

Department of Political Science

Chair: International Relations

The Role of City Diplomacy in the Fight Against Climate Change

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Introduction

In the 1960s, looking at the events of 1968 in France and across the Western world, Henri Lefebvre claimed that social revolution has to be urban (Lefebvre, 2003). He stressed that capitalism had reduced urban life to a commodity for the rich. Lefebvre, and after him David Harvey, claimed that urban populations need to strive for the "right to the city" (*Le Droit à la Ville*, also the title of Lefebvre's masterpiece), which entails placing the citizen at the core of urban transformation, exercising a collective power over the process of urbanization, and ultimately building a shared city, one that offers opportunities to all and leaves no one behind (Harvey, 2008: 1).

Sociologist Robert Park defined the city as "man's most consistent and on the whole, his most successful attempt to remake the world he lives in more after his heart's desire. But, if the city is the world which man created, it is the world in which he is henceforth condemned to live. Thus, indirectly, and without any clear sense of the nature of his task, in making the city man has remade himself." (Park, 1967: 3). If that is so, then the character of the city cannot be divorced from the priorities of its population, of its social relations, lifestyle, and increasingly of the choices of leading sustainable lives or going on with a consumerist linear economy. According to Harvey, "The right to the city is, therefore, far more than a right of individual access to the resources that the city embodies: it is a right to change ourselves by changing the city more after our heart's desire. It is, moreover, a collective rather than an individual right since changing the city inevitably depends upon the exercise of a collective power over the processes of urbanization." (Harvey, 2008: 1). What is ultimately implied by these social scientists is that the city is the building brick for effective change, and in our current times, it is the only place where sustainable development can be initiated and spread.

In 2019, former US President Donald Trump announced the United States' withdrawal from the Paris Agreement. In response, mayors from 61 cities throughout the nation signed a statement rejecting the President's denial of global warming, which they claimed was "getting a cold reception from America's cities". The so-called "Climate Mayors" upheld the commitments to the goals of the Paris Agreement, pledged to continue to meet their cities' climate targets and work together to create a clean energy economy. They concluded their statement claiming that "if the President wants to break the promises made to our allies enshrined in the historic Paris Agreement, we'll build and strengthen relationships around the world to protect the planet from devastating climate risks." The number of mayors quickly grew to 466, representing 74 million people, over 20% of the total population of the United States (Climate Mayors, 2019). Taking a stance against the federal government by implementing city policies in the opposite direction of the national orientation, the group became a relevant political actor and created a precedent that had a strong global impact (Marchetti, 2021).

This case provides a clear example of the growing importance of cities in the international sphere. For over three centuries, following the 1648 Peace of Westphalia, the nation-state was the only relevant actor

in the global arena. This state-centric model has largely failed, at least for what concerns environmental policy. We are witnessing the growing call from the planet to stop society's excessive consumption and develop a sustainable way of living. It seems that, despite the growing number of international agreements on the subjects, states are still essentially turning a blind eye to the issue, or at least they are not acting fast enough. This is due to a variety of reasons, among which the difficulty of action for centralized actors. In the last decades, we have seen a growing push from cities to act in more sustainable ways. For example, 25 cities pledged to become emission-neutral by 2050. Moreover, at the 2017 North American Climate Summit, 67 cities committed to the Chicago Climate Charter and agreed to reduce emissions equally or to a greater degree than what is required of their nations by the Paris Agreement. Further, signatories of the Global Covenants of Mayors for Climate and Energy are also committed to outstanding emissions reduction levels (Urban 20, 2018: 1).

For the first time in history, in 2008, the global urban population outnumbered the rural population, marking a "new urban millennium." (UN Department of Economic and Social Affairs, 2021). Currently, 4.2 billion people live in cities, amounting to 55% of the global population, and the World Bank predicts that, in 2050, nearly 7 out of 10 people worldwide will live in cities. Urban areas generate more than 80% of global GDP, a vital asset for sustainable growth (World Bank, 2020), and are expanding in size and population. It is expected that, by 2030, the number of mega-cities of more than ten million inhabitants will grow from 28 to 41 (Acuto, 2016: 611). Given the increasing significance of the topic, efforts have been made to address sustainable development from an urban perspective, sparking movements all around the globe, and resulting in the inclusion of Goal 11 in the Sustainable Development Goals, "make cities and human settlements inclusive, safe, resilient and sustainable." Further, since the cross-cutting nature of urban issues, these have an impact on several other SDGs, including 1, 6, 7, 8, 9, 12, 15, and 17 (UN Department of Economic and Social Affairs, 2021).

The scale and speed of urbanization bring several challenges to local governments, including the increasing demand for affordable housing, well-connected transport systems, primary services, and jobs – particularly for the 1 billion urban poor living in informal settlements. Cities consume two-thirds of global energy consumption and account for more than 70% of GHG emissions. This unfortunate primate needs to inspire cities to push for better environmental policies to tackle climate change. Cities are progressively more exposed to climate and disaster risks as they grow in size and population, and coastal areas are especially subject to climate disasters. Nearly half a billion people live in coastal cities, which are increasingly vulnerable to sea-level rise. To appreciate the scale of the problem, it suffices to say that in the 136 largest coastal cities, which host 100 million people, \$4.7 trillion in assets are exposed to coastal floods. Further, 90% of urban expansion in developing countries is happening in the proximity of hazard-prone areas, and it is further endangered by the spread of informal settlements.

Over the past year, we have witnessed the impact on cities of the COVID-19 crisis. The pandemic had massive implications in their economic structure due to the measures taken to control the spread of the virus, especially in the state of their public health systems. Given the exponential growth of urbanization and the dangers posed by the climate crisis, pandemics, and globalization in general, cities must work together, coordinating their policies and investment choices to become more inclusive, healthy, sustainable, and resilient (World Bank, 2020).

This coordination work has been greatly enhanced by city diplomacy. City diplomacy is an "umbrella term" that acknowledges that the international activities of cities are extensive and diversified, ranging from twinnings to global governance, and from city networks to international summits (Amiri and Sevin 2020: 3). Although cities still seem invisible to some observers of the international political arena, their role is ever-more expanding. Acuto calls them "the invisible gorillas of international studies", referring to an experiment by Chabris and Simonsin in which subjects were asked to watch a video of students playing basketball and count how many times the ball was passed. Concentrated on their task, most subjects failed to notice the man walking in the scene in a gorilla costume (Acuto, 2013: 2). This happens to cities as well which, according to Amiri and Sevin, "actively participate in the global governance of a wide variety of complex issues, ranging from climate change to public health to human migration, and they often do so through the medium of transnational city networks. However, despite nearly two decades of research on the subject, we still lack a systematic appreciation of the implications of transnational city networking for global politics and diplomacy." (Amiri and Sevin, 2020: 13).

Behind the development of the growing number of city networks are the demographic and economic changes associated with globalization. According to Marchetti, two logics underpin the focus on cities. The first is the logic of efficiency and effectiveness, as good city governance is considered the most qualified instrument due to its direct contact with citizens. The second is the logic of democracy, which sees good governance as the best tool to implement the democratic ideal, as cities become instruments for achieving community empowerment and self-determination. City diplomacy overcomes democratic deficits by connecting the people to global affairs, but such growth of importance is not free of challenges. It suffices to mention the Brexit referendum and the Trump election to see that economic, cultural, and political divides between the "center" and the "periphery" can become so relevant to change the fate of nations and the international arena (Marchetti, 2021).

In the first chapter, I will give a general introduction of city diplomacy and its history. I will then walk you through the several actions that have been taken by city diplomacy in regard to climate action, the international agreements, and networks devoted to the cause. In the second chapter, I will illustrate the role of environmental city diplomacy in Italy and the role of city networks at the European Union level in shaping policy making. In the third chapter, I will look at the case-study of Urban 20, a city network parallel to the Group of 20 process that influences G20 direction at the urban level. In the conclusion, I

will offer a reflection on the future threats, in particular climate-related, that European cities will face and to possible solutions to tackle them. Central to the work is the call on cities to cooperate, possibly through city networks, to share knowledge and unite forces to face common challenges.

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My grandmother, Vincenzina, who has stood by me, supported me, and believed in me since the day I was born, and who has taught me the value of knowledge and imagination.

My mother, Donatella, who has taught me to be passionate, fearless and to stand by my ideas and beliefs no matter what.

My father, Francesco, who has always been by my side, ready to give me valuable advice on school and life.

Pier Giorgio, who is the best brother I could ever ask for.

My aunt and my uncle, Emanuela and Giacomo, who are always there to support me and give me precious advice.

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Chapter 1: A General Overview of City Diplomacy and Environmental City Diplomacy

1.1. The Role of Cities in the International Sphere

The twenty-first century has seen the waning of the Nation-State and national political authority masked behind global waves of populism and nationalism with their promises of national restoration (The Guardian, 2018). Simultaneously, the rise of global temperatures is calling for drastic changes across all aspects of human life. Even with their best efforts, states alone cannot expect to win the climate war. In a world of interdependence, diplomacy based on seventeenth-century Westphalian political institutions is in trouble (Chan, 2016: 134). The explanation for this is at least two-fold. On the one hand, it is common for state-to-state diplomacy to fall into gridlocks. For example, at the 15th UNFCCC Conference of the Parties (COP15) in Copenhagen, the main issue on the table was how national sovereignty was preventing states from acting on climate change effectively (UNFCCC, 2009). On the other hand, international policy making suffers from "democratic deficits" as citizens lack participation in the decisions taken by their institutions on the international level, which leads to widespread opposition on the accountability of state-based international institutions (Chan, 2014), a pattern observed in the numerous anti-globalization protests, notably in the occasion of the G20 and G8 summits. The solution proposed by several academics and institutional figures is that of a local-based democracy that finds its best representation in cities for at least three main reasons.

