South Africa	Africa	Megacity
Dakar	Senegal	Africa	Megacity
Dar es Salaam	Tanzania	Africa	Megacity
Durban	South Africa	Africa	Steering committee, Megacity
Johannesburg	South Africa	Africa	Megacity
Lagos	Nigeria	Africa	Megacity
Tshwane	South Africa	Africa	Innovator city
Cairo	Egypt	Africa	Temporarily inactive
Nairobi	Kenya	Africa	Temporarily inactive
Beijing	China	Central East Asia	Observer city
Chengdu	China	Central East Asia	Megacity
Dalian	China	Central East Asia	Megacity
Hong Kong	China	Central East Asia	Steering Committee
Nanjing	China	Central East Asia	Megacity
Qingdao	China	Central East Asia	Megacity
Shanghai	China	Central East Asia	Observer city
Shenzhen	China	Central East Asia	Megacity
Wuhan	China	Central East Asia	Megacity
Auckland	New Zealand	East, Southeast Asia & Oceania	Innovator city
Bangkok	Thailand	East, Southeast Asia & Oceania	Megacity
Hanoi	Vietnam	East, Southeast Asia & Oceania	Megacity
Ho Chi Minh City	Vietnam	East, Southeast Asia & Oceania	Megacity
Jakarta	Indonesia	East, Southeast Asia & Oceania	Megacity
Kuala Lumpur	Malaysia	East, Southeast Asia & Oceania	Megacity
Melbourne	Australia	East, Southeast Asia & Oceania	Megacity
Quezon City	Philippines	East, Southeast Asia & Oceania	Megacity
Seoul	Republic of Korea	East, Southeast Asia & Oceania	Steering Committee, Megacity
Singapore	Singapore	East, Southeast Asia & Oceania	Observer city

<sup>6</sup> Source: C40 (n.d.). The power of C40 Cities. Retrieved from <http://www.C40.org/cities>

Sydney	Australia	East, Southeast Asia & Oceania	Megacity
Tokyo	Japan	East, Southeast Asia & Oceania	Steering Committee
Yokohama	Japan	East, Southeast Asia & Oceania	Megacity
Changwon	Republic of Korea	East, Southeast Asia & Oceania	Temporarily inactive - Innovator city
Amsterdam	<b>the Netherlands</b>	<b>Europe</b>	<b>Innovator city</b>
Athens	Greece	Europe	Megacity
Barcelona	Spain	Europe	Megacity
Basel	Switzerland	Europe	Innovator city
Berlin	Germany	Europe	Megacity
Copenhagen	Denmark	Europe	Steering Committee, Innovator City
Istanbul	Turkey	Europe	Megacity
London	United Kingdom	Europe	Steering Committee, Megacity
Madrid	Spain	Europe	Megacity
Milan	Italy	Europe	Steering Committee, Megacity
Moscow	Russia	Europe	Megacity
Oslo	Norway	Europe	Innovator city
Paris	France	Europe	Steering Committee, Megacity and current President
Rome	Italy	Europe	Megacity
Rotterdam	the Netherlands	Europe	Innovator city
Stocholm	Sweden	Europe	Innovator city
Tel Aviv - Yafo	Israel	Europe	Megacity
Venice	Italy	Europe	Innovator city
Warsaw	Poland	Europe	Megacity
Heidelberg	Germany	Europe	Temporarily inactive - Innovator city
Bogota	Columbia	Latin America	Megacity
Buenos Aires	Argentina	Latin America	Megacity
Caracas	Venezuela	Latin America	Megacity
Mexico City	Mexico	Latin America	Steering Committee, Megacity
Curitiba	Brazil	Latin America	Megacity
Lima	Peru	Latin America	Megacity
Medellin	Colombia	Latin America	Megacity
Quito	Ecuador	Latin America	Innovator city
Rio de Janeiro	Brazil	Latin America	Megacity
Salvador	Brazil	Latin America	Megacity
Santiago	Chile	Latin America	Megacity
Sao Paulo	Brazil	Latin America	Megacity
Austin	United States	North America	Innovator city
Boston	United States	North America	Steering Committee, Megacity
Chicago	United States	North America	Megacity

Houston	United States	North America	Megacity
Los Angeles	United States	North America	Steering Committee, Megacity
Montreal	United States	North America	Megacity
New Orleans	United States	North America	Innovator city
New York	United States	North America	Megacity
Philadelphia	United States	North America	Megacity
Portland	United States	North America	Megacity
Seattle	United States	North America	Megacity
Toronto	Canada	North America	Innovator city
Vancouver	Canada	North America	Innovator city
Washington DC	United States	North America	Megacity
Amman	Jordan	South and West Asia	Megacity
Bengaluru	India	South and West Asia	Megacity
Chennai	India	South and West Asia	Megacity
Dubai	United Arab Emirates	South and West Asia	Steering Committee
Jaipur	India	South and West Asia	Megacity
Karachi	Pakistan	South and West Asia	Megacity
Kolkata	India	South and West Asia	Megacity
Delhi	India	South and West Asia	Temporarily inactive
Dhaka	Bangladesh	South and West Asia	Temporarily inactive
Mumbai	India	South and West Asia	Temporarily inactive

## Appendix 3: Participation Standards<sup>7</sup>

Standards	Mandatory	Recommended
1. Participate in all C40 data collection efforts	✓	
2. Build and complete a city-wide GHG inventory using the GPC standard	✓	
3. Set a target to reduce GHG emissions.	✓	
4. Establish City strategic action plans to reduce greenhouse gas emissions and adapt to climate change.	✓	
5. Report annually on progress through a C40 recognized platform (currently CDP).	✓	
6. Sign a partnership agreement/MOU.	✓	
7. Demonstrate active participation in Networks.	✓	
8. Attend C40 Mayors Summit.	✓	
9. Complete and update City pages on C40 website	✓	
10. Offer to be the lead city or co-lead city in a C40 network.		✓
11. Offer to host a C40 Network workshop.		✓
12. Offer to second staff to C40 or to another C40 city.		✓
13. Host study tours and/or mentorship programs with other cities.		✓

<sup>7</sup> Source: C40 (2017). Participation Standards. Retrieved via interview.

# Appendix 4: List of Codes

## **Sub question 1: How are C40 club benefits presented by C40?**

Contact with C40

Presentation of C40

National government

## **Sub question 2: Why did Amsterdam become a C40 member?**

Admission

Motivation

Expectations

Who

Other subnetworks

## **Sub question 3: How is C40 membership experienced by Amsterdam?**

Benefits

- Collaboration with other cities

- Activities-

- Best practice

- Reputation

- Business opportunities

- Political influence

- Assistance

Barriers

Costs

Exclusiveness

Impact

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## Acknowledgements of Figures

<b>Title</b>	<b>Source</b>
<b>Frontpage</b>	C40 production images (2014). Awards. Retrieved from <a href="http://c40-production-images.s3.amazonaws.com/awards_pages/images/2014/media/ceremony.jpg">http://c40-production-images.s3.amazonaws.com/awards_pages/images/2014/media/ceremony.jpg</a>
<b>Michael Bloomberg</b>	C40 Flickr (2015). C40 Forum, Paris. Retrieved from <a href="https://www.flickr.com/photos/c40citieslive/22912758884/in/dateposted-public/">https://www.flickr.com/photos/c40citieslive/22912758884/in/dateposted-public/</a>
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<b>Icons on the C40 website</b>	C40 (2016). C40, Amsterdam City Snaphost. Retrieved from <a href="http://www.C40.org/cities/amsterdam">http://www.C40.org/cities/amsterdam</a>
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