The first reason is purely historical. Cities are the oldest political institutions still in place, and both the origin of diplomacy and democracy is to be traced back to Greek city-states. The word "politics" comes from the Greek word for city, $p \hat{o} lis$. Also, there is extensive evidence that in city-states like Athens and Macedon, it was customary to send and receive ad-hoc embassies and appoint ambassadors to negotiate with other cities (Pluijm, 2007: 5). In the Renaissance, there is the rise of powerful Italian city-states like Venice and Milan, which were the first to create an organized diplomatic system and establish permanent diplomatic missions abroad (Nicholson, 2001: 6-33). Despite the centrality of city-states throughout the centuries, although their action would be more relatable to micro-state diplomacy rather than to city diplomacy in the modern sense, the role of cities in the international sphere reached a halt with the 1648 Peace of Westphalia, which clearly stated that international relations are the exclusive realm of states. Cities retained a central role as the beacon of social, cultural, and economic processes but had to wait until the 20th century to enhance their diplomatic status, as discussed later in the chapter (Kihlgren Grandi, 2020a: 38-39).

The second reason is the pivotal role of the city in regard to the global population. In 2018, the UN assessed that 55% of the world population lives in urban areas, a figure that is expected to rise to 68% in 2050 (United Nations, 2018). Furthermore, a study of OECD and UCLG on 122 countries showed that in 30% of them, the only form of local authority is the city (OECD/UCLG, 2019). From this data, it is logical to assume that through local government practices there can be a more direct and effective engagement of

the most extensive strata of the population, which would not normally take a stance in a world where decision-making is only up to the states. Despite their central role, the contribution cities can make is hampered by an uneven collaboration with national governments, limited access to global governance processes such as the SDGs and Habitat III, inadequate funding, and insufficient data collection and sharing. For example, even the relatively well-backed C40 group claims that 64% of climate actions taken up by its member-cities are funded only on their budgets. Also, despite being a requirement both of the SDGs and the New Urban Agenda, data gathering and sharing are very inadequate, and efforts are needed to offer more sophisticated urban measurements that are both accurate and globally relevant. Despite receiving adequate UN attention – through WHO Healthy Cities, the UN Educational, Scientific and Cultural Organization (UNESCO), and the UN-Habitat network on urban safety and security – and interest from other international bodies, there are still no formal mechanisms to ensure that cities and city networks have a place at the global table (Acuto, 2016: 613).

One issue that needs to be considered is the direct correlation between the size of cities and their level of international activities, which has been shown by extensive research worldwide (Dierwechter 2010: 59-82; Lundqvist and Von Borgstede 2008: 299-324; Kihlgren Grandi 2020b; United Cities and Local Governments 2013; Bilsky et al. 2017). The research points out the limited international recognition that small and intermediary cities suffer (Kihlgren Grandi, 2020a: 6). This may seem a problem that can easily be overlooked in a globalized world where mega-cities retain the largest share of economic power. Instead, global issues that ought to be tackled at a local level – the leading example being climate change – need a targeted response that is thoroughly integrated across the whole territory. The limited international recognition of small and intermediary cities is, nonetheless, subject to exceptions. For instance, Kuopio, Finland, and Udine, Italy, are both WHO Healthy Cities, and Tshwane, South Africa, an intermediate city including Pretoria, expanded its biogas power plants and invested \$5 million to save 2 million tons of CO2 by 2035 in collaboration with other C40 cities' energy working groups (Acuto, 2016: 613).

The third reason is the increasing number of city networks. City networks are defined as "formal associations of cities and municipalities through which officials learn from one another, engage with public and private actors such as firms and multilateral institutions, and advocate for collective urban interests." (Lecavalier and Gordon, 2020: 16; Acuto et al., 2017). In the last decades, city networks have both become more numerous and more transnational (Acuto and Rayner, 2016). Since the 1980s, they also have become more issue-specific, shifting from the mere mediation of the local-national relationships to produce targeted knowledge for and about cities. Early examples are the Mayors for Peace, founded in 1982, and the World Health Organization's European Healthy Cities Network, founded in 1984. These networks not only facilitate city-to-city interaction, but also reinvent policy actions regarding the topics they focus on (Lecavalier and Gordon, 2020: 16-17). Nowadays, there are over 200 formal city networks, a figure that is exponentially increasing since the early 2000s, with an average of four new networks initiated every year (Acuto, 2017). This is a point that sheds light on a couple of issues related to city

diplomacy. So far as cities have the power to disagree with their nation-states and therefore retain a degree of decentralization, they can peacefully engage in the international sphere. Instead, where there is total alignment in foreign policy between the local and central government – which often happens in centralized autocratic states – and it is nearly impossible to voice opposition, city diplomacy has little to no scope (Kihlgren Grandi, 2020a: 7).

According to Lecavalier and Gordon, "city networks and their secretariats provide useful "economies of scale" by pooling cities' resources to provide policy research, formal case studies, expert consultancy, and advocacy." Secretariats also provide specific resources to their member cities, for example the Compact of Mayors created ClearPath, a greenhouse gas (GHG) inventory tool, and C40 offers a variety of resources through the Climate Action Planning Resource Center which is intended to help the reduction of GHG emissions, assess climate risk and plan long-term strategies. In climate governance, city network secretariats (CNSs) serve pivotal diplomatic functions, representing urban interests in multilateral meetings and in particular with the United Nations. Thanks to the advocacy of ICLEI and others, cities were recognized as "key governmental stakeholders" at the 2010 UN Climate Conference in Cancun. In 2014, the Lima-Paris Action Agenda and the Non-State Actor Zone for Climate Action (NAZCA) platform further recognized the role of cities in global climate action (Lecavalier and Gordon, 2020: 17-18).

To begin the journey through the role that cities have in tackling global issues, defining the concept of 'city' is necessary. The term is two-dimensional and accounts for an administrative and a spatial definition. The city's administrative dimension regards the structure of the local government, which usually features an executive branch headed by a mayor, a political assembly – for example, a municipal council – and a permanent staff. The city as an administrative entity provides a range of mostly similar public services to the community, such as public transportation, public spaces management, waste management, public housing, and lighting. On the other hand, the territorial dimension defines the city according to its administrative boundaries, distinguishing between small, intermediate, large, and mega-cities. Small cities have a population of up to 50,000 inhabitants, intermediate cities have a population between 50,000 and 1 million inhabitants, and large cities count over 1 million inhabitants. Lastly, mega-cities are those urban areas featuring more than 10 million inhabitants (Kihlgren Grandi, 2020a: 4).

During the 1980s and 1990s, the concept of 'paradiplomacy,' short for parallel diplomacy, gained space in the academic discourse. The idea was to set two parallel routes for diplomacy and create a coexistence of state diplomacy and local diplomacy (Acuto, 2013a: 483). The notion is in line with the theoretical reasoning of the duality of a 'state-centric world' in which only state actors operate and a 'multicentric world' in which cities and other non-state actors operate (Rosenau, 1990: 243-297). The idea of having "two worlds of world politics" may seem appealing on a theoretical level, but it is nothing more than the oversimplification of a more complex reality. Rogier van der Pluijm brilliantly summarized the concept claiming that state and city actors are part of a multilayered diplomatic environment in which they are

blended together through the co-operation of forces located at subnational, national, and international level. He defines contemporary diplomacy as a "web of interactions with a changing cast of state, city and other players, which interact in different ways depending on the issues, their interests and capacity to operate in this so-called multilayered diplomatic environment." This approach allows to fit city actors – operating in a transnational network environment and hence simultaneously across multiple scales – into the mutable patterns of international politics. Therefore, the notion of parallel diplomacy is rather inappropriate as state and city actors do not "ride along different diplomatic routes, but rather along the same route although in a different car." (Pluijm, 2007: 8-9).

1.2. City Diplomacy

The concept of city diplomacy is subject to various definitions, ranging from its role in conflict resolution and peace-building to its importance in tackling climate change. In one early definition, the Netherlands Institute of International Relations Clingendael defines city diplomacy as "the institutions and processes by which cities engage in relations with actors on an international political stage with the aim of representing themselves and their interest to one another." (Pluijm, 2007: 11). It has become increasingly clear that cities are progressively gaining a more central role in diplomatic relations with each other, with states, with international and supranational organizations. As brilliantly stated by Acuto and Rayner, cities have the potential "to act as a transformative force at a time when much of world politics is locked into slow-moving multilateralism." (Acuto and Rayner, 2016: 1147).

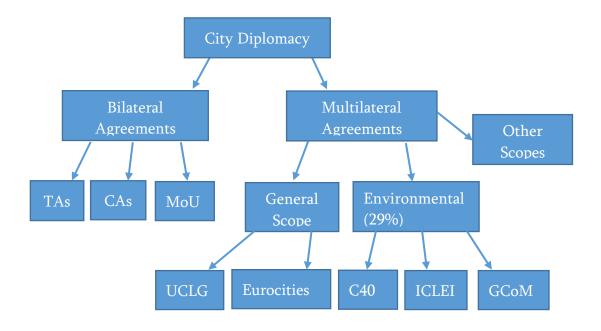
City diplomacy, like state diplomacy, strives for universal moral good and local self-interests. Therefore, in most cases, it has a 'value-based' approach. This is particularly evident in sustainable development, which answers to both local interests – for instance, in making the local economy more resilient to climate change – and global values, such as the preservation of the environment and biodiversity, as well as social and environmental equity. According to Kihlgren Grandi, the goals of city diplomacy could be summarized as: cooperation in addressing global challenges such as climate change, migrations, gender equity, violent extremism, and urbanization; regional integration and solidarity; prevention of conflict and peace-building; and development aid. The expected outcomes are both of improving the quality of municipal services by sharing new technologies and methodologies, useful in coping with unprecedented challenges such as the COVID-19 pandemic and the hazards of climate change; and of enhancing attractiveness, which is a priority in both the cultural and economic dimensions of city diplomacy (Kihlgren Grandi, 2020a: 9-10).

Historically, the tools of city diplomacy have been bilateral agreements, such as Twinning agreements (TAs), Cooperation agreements (CAs), and Memorandums of Understanding (MoU). Twinning agreements consist of long-term partnerships between two cities that can cover all or specific sectors of municipal action. Cooperation agreements are weaker forms of cooperation, usually more specific than TAs and less formal. The Memorandum of Understanding is an even weaker tool that is usually intended

as a first step towards a future partnership and usually does not even require a vote by the city council (Kihlgren Grandi, 2020a: 11). The first documented modern twinning agreement was signed in 1920 by Keighley, England, and Poix-du-North, France (Handley, 2006: 4), but they gained a wider scope in the aftermath of the Second World War when they spread throughout Western Europe with the precise aim of reconciling former political enemies. In 1947, several agreements between British and German municipalities were signed – Oxford and Bonn, Reading and Düsseldorf, Bristol and Hannover, and Coventry and Kiel, both heavily bombed during the war – and in 1950, the first Franco-German twinning agreement was signed between Montbéliard and Ludwigsburg, quickly followed by other municipalities on both sides of the border. The spread of city twinning was enabled thanks to the help of city networks already present at the time, including IULA, the Council of European Municipalities, the People-to-people program launched by President Eisenhower in 1956, and the United Towns Organization. In 1971, UTO was the first city network to gain official recognition from the United Nations as fostering international cooperation through town twinning (Kihlgren Grandi, 2020a: 39-40).

Although bilateral agreements, particularly city twinnings, have been a historical tool forging city-to-city relationships, modern city diplomacy mainly operates through city networks, consisting of formalized multilateral cooperation between three or more cities cooperating on one specific sector. For example, C40 is focused on climate change, and LUCI is focused on public lighting. There are also multi-purpose networks operating across all sectors of municipal action, like UCLG or Eurocities (Kihlgren Grandi, 2020a: 10-13). City networks are characterized by reciprocal communication patterns, policy making, and information exchange (Acuto and Rayner, 2016: 1149-1150). For example, Changwon, in South Korea, applied 'cool roof techniques' that can reflect sunlight and cool buildings, taking inspiration from the trials done in Tokyo and New York, both C40 cities.

City networks in the last decades have switched from being mainly national to regional and international, a pattern observed since the end of the Cold War. Although 29% of city networks address the environment as their primary target, there is a wide variety of other topics treated, including poverty (16%), energy (12%), culture (11%), peace (11%) and gender (8%). The focus of climate change for city collaborations has increased since the early 2000s. Almost two-thirds of city networks are partnered with major international organizations, such as the World Bank, and corporations, such as Arup, an engineering firm based in London (Acuto, 2016: 612). Network production extends far beyond meeting at conferences and issuing joint statements. In fact, the research carried out by Acuto and Rayner shows that 44% of networks globally produce reports – real evidence statements on the current state of events – and 38% produce policy papers. Network production is equally about joint policy initiatives and continuing the connection beyond the meetings, establishing a way to carry on joint action through blogs, newsletters, and online interactions (Acuto and Rayner, 2016; Acuto, 2017).



The history of city networks begins at the 1913 Universal Exhibition in Ghent, where mayors from all over the world met at the International Congress of the Art of Building Cities and Organizing Community Life. In the words of Emile Braun, then mayor of Ghent, their objective was to "deliberate on the major problems that arise from the universal nature of the conditions of present-day life, which are more or less the same everywhere." The result of the congress was the creation of the International Union of Cities — which will be renamed in 1928 International Union of Local Authorities (IULA) — the first global city network, created seven years before the League of Nations came into being. Its aim was "the promotion of inter-community cooperation in the name of democracy and peaceful agreement in the construction and administration of cities." In the aftermath of the Second World War, the organization became a key supporter of city empowerment, directing its efforts on democracy and peace-building. IULA continued to act as the premier international local government organization from the 1950s onwards, serving as a united voice of the local realities throughout the globe, representing local interests on various national and international platforms, including the United Nations and the European Union. In the 1980s, it set up a number of autonomous regional sections all over the world.

During the Cold War, political bipolarism prevented communication between communities of the two opposing sides, the USA-led Western bloc, and the Soviet-led Eastern bloc. During these difficult years, J.M. Bressand created the Bilingual Education Movement paving the way for establishing The United Towns Organization (*Fédération mondiale des cités unies* – FMCU), founded in Aix-les-Bains, France, on 28 April 1957. As stated in their Charter (*La Charte des Villes Jumelees*), UTO focused extensively on city-twinning as an instrument promoting peace through mutual respect, understanding, and cooperation. Other main principles were non-interference, non-discrimination, bilingualism, and solidarity. In 1984, the World Association of Major Metropolises (Metropolis) was created by the then President of the

Regional Council for France's Ile-de France region M. Giraud, with the objective of fostering international cooperation and strengthening the bonds of solidarity.

In 1996, the process of unification of IULA, UTO, and Metropolis began on the occasion of the UN Conference on Human settlements (Habitat II) in Istanbul. It was finalized in 2004, when the three municipal movements merged into the United Cities and Local Governments. The global city network defines itself as "the united voice and world advocate of democratic local self-government" and is founded on three core principles: democracy, autonomy, and decentralization in the service of the citizens. Its main areas of interest are local action for democracy, freedom, and development; peace through reinforcement of cooperation between cities; and modernization of local management (UCLG, 2013c: 10-17). Currently, UCLG is the largest organization of local and regional governments in the world, uniting over 240,000 towns, cities, regions, and metropolises in 140 UN Member States, and it is partnered with more than 175 local and regional government associations. They represent over five billion people worldwide, making up 70% of the world's population.

UCLG works through a coordination and consultation mechanism, the Global Taskforce of Local and Regional Governments (GTF). GTF brings together the major city networks and is responsible for developing joint advocacy work, amplifying local and regional governments' voices and bringing their perspectives to the SDGs, the New Urban Agenda and other relevant climate change agendas. In accordance with the Quito Outcome Document, GTF also convenes local and regional leaders in the World Assembly of Local and Regional Governments to monitor targets set in the New Urban Agenda (UCLG, 2013a). Other than UCLG, other participants to GTF are the C40 Cities Climate Leadership Group and ICLEI. A further resource for UCLG is the United Nations Advisory Committee of Local Authorities (UNACLA), established by the UN-Habitat Governing Council Resolution 17/18 of 1999. It is an advisory body whose aim is to work in cooperation to implement the Habitat Agenda and strengthen the dialogue between the UN and local authorities by making yearly reports to the Executive Director of UN-Habitat. UCLG both chairs UNACLA and retains ten out of the twenty total seats. The remaining members are appointed within the membership of the GTF or within other representative networks (UN-Habitat, 2021). Although UCLG is a multi-purpose city network, it has a major influence on climate action. Its contribution, as well as that of other central environmental city networks, will be analyzed in the next section.

1.3. Environmental City Diplomacy

In 1961, Vincent Ostrom, Founding Director of the Ostrom Workshop based at Indiana University, introduced the concept of 'polycentricity' in regard to the shared management of a metropolitan area between public and private agencies, concluding that: "Polycentric connotes many centers of decision-making that are formally independent of each other... To the extent that they take each other into account in competitive relationships, enter into various contractual and cooperative undertakings or have recourse

to central mechanisms to resolve conflicts, the various political jurisdictions in a metropolitan area may function in a coherent manner with consistent and predictable patterns of interacting behavior. To the extent that this is so, they may be said to function as a system." (Ostrom et al. 1961: 831-32).

Almost 50 years later, his wife Elinor Ostrom, Nobel Prize in Economics in 2009 for her analysis of economic governance in demonstrating how common property can be successfully managed by groups using it, argued that instead of focusing only on global efforts to reduce the risks associated with the emission of greenhouse gases, it is fundamental to encourage polycentric efforts. She rejected the conventional theory of collective action which predicts unlikely to reduce a risk without an externally enforced set of rules. In 2010, five years before the binding Paris Agreement, she advocated for an international treaty that would unite the voices of international leaders after having agreed on how to divide equally responsibilities between developed countries, major producers of GHG emissions, and developing countries, both victims of inequitable distribution of natural resources and hazards resulting from excessive emissions. Although this was an important step, she stressed the importance of focusing on polycentric action and not merely on state-based international agreements.

Rejecting the theory of the "tragedy of the commons" (Hardin, 1968), Ostrom argues that when individuals are well informed about the threats they face, and they are enabled to build settings where trust can emerge and be sustained over time, positive actions are frequently taken without recurring to an external authority imposing rules, monitoring compliance and assessing penalties. She pointed out that while most climate change effects have a global scope, the causes are actions taken by individuals at the local level. Therefore, one should uplift the familiar slogan "Think Global, Act Local" and understand that to solve the climate crisis in the long run, the routine of individuals, communities, and governments at multiple levels must change substantially. It is fundamental to foster local discussions generating information about the unrecognized costs of GHG emissions and other environmental hazards. As a consequence of developing a sense of ethical responsibility for personal carbon footprint, individuals can potentially change their behavior and recognize that they can achieve extensive benefits by undertaking costly actions that combine with the actions of others to reduce the threat faced by all.

Ostrom claimed that the discussions held among local and regional leaders enhance their knowledge of potential policies and show how cooperation increases the impact and benefits of their actions. Ultimately, the advantage of a polycentric approach is that it "encourages experimentation by multiple actors, as well as the development of methods for assessing the benefits and costs of particular strategies adopted in one setting and comparing these with results obtained in other settings. A strong commitment to finding ways of reducing individual emissions is an important element for coping with climate change. Building such a commitment, and trusting that others are also taking responsibility, can be more effectively undertaken in small- to medium-scale units that are linked together through diverse information networks." (Ostrom, 2010: 550-557).

1.3.1. Why Cities are Fundamental Actors in Climate Governance

In 2011, the then-World Bank President Robert Zoellick claimed that "it is no stretch of the imagination to believe that cities will take the lead in overcoming climate change." (Zoellick, 2011). Further, UN-Habitat stated that the battle for sustainable development is to be won or lost in cities (Acuto, 2016: 612). These are very powerful statements attributing to cities a great role in climate governance, which is a necessary requirement considering their position in global affairs and their responsibility towards their citizenry. Cities are the primary source of climate disruption, covering less than 2% of the earth's surface and accounting for more than half of the world population, 60 to 80% of energy consumption, and 70% of human induced GHG emissions (Kihlgren Grandi, 2020a: 111). Furthermore, most cities are expanding, and by 2030, the number of mega-cities of more than ten million inhabitants will grow from 28 to 41, and urban areas will generate more than two billion tons of waste per year (Acuto, 2016: 611).

Cities have immense economic power, collectively retaining 80% of global GDP. At times, the financial capacity of one city alone exceeds that of nation-states. This is the case of New York City, managing an annual budget of \$88 billion, which exceeds the national budget of 120 countries. London and Tokyo, hosting respectively 20.3% of the total population of the United Kingdom and 26.8% of the total population of Japan, account for 26.5% and 34.1% of their countries' GDP (Marchetti, 2021). This overwhelming economic power has the potential to be a crucial driver of sustainable development, coupled with environmentally sensitive policy making. The C40 Cities Climate Leadership Group claims that cities are becoming increasingly able to use international institutions and processes to contribute to shaping policies and frameworks. Cities are called to enhance their position as "global climate leaders" and "champion the urgency of ambitious climate action in line with the latest science and a 1.5°C trajectory." Thanks to their comprehensive understanding of the problems of their territory and their ability to directly communicate and share knowledge with their citizens, local authorities have a key role in accelerating the delivery of the Paris Agreement, the 2030 Sustainable Development Agenda, and other relevant global objectives (C40 Knowledge, n.d.).

Governments from 823 cities and 101 regions across the world have made net zero pledges. They account for about 11% of the global population and 846 million people. The leaders in the "race" are North America, East Asia and the Pacific, and Europe. Europe has the highest number of cities and regions pursuing climate action, including many small municipalities, while the local governments aiming for net zero in East Asia and the Pacific regions represent the largest population, for a total of 223 million people and over 10% of the region's population – including eight Australian states and 135 cities in Japan, most of which are members of the 2050 Zero Carbon Cities in Japan Initiative.

In North America, cities and regions working towards net zero emissions represent more than 60% of the region's total population, about 222 million people and 24 US states. Latin America's engagement in climate action covers 209 cities and five regions, with over 81 million people. Some of Sub-Saharan

Africa's megacities, like Lagos, pledged to net zero emissions, representing more than 99 million people and 9% of the region's total population. In some countries, among which Australia, Sweden, South Africa, Canada, Japan, and Spain, cities and regions targeting net zero represent more than 70% of their national populations. In Australia, local governments pursuing net zero represent over 95% of the country's total population (Data-Driven EnviroLab & NewClimate Institute, 2020: 11-13).

1.3.2. Cities in International Environmental Agreements

City action in global climate governance is widely recognized, among others, by the United Nations, the European Union, and the OECD. Within the United Nations, a key actor that contributes to the international recognition of the link between cities and sustainability is the United Nations Human Settlements Programme (UN-Habitat). It was created in 1978 – two years after the United Nations Conference on Human Settlements (Habitat I) held in Vancouver – and is headquartered in Nairobi. UN-Habitat promotes sustainable urban development and the need for policies to be localized and shared between cities. Just before the 1996 Habitat II conference in Istanbul, the necessity to establish an exchange between UN institutions and cities led to the creation of the First World Assembly of Cities and Local Authorities (WACLA) which was succeeded by the World Assembly of Local and Regional Governments. The World Assembly, composed of around 400 mayors, met in Quito in 2016 to draft the New Urban Agenda (later discussed in depth). Since then, the Assembly has convened annually under the auspices of the UCLG on behalf of the Global Taskforce of Local and Regional Governments to ensure the local follow-up of the Agenda and define cities' contribution in achieving its objectives (Kihlgren Grandi, 2020: 117).

In June 1992, at the United Nations Conference on Environment and Development held in Rio de Janeiro (also known as the Earth Summit), 154 states signed the United Nations Framework Convention on Climate Change. The UNFCCC entered into force on 21 March 1994 and today is endorsed by virtually all countries in the world. Its ultimate aim is to stabilize greenhouse gas concentrations "at a level that would prevent dangerous anthropogenic (human induced) interference with the climate system." It states that "such a level should be achieved within a time-frame sufficient to allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened, and to enable economic development to proceed in a sustainable manner." (United Nations, 2021a).

On 12 December 2015, 196 heads of state gathered to discuss the future stance towards climate change at the United Nations' Climate Conference in Paris (COP21). They adopted the Paris Agreement, a legally binding international treaty whose goal is to limit global warming "to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels, recognizing that this would significantly reduce the risks and impacts of climate change." (Paris Agreement, 2015: Article 2). At the same time, the Mayor of Paris, Anne Hidalgo, gathered one thousand mayors from around the world to the Climate Summit for Local Leaders to reaffirm their joint commitment

to tackle global warming and declare that advancing climate solutions is both a shared responsibility and a matter of social justice. The parties recognized the central role cities have in charting the course to a low carbon future, given that their activities generate two-third of GHG emissions.

Mayors and local leaders collectively committed to advance and exceed the expected goal of the Paris Agreement; produce and implement participatory resilience strategies to adapt to the growing impact of climate hazards by 2020; annually reduce up to 3.7 gigatons of urban GHG emissions by 2030 – the equivalent of 30% of the difference between current national commitments and the 2 degrees pathway identified in the Agreement; support long-term goals such as a transition to 100% renewable energy and 80% GHG emissions reduction by 2050; and "engage in partnerships among themselves and with global organizations, national governments, the private sector, and civil society to enhance cooperation and capacity-building programs, scale-up climate change solutions, develop metrics and promote innovative finance mechanisms and investments in low-emission projects across the world." The local leaders pledged to strengthen the initiatives of city and regional networks – in particular the Compact of Mayors, the Covenant of Mayors, and the Compact of States and Regions – and to coordinate to prepare to the Habitat III Conference, in accordance with the United Nations Sustainable Development Goals (Cities for Climate, 2015).

The United Nations defined the Sustainable Development Goals as a "blueprint to achieve a better and more sustainable future for all." (United Nations, 2017). The SDGs are a collection of 17 global interlinked goals included in UN Resolution 70/1, also called "The 2030 Agenda for Sustainable Development." They were adopted on 25 September 2015 by the United Nations General Assembly and intended to be achieved by 2030. The mechanism to follow up and review the Agenda is the High-level Political Forum on Sustainable Development (UN General Assembly, 2015: 15). On behalf of the people they serve, member states have adopted "a historic decision on a comprehensive, far-reaching and people-centered set of universal and transformative Goals and targets." They have recognized that eradicating poverty in all its forms and dimensions is the greatest global challenge, but at the same time, it is indispensable to achieve sustainable development. Member states are committed to achieving sustainable development in the economic, social, and environmental dimensions in a balanced and integrated manner. To do so, they build upon the achievements of the Millennium Development Goals and seek to address the unfinished business (UN General Assembly, 2015: 6).

The targets set in the 2030 Agenda "are integrated and indivisible, global in nature and universally applicable, taking into account different national realities, capacities and levels of development and respecting national policies and priorities." (UN General Assembly, 2015: 16). The Sustainable Development Goals are (1) No Poverty, (2) Zero Hunger, (3) Good Health and Well-being, (4) Quality Education, (5) Gender Equality, (6) Clean Water and Sanitation, (7) Affordable and Clean Energy, (8) Decent Work and Economic Growth, (9) Industry, Innovation and Infrastructure, (10) Reducing

Inequality, (11) Sustainable Cities and Communities, (12) Responsible Consumption and Production, (13) Climate Action, (14) Life Below Water, (15) Life On Land, (16) Peace, Justice, and Strong Institutions, (17) Partnerships for the Goals (UN General Assembly, 2015).

The United Nations Member States committed to work closely with local governments on the implementation of the SDGs, and since 2015, cities, regions, and their associations have effectively localized the 2030 Agenda. This brought the SDGs closer to the people and made the objectives more tangible. In paragraph 79, the 2030 Agenda encourages "Member States to conduct regular and inclusive reviews of progress at the national and subnational levels which are country led and country driven. Such reviews should draw on contributions from indigenous peoples, civil society, the private sector and other stakeholders, in line with national circumstances, policies and priorities." (UN General Assembly, 2015: 38). In paragraph 89, the Agenda calls on major groups and other relevant stakeholders to "report on their contribution to the implementation of the Agenda." (UN General Assembly, 2015: 40). These subnational reviews of SDG implementation are called Voluntary Local Reviews (VLRs) and, although they do not hold official status, have significantly increased in the last years (UN Department of Economic and Social Affairs, 2021).

The United Nations Conference on Housing and Sustainable Urban Development (Habitat III) – held in Quito, Ecuador, on 20 October 2016 – produced the New Urban Agenda (NUA), a thorough urban development guideline for the next twenty years. The United Nations General Assembly endorsed the document on 23 December 2016, at its sixty-eighth plenary meeting of the seventy-first session. The New Urban Agenda represents "a shared vision for a better and more sustainable future" in which everyone will have equal access to the benefits and opportunities that cities can offer, and the international community will reconsider the role and physical form of urban systems. Its main objective is to accelerate the realization of the Sustainable Development Goals (SDGs), particularly SDG 11, which aims to make cities resilient, safe, inclusive, and sustainable. The Agenda states that "cities can be the source of solutions to, rather than the cause of, the challenges that our world is facing today" and that urbanization can be a powerful tool for sustainable development if planned and managed well. The Agenda sees the cooperation of member states and international organizations with thousands of regional and local governments and all major city networks coordinated by the Global Taskforce of Local and Regional Governments (New Urban Agenda, 2017).

The 'Race to Zero' global campaign aims at rallying leadership and support from local and regional actors, businesses, and investors for "a healthy, resilient, zero carbon recovery that prevents future threats, creates decent jobs, and unlocks inclusive, sustainable growth," mobilizing a coalition of net zero initiatives. These actors cover nearly 25% of global CO2 emissions, over 50% of global GDP, and represent 708 cities, 24 regions, 2,360 businesses, 163 of the most prominent investors, and 624 Higher Education Institutions. Their objective is to unite non-state actors in the pursue of the goals set in the Paris Agreement

and send a resounding signal to national governments to meet climate action targets and create a more sustainable and resilient economy. The campaign is led by Nigel Topping and Gonzalo Muñoz, High-Level Champions for Climate Action, and it mobilizes actors outside national governments to join the Climate Ambition Alliance – launched at the UNSG's Climate Action Summit 2019 by Sebastián Piñera, President of Chile (United Nations Framework Convention on Climate Change, 2021).

In March 2016, a month before the 43rd session of the Intergovernmental Panel on Climate Change held in Kenya, UCLG, C40, and ICLEI launched the CitiesIPCC campaign aiming to advocate for the enhancement of scientific knowledge regarding cities and climate change. The campaign's initial goal was convincing the delegates gathering in Nairobi to write a special report on cities as part of AR6, the sixth assessment cycle (2016-2023). Delegates agreed to write the report during the AR7. At the IPCC 44th session in Bangkok in October 2016, the IPCC agreed to co-sponsor a scientific conference on cities and climate change. At that point, the campaign had grown exponentially and included prominent partners such as the United Nations Environment Programme, UN-Habitat, the World Climate Research Programme, Future Earth, and the Sustainable Solutions Network. In March 2018, 750 urban researchers attended the Cities and Climate Change Science Conference in Edmonton, Alberta. The event initiated by the CitiesIPCC catalyzed existing research on cities and climate change to provide the basis for the AR7 Special Report on Climate Change and Cities and help deliver the objectives of the Paris Agreement, the New Urban Agenda, and the Sustainable Development Goals. The conference and the IPCC commitments represent a significant step forward for the recognition of cities in global climate governance and their role in managing and mitigating climate change.

The CitiesIPCC campaign and conference illustrate the evolving role of city network secretariats as autonomous actors, providing significant impact not only on cities but also on the global governance of climate change. According to Lecavalier and Gordon, "the secretariats of the lead networks – C40, ICLEI, and UCLG – demonstrated independent agency during the conference, setting the conference agenda and interpreting the lessons for research which emerged from the event. Moreover, their leadership roles in the campaign and conference have potentially important feedback effects, entrenching their positions as leaders in urban climate governance and moving them into increasingly central positions in the global climate governance network." The CitiesIPCC conference showed an inclusive and diverse environment with respect to geographic participation and included a broad plurality of actors not limited to the research community, like city practitioners. The conference was more than city knowledge brought into the IPCC process but rather marked a significant shift formulating an authoritative Global Research and Action Agenda intended to convey and guide urban climate governance objectives and dictate the direction of future scholarship (Lecavalier and Gordon, 2020: 22-25).

1.3.3. Environmental City Networks

According to Lecavalier and Gordon, "in climate governance, city networks are notable for their role in encouraging policy experimentation, a practice that can reveal new technological or knowledge solutions which can be transferred to other locations or scaled up to drive deeper forms of change." (Lecavalier and Gordon, 2020: 20). The action of environmental city networks is two-fold. On the one hand, they tend to spread inspired solutions to tackle climate change. Their tools are sharing best practices among members, introducing pilot projects, and supporting member cities through diagnostics, research, and capacity-building activities, often in cooperation with NGOs and academic institutions. On the other hand, they issue global and regional advocacy campaigns that address national governments and international organizations (Kihlgren Grandi, 2020a: 113).

First and foremost, it is crucial to outline the involvement of UCLG and the Global Taskforce of Local and Regional Governments with climate change. The global network has continuously been involved with environmental negotiations, and it has raised awareness about the impact of climate change on urban settlements. UCLG actively supported the inclusion of SDG 11 (Sustainable Cities and Communities) in the 2030 Agenda, stressing its importance as the only goal with a subnational focus. Many cities and other subnational entities that are part of UCLG have aligned their strategic plans with the SDGs and launched various innovative initiatives, such as organizing awareness-raising workshops and training professionals to understand the link between their policies and what the 2030 Agenda provides. The SDGs, and in particular SDG 11, recognize the central role of local governments and strive for collaboration with the national and international leadership.

UCLG is one of the founding partners of Local 2030, a multi-stakeholder hub devised to accelerate the SDGs' implementation and led by the United Nations Secretary-General's Executive Office. Local 2030 works in close relationship with the Global Taskforce of Local and Regional Governments, in its capacity as a consultation mechanism allowing local government organizations to follow the international process and develop partnerships that can ensure the achievement of SDGs. The network took part in the 2018 High-Level Political Forum, ensuring that local leaders could have a seat at the global table, and is monitoring the implementation of the global agenda through its Global Observatory on Local Democracy and Decentralization (GOLD), producing the Annual Report of LRGs on SDG implementation, showcasing the initiatives undertaken at the local level (UCLG, 2018: 4-8).

Two environmental networks that stand out for their capacity "to enhance cities' commitments in concrete actions and advocacy for the global recognition of the role of cities in the fight to climate change" (Kihlgren Grandi, 2020a: 114) are C40 and ICLEI.

The C40 Cities Climate Leadership Group gathers 97 cities, representing one-twelfth of the world population and accounting for 25% of global GDP. The group has taken over 10,000 actions to combat climate change. It uses collaboration, knowledge-sharing, and metrics to drive sustainable action across

seven areas: adaptation and water, energy, finance and economic development, measurement and planning, sustainable communities, transportation, and waste. It convenes 16 networks providing services in support of cities in their efforts to combat climate change. The networks cover sustainability topics with the highest potential for significant climate impact and help cities improve and accelerate their climate action. One-third of the actions reported by member cities were directly influenced by collaboration with other cities in the group, and 70% of C40 cities have implemented better and faster climate actions, which are the result of their networks' approach based on four primary targets. The first is the connection between city officials around the world to deliver solutions to climate hazards. The second is the process of taking inspiration for innovation from leading global cities displaying successful ideas and solutions to climate challenges. The third is city peer advising based on experience with similar projects and policies. The fourth is the influence on national and international policy agendas and a drive on the market by leveraging cities' collective voice (C40, 2021).

The global city network was launched in 2005 by Ken Livingston, Mayor of London, to convene large cities with strong environmental commitments under the assumption that local authorities could better influence the international arena collectively rather than individually. The C40 Chair, which is currently held by Mayor of Los Angeles Eric Garcetti, represents the most vital expression of environmental city diplomacy. C40 champions the Paris Agreement's objectives and focuses on providing its members with guidance for implementing urban strategies for carbon neutrality, adaptation, and climate action, including the tools to assess their impact. It publishes reports and organizes meetings between political leaders and the technical staff of member cities so as to empower local administration with research-backed tools (Kihlgren Grandi, 2020a: 114-115).

In 2015, C40 forecasted that it would have reduced carbon dioxide emissions by 645 megatons by 2020, thanks to its conspicuous financing of more than US\$2.8 billion. C40 recommends a collaborative rather than a top-down approach, showing that cities that cooperate have much more pilot actions than those that do not, and cities that innovate in partnership with business and civil society are three times more likely to extend pilot projects citywide. In 2015, C40 Cities Finance Facility (CFF) was launched as an investment project gathering \$3.7 million from the German Federal Ministry for Economic Cooperation and Development and \$2 million from the American Development Bank, a number growing to \$20 million over three years, provided that the funding was effectively spent on sustainable infrastructure in low and middle-income cities (Acuto, 2016: 612-13). The presence of a mechanism bridging sustainable development and finance like CFF is fundamental as developing countries require an estimated US\$4 trillion per year in infrastructure investment and only one in five cities worldwide is able to borrow from its state, a figure dropping to one in four cities that is able to issue municipal bonds. In the words of Eduardo Paes, former Mayor of Rio de Janeiro and C40 Chair from 2014 to 2016, "The C40 Cities Finance Facility represents a massive opportunity for cities, particularly those in the Global South. The project represents a significant step forward in delivering one of (his) strategic aims as C40 Chair, and will allow

cities to leverage significant public and private financing for green infrastructure projects, enabling cities to accelerate their ambitious emissions reductions." (C40 Cities Finance Facility, 2021).

ICLEI – Local Governments for Sustainability is a global network convening over 1,750 local and regional governments in more than 100 countries committed to sustainable urban development, influencing policy, and driving local action for low-emission, nature-based, resilient, and circular development (ICLEI, 2021). It was launched by 200 cities reunited at the United Nations in September 1990, under the name of International Council for Local Environment Initiatives. It was later renamed ICLEI and currently represents the broadest coalition of cities committed to sustainable urban development. The network covers over 20% of the global population and 25% of the urban population worldwide. It is headquartered in Bonn, Germany, and currently has 22 offices around the world. It provides member cities with several capacity-building opportunities, having realized over 1000 training activities. It also provides a framework for joint projects and peer exchange and has 200 active sustainability initiatives. It is a member of the Global Taskforce of Local and Regional Governments and the World Assembly of Local and Regional Governments (Kihlgren Grandi, 2020a: 114).

ICLEI is based on five pathways towards sustainable development designed to create systemic change and providing a framework for integrated solutions balancing human rights and the natural environment:

- 1. The low emission development pathway, through which local and regional governments can reduce GHG emissions in all activities, especially in transport, waste, and building. The aim is to reach carbonneutral infrastructures and operations by mid-century and commit to 100% renewable energy.
- 2. The nature-based development pathway aims to protect and enhance biodiversity and urban ecosystems, fundamental for the local communities' well-being and resilience. The pathway encourages cities to deploy plans to unlock nature's potential to provide services and economic opportunities.
- 3. The circular development pathway encourages new models of production and consumption that use recyclable and replenishing resources. This would put an end to the linear model of resource extraction, production, consumption, and disposal. The pathway fosters equitable access to resources, supports local economies that are productive and not extractive, and prioritizes sustainable waste management, working with the business sector to deliver green solutions that meet all citizens' needs.
- 4. The resilient development pathway helps to anticipate, prevent, absorb, and recover from shocks caused by rapid environmental, technological, social, and demographic change by requiring local governments to prioritize resilience in their municipal strategies and consider the rights and needs of the vulnerable strata of society.
- 5. The equitable and people-centered development pathway aims at building more just and inclusive urban communities by addressing poverty. It pushes local governments to ensure the livability and safety of the

urban environment and pursue safe access to food, water, energy, and sanitation for all, as well as clean air and soil (ICLEI, 2021).

The Global Covenant of Mayors for Climate and Energy (GCoM) is the largest global alliance for city climate leadership. It was established in 2016 by merging the Compact of Mayors and the European Union's Covenant of Mayors with the aim of creating a global coalition of cities pledging to cut GHG emissions. It is partnered with global city networks like C40, ICLEI, and UCLG and with UN-Habitat to unite in the fight against global warming. It convenes 10,544 cities across 138 countries for a total of 969 million people and pledged to cut 24 billion tons of C02 equivalent of annual emissions by 2030. The Compact of Mayors was a group of mayors aimed at the reduction of GHG emissions in cities. It was launched in 2014 by the United Nations Secretary-General, Ban Ki-moon, and the Special Correspondent for Cities and Climate Change and former Mayor of New York City, Michael R. Bloomberg. The Covenant of Mayors was instead created in 2008 to accomplish the EU's 2020 goals. Differing from the Compact of Mayors, after the merge in 2016, the Covenant of Mayors became a regional division of the Global Covenant in Europe.

The action of GCoM is based on monitoring and progress reports. The local entities must report their progress to receive recognition badges and move towards the achievement of the established targets. Cities report their progress in developing the inventory, the establishment of GHG reduction targets, the analysis of climate risk and vulnerability, and the establishment of climate actions for mitigation and adaptation (Global Covenant of Mayors for Climate and Energy, 2021). Cities can disclose their environmental data through the Unified CDP-ICLEI reporting system, which provides publicly available data, evaluates local responses, and benchmarks performances against peers (CDP, 2021). The GCoM has one of the best-defined impact goals. According to Kihlgren Grandi, "in 2019, the existing GCoM city targets would avoid the emission of 2.3GtCO2, thus delivering a 35% reduction in emissions compared with the business-as-usual (BAU) scenario in 2030. With global urban abatement potential in 2030 estimated at 45% compared with BAU, GCoM cities have the ambition to contribute to the global goal significantly." (Kihlgren Grandi, 2020a: 119).

In this chapter, I have explored the crucial role cities can have in forging new pathways towards a more sustainable world and, at the same time, to halt as far as possible the trajectory of global warming and its disastrous consequences. Cities can only have a meaningful global impact on climate change if they cooperate and share knowledge, a message sent by all the networks explored above. In the next chapter, I will narrow the focus and talk specifically about Italian local contribution to sustainable development in cooperation with city networks and institutions. I will also consider the role of city networks at the European Union policy-making level.

Chapter 2: Environmental City Diplomacy in Italy

2.1. Local Governance in Italy

Historically, the institution of the city precedes that of the modern state. Throughout the first millennium, Europe witnessed the creation of a two-folded political scene: on the one hand, the city-state (from the Greek pòleis to the Italian medieval comuni), on the other, the vast territorial Empires (Portinaro, 2007: 8-9). Italian history is a paradigmatic example of the crucial role that cities can acquire in international relations. One only need think of Rome, establishing an empire which at its height was the "most extensive political and social structure in western civilization" (Mark, 2018), or Venice, a trade network bridging the Western and Eastern worlds.

Currently, the Italian system of local autonomies is characterized by excessive 'pulverization' (Mangiameli, 2013). The majority of the 7,904 Italian municipalities are significantly reduced in size and population compared to international standards. The smallest town in the country is Monterone, in Lombardy, with only 30 inhabitants (ISTAT, 2021). This fact substantially complicates service delivery, as most facilities – for example, waste sorting systems – need a minimum threshold of territorial capacity to be efficient. Primarily from the need to guarantee accessible services comes the legislator's necessity to promote the association of small municipalities. Nevertheless, the importance of the borghi is central to the Italian tradition, and despite being progressively more depopulated, it is crucial to preserve their cultural and historical value.

Even the metropolitan cities in Italy have a limited population compared to their European and global counterparts. For example, Rome's metropolitan area has a population of about 4.2 million. This is less than one-third of the population of London's metropolitan area, which counts about 14.3 million people (Eurostat, 2021), and less than one-fifth of the population of the sole city of Beijing, which counts almost 21 million people (United Nations, 2018). Despite their reduced size, validated by their solid cultural tradition, Italian cities have a keen capacity to project themselves on the international sphere and positively connect with other European and international realities.

This section is devoted to a brief overview of Italian legislation regarding local autonomies, which will allow to fully comprehend the context in which municipalities and city networks interact. The Italian Constitution recognizes the pivotal role of local entities in articles 5 and 114, in which it establishes the autonomistic principle. Article 5 states as follows:

"The Republic, one and indivisible, recognizes and promotes local autonomies; implements in those services that depend on the State the fullest measure of administrative decentralization; and accords the principles and methods of its legislation to the requirements of autonomy and decentralization." (Art. 5, Italian Constitution).

Article 114 lists the subnational entities of the Republic from the smallest to the largest (municipalities, provinces, metropolitan cities, regions, and the state). It was modified with the Reform of Title V of the Constitution in 2001. The previous version declared that "The Republic shall be divided in regions, provinces and municipalities," while the current version states that "The Republic shall be composed of municipalities, provinces, metropolitan cities, regions and the State." The verb "compose" rather than "divide" naturally creates a sense of institutional cohesion. Further, the new version places municipalities as the first item on the list, stressing their role as the bedrock of the Republic and the constituting unit from which progress has to be initiated. The second paragraph patently recognizes the autonomy of local entities by claiming that "Municipalities, provinces, metropolitan cities and regions shall be autonomous entities having their own statutes, powers and functions in accordance with the principles laid down in the Constitution." Art. 114, Italian Constitution; Const. law no. 3/2001). From these two articles only, the value attributed to subnational entities by the Italian Republic is already remarkable. This attention mirrors the idea at the core of the Regional State: decentralization and autonomy granted to the regions and local entities.

Municipalities, provinces, metropolitan cities, and regions all have a similar governmental structure consisting of three bodies: the Council (Consiglio), the Giunta, and its President (Mayor in municipalities). The Council is the representative body exercising policy-making powers. The Giunta is the executive body, and it is formed by assessors assigned to specific administrative branches as chosen by the chief executive. There is no fixed number as they vary based on demographic density. The Mayor is the chief executive and policy leader, elected by universal direct suffrage and exercising several powers, including administration, representation, and nomination (Vesperini, 2009: 2).

Italy began the process of decentralization in the 1990s. The decade was marked by the Bribesville scandal (*Tangentopoli*), which caused extensive questioning of the central government's authority and widespread demand for local autonomy. In these years, the birth and development of the Northern League (*Lega Nord*), an anti-establishment party headed by Umberto Bossi, concentrated all its efforts in gaining Northern support. The party had a vague but radical awareness that the relations between central and local governments needed to be transformed in response to the party system remaining basically unchanged since the end of the war. The idea was to capture the growing abstentionism of the northern regions – guided by the interests of the small and medium-sized firms who did not develop a strong sense of identification with Italy as a state and Rome's politics – offering an anti-party, radical alternative. In Lombardy, the party stronghold, the proportion of votes raised from 19% in 1990 to 24% in 1996 (Dente, 2007: 177).

In this context, first came law no. 142/1990 on the "Organization of local autonomies," which established the functions of municipalities and provinces (in regions with ordinary status). The law stated that the local communities, ordered in municipalities and provinces, have statutory and financial autonomy (Law

no. 142/1990). Seven years later, law no. 59/1997 (one of the four "Bassanini laws") introduced administrative federalism, which is the maximum possible decentralization under ordinary law, and the principle of subsidiarity. A fundamental characteristic of the law is the redefinition of the relations and distribution of competences between the state, regions, and local entities, creating further administrative decentralization (Law no. 59/1997).

A breakthrough was Constitutional Law no. 3/2001, modifying Title V of Part II of the Constitution. The law greatly enhanced the role of subnational entities, entrusting regions with the power of acting for all matters not explicitly granted to the state in Article 117 (Art. 117.4, Italian Constitution). Further, the state and the regions were now bound to the same limitations when passing legislation – the Constitution, EU law, and international obligations (Art. 117.1, Italian Constitution). Also, before 2001, the exercise of the administrative function was granted primarily to regions. Instead, since Constitutional Law no. 3/2001, administrative functions have been mainly attributed to municipalities, although they can also be attributed to the other levels of government according to principles of subsidiarity, differentiation, and proportionality for the purpose of uniform implementation (Art. 118.1; Constitutional Law no. 3/2001).

The metropolitan cities in regions with an ordinary status are Rome, Turin, Milan, Venice, Genoa, Bologna, Florence, Bari, Naples, and Reggio Calabria. In addition, there are four metropolitan cities from regions with a special statute: Cagliari, Catania, Messina, and Palermo. Law no. 56/2014 established their competences, which are: strategic development of the metropolitan territory; promotion and integrated management of services, of infrastructures and communication networks of interest to the metropolitan city; development of institutional relations pertaining to their level, including those with European metropolitan cities (Art. 2). It is important to stress that the city and the metropolitan city are two differentiated entities in terms of territorial capacity, competences (the metropolitan city covers the province's territory and is awarded the latter's institutional competences), and governing administration. However, the Mayor is also the President of the metropolitan city (Law no. 56/2014).

Italian Legislation on Local Autonomies		
Law no. 142/1990 on the "Organization of local autonomies"	Functions of municipalities and provinces in regions with ordinary status	
Law no. 59/1997 (one of the four Bassanini Laws)	Administrative Federalism and Principle of Subsidiarity	
Constitutional Law no. 3/2001 modifying Title V, Part II of the Constitution	Regions act for all matters not granted to the State in Art. 117	

	Regions are bound to the same limitations of the State when passing legislation i.e. Constitution, EU law and international obligations Administrative functions are granted primarily to municipalities
Law no. 56/2014	Competences of metropolitan cities: - Strategic development of the territory - Promotion and management of services, infrastructures, communication networks - Development of institutional relations including with European cities

Now that the primary laws governing local entities have been outlined, it is necessary to turn to the institutional bodies governing the relations between cities and institutions at the national, European and global level.

The primary tool enhancing communication between the central government and local entities is the Conference of State-City and Local Autonomies (Conferenza Stato-città e autonomie locali). It was instituted on 2 July 1996 with Decree of the President of the Council (DPCM) no. 281 published in the Official Gazette 27 January 1997 no. 21. The Conference is a collegial body with consultive and decisional functions and serves as the center for cooperation and confrontation between the State and local entities. It is disciplined by legislative decree no. 281/1997, published in the Official Gazette on 30 August 1997 no. 202. Since law no. 131/2003 and law no. 11/2005, local entities have been granted participation in the process of European legislation. The Conference is chaired by the President of the Council of Ministers or, in the absence of the latter, is co-chaired by the Interior Minister and the Minister of Regional Affairs and Autonomies. Other members are the Minister of Economics and Finance, the Minister of Infrastructures, the Minister of Health, the Presidents of ANCI, UPI, UNCEM, and, on the designation of the respective associations, six presidents of the province and fourteen mayors, five of which are mayors of metropolitan cities (Interior Ministry, 2020).

Local autonomies can interact with the European Union through the Committee of Regions (CoR). The Committee was established in 1994, following the entry into force of the Maastricht Treaty. It is an advisory body composed of 329 members representatives of Member States' local authorities, 24 of which are from Italy. It issues opinions based on mandatory and voluntary consultation, and it can refer to the European Court of Justice cases of violation of the principle of subsidiarity. Most importantly, the

European Commission, the European Parliament, and the Council of the European Union are required to consult the CoR when legislation is being drawn on matters concerning local governance such as health, education, employment, transport, energy, and climate change. The Committee's legal bases are set in Article 13(4) of the Treaty of the European Union (TEU) and in Articles 300 and 305 to 307 of the Treaty on the Functioning of the European Union (TFEU). In July 2020, the CoR adopted three political priorities for the period 2020-2025, stressing the principle of subsidiarity and claiming that all decisions taken at the EU level involving major transformations (such as global pandemics and climate change) must be taken as close to citizens as possible. The three priorities are: bringing Europe closer to its citizens, managing fundamental societal transformation, and locally-based EU policies according to the fundamental value of cohesion (European Union, 2020).

The key representative bodies of Italian cities to the national and international sphere are ANCI and AICCRE. ANCI, the National Association of Italian Municipalities (Associazione Nazionale Comuni Italiani), is a non-profit organization born in 1901 that gathers 7041 municipalities, representing 89% of the national population. The current president is the Mayor of Bari, Antonio Decaro. The principles at the basis of the organization are autonomy, independence, representation, and subsidiarity. Its role is to represent the general interests of municipalities, unions of municipalities and other forms of association, metropolitan cities, and all entities of municipal derivation, constituting a common system of representation. It engages in relations with the Government, Parliament, and all other national institutions and entities, the European Union, and the Committee of Regions. Among its many functions, the organization promotes local development and management policies, raises awareness on local problems, and draws up bills to improve the conditions of municipalities and local administrators. Further, it takes care of collecting, analyzing, and publishing data regarding metropolitan cities, municipalities, and municipally derived entities. It carries out support activities, technical assistance, and provision of services in the interest of individual or associated municipalities and metropolitan cities, also on behalf of the Public Administration, at its various levels. It promotes and coordinates local, national, and European projects. Lastly, it participates and brings up the concerns of municipalities to the Conference of State-City and Local Autonomies (Art. 1, ANCI Statute).

AICCRE, the Italian Association for the Council of European Municipalities (Associazione Italiana per il Consiglio dei Comuni e delle Regioni d'Europa) is an Italian association gathering all levels of local governance. It was founded in 1952 by local administrators and civil society representatives. The current president is the President of Emilia-Romagna, Stefano Bonaccini. The organization's activities are based on national and supranational levels, which are progressively more interconnected. In Europe, AICCRE is the national secretariat of the Council of European Municipalities and Regions (CEMR), the largest organization of local governments in Europe. The organization also has delegations at UCLG and at the Congress of Local and Regional Authorities, the institution representing regions and local entities from the 47 members of the Council of Europe. On climate change specifically, AICCRE focuses on Agenda

2030 and the Sustainable Development Goals, enabling Italian local entities to share their experiences at the international level (AICCRE, 2021).

2.2. Variables in City Engagement

Several variables impact the way in which cities engage with one another to cooperate and share information on sustainable development. Due to the already mentioned characteristics of the Italian system of local autonomies, it is relevant to analyze how size and population can play a role in shaping city engagement. Another discriminating factor that not only characterizes the Italian system but finds application on a global scale is the political orientation of the administration. The following sections will display examples to prove these points.

2.2.1. Size

Size is the most easily detectable discriminating factor in city engagement in climate action. The different roles played by metropolitan and large cities compared to smaller municipalities are clearly observable. Before beginning to concentrate on the various types of cities and their respective engagement with climate action, a clarification is needed. As I previously mentioned, Italian cities are reduced population-wise compared to international standards. Therefore, the only two cities which can be considered large cities (with a population above 1 million) are Rome (population of 2,783,809) and Milan (population of 1,397,715). Until the early 2000s, also Naples had a population above 1 million. Currently, its population has dropped to around 950,000. Nevertheless, here I am talking about municipalities and not the corresponding metropolitan cities. If one is to take metropolitan cities as the unit of study, eight out of fourteen (Bari, Bologna, Catania, Milan, Naples, Palermo, Rome, and Turin) have a population above 1 million. The remaining six (Cagliari, Florence, Genoa, Messina, Reggio Calabria, and Venice) are to be considered intermediate, with a population ranging between 50,000 and 1 million.

That being said, let us proceed in order and begin from metropolitan cities. Between 2014 and 2020, metropolitan cities were granted access to the National Operational Programme, a mechanism created by the national Urban Agenda and Sustainable Development. The program created a space for cooperation among metropolitan cities to improve the quality and efficiency of urban services. It focused on five main priorities: metropolitan digital agenda, sustainability of public services and urban mobility, services for social inclusion, and infrastructures for social inclusion and technical assistance (European Commission, 2014).

Moving the focus to individual cases, the two cities with the best climate action results in the country are Florence and Turin, both metropolitan cities. They both have been awarded the presence in the A-list ranking, together with other 88 cities worldwide, for their commitment to climate action. The ranking is released by the Carbon Disclosure Project, a non-profit organization that offers a global system of measurement of environmental impact. Turin was awarded this position for two years in a row thanks to

its plan of reducing carbon emission by 40% before 2030. The city converted the urban transportation system and created 200 km of cycle paths provided for by the Biciplan, reaching the goal of bringing urban bicycle transport from 3% in 2008 to 15% in 2020. Further, since 2008 all public lighting (street lighting, public buildings, and traffic lights) comes from renewable sources. Florence made the A-list in 2020 thanks to its strong effort in transportation by providing 4,000 electric vehicles crossing its territory. The city's ambitious goal is to become the Italian capital of electric transportation. In public transportation, Florence activated electric mini-buses in the historical center and 30 hybrid buses. The city also provided for 300 hybrid and electric taxis. Florence participated in the European project REPLICATE (Renaissance of Places with Innovative Citizenship And Technologies), dedicated to the city's intelligent development, focusing on energy efficiency and sustainable mobility (Carlorecchio, 2020).

Rome and Milan have a leading institutional role in representing Italy in global networks like UCLG and C40. Mayor Raggi of Rome and Mayor Sala of Milan will co-chair the 2021 Urban 20 (U20) cycle, parallel to the Italian G20 presidency. They will address the most pressing challenges faced by the world, including climate change and the post-pandemic transition (UCLG, 2020). Rome is very active in international networks. The city is part of the URBACT network Urban Agriculture for Resilient Cities, focusing on urban gardens. The city also led the project Soil4life, sponsored by the Environment Life Programme, the EU's funding instrument for climate action, created in 1992. The project promotes the sustainable use of the soil as a strategic, scarce, and non-renewable source. It has a duration of four years (2018-2022) and engages Italian, French, and Croatian partners. The program developed a permanent consultation table of institutional actors to enhance soil governance. Its outcomes are a White Book destined to the Government and the competent Ministries and the Charter on the Principles for the Sustainable Use of the Soil destined to the local administrations (Comune di Roma, n.d.).

Milan is a national leader in climate action. In 2019, the city founded the Department of Ecological Transition (Assessorato alla Transizione ambientale), which is headed directly by the mayor, and takes care of defining the city's environmental policies, policies relating to the improvement of waste disposal and cleaning services, energy policies, and the governance of public water (Comune di Milano, 2019). Milan is facing severe climate hazards. The average temperature has increased by 2° C since 1901, and the average PM10 is $32 \,\mu\text{g/m3}$ compared with the $20 \,\mu\text{g/m3}$ maximum allowed by the WHO. The city council has declared the environmental and climate crisis with motion no. 433 of 20 May 2019.

To gain international support in its climate efforts, Milan has joined several city networks, among which C40, the Urban Agenda Partnership for Air Quality, the Covenant of Mayors, and the Resilient Cities Network. The city aims at becoming carbon neutral by 2050, reducing C02 emissions by 45% before 2030. Due to the consistent breaching of air standards, Milan has subscribed to the C40 Clean Air Cities Declaration to develop a strategy to comply with WHO guidelines for air quality. Concerning land quality, the city aims at reducing soil consumption by 4%. The plan is to create twenty new parks, increase green

areas by 10,000 m2, and have 11% of the city's total area devoted to the development of urban forests. Concerning the circular economy, the city aims at recycling 75% of all waste by 2028.

For what concerns sustainable mobility, Milan aims at increasing by 68% the subway and tram lines, reaching a total of 195 km by 2030. Further, the city plans to make the public bus system fully electric by 2030. Currently, there are 85 electric public busses in the city, but by the end of 2021, the number will rise to 170 (Granelli, 2021). The city also pledged to transform 100 km of street space into bike and walking paths by the end of 2021 (C40, 2020). Finally, Mayor Sala hopes that the Recovery Fund will enable the city to increase the investments in energy efficiency on social housing and public schools and extend district heating – for example, a connection with the Cassano d'Adda plant would benefit 150,000 more citizens (Gallione, 2021).

Venice launched Venice 2030, an international laboratory sponsored by AICCRE, Platforma, UCLG, UN-Habitat and UNDP, UN SDGs Action Campaign, and the European Commission. The project aims at developing strategic tools to achieve the Sustainable Development Goals at the local level by identifying experiences, gathering data, and providing solutions to the challenge of financing the local implementation. The first edition of the Venice City Solutions in 2018 was attended by a mix of representatives of central, local, and regional governments and associations, amounting to 114 participants from 30 countries (Venice City Solutions 2030, 2018: 4).

Genoa has enacted the Sustainable Energy and Climate Action Plan that between 2010 and 2020 has led to a 23% decrease in CO2 emissions and, between 2020 and 2030, aims to reach a reduction of 40%. Genoa is among the first cities to have adopted an urban plan for sustainable mobility. It has created incentives for the purchase of electric vehicles and has increased the number of cycle paths throughout the city. The Ministry of Infrastructures and Transportation awarded it with a funding of 500 million to revolutionize local public transport, including the purchase of 140 electric vehicles. It has also created an energy efficiency plan for public buildings and schools, with electricity coming fully from renewable sources. The city also organizes awareness campaigns on energy-saving and circular economy (Campora, 2021).

Moving the focus to intermediate cities, one of Italy's most prominent examples of climate action is Prato, the Italian leader of the European Urban Agenda for Circular Economy (Comune di Prato, 2018). The city launched the project "Strategy 2030," which defined the approach for intervention in integrated sustainable urban development, focusing with UIA on the realization of the project "Urban Jungle" for the development of urban green areas and with URBACT on the topic of circular economy (Gallo, 2020). Mayor Matteo Biffoni claims that Prato is historically bound to a circular economy as "reuse has been the basis for the development of the textile sector with the creation of carded wool, the first recycled spinning mill. Already in the 1980s, thanks to public-private investments, a centralized system for the purification of civil and industrial wastewater was created." In 2018, the city signed with the then Ministry of the

Environment (now renamed Ministry of Ecological Transition) and the cities of Milan and Bari the Memorandum of Understanding "Città per la circolarità" which began a collaboration between the ministry and the three cities aimed at experimenting, testing, and promoting coordinated initiatives focusing on the role of circular economy (Ministry of Ecological Transition, 2018).

Other notable examples of sustainable action are Cesena, Forlì, and Udine. Cesena is the first city to adhere to the Green City Accord (GCA) launched by the European Commission. GCA is a movement of European mayors dedicated to making Italian cities cleaner and healthier. Cooperating to the initiative's management are CEMR, Eurocities, and ICLEI Europe (AICCRE, 2021). Forlì coordinated the Sos4life project, sponsored by the Environmental Life Programme, which also involved the municipalities Carpi and San Lazzaro di Savena for the period between 2016 and 2020. The project aimed to demonstrate the applicability at a local scale of zero net consumption of soil to be fully achieved by 2050. Lastly, Udine is a WHO Healthy City, who indirectly supports climate action by making the urban space a healthy environment and enhancing green areas. Udine is also part of the Covenant of Mayors, URBACT, and Local Agenda 21 (Comune di Udine, 2017).

ANCI launched the "MediAree Next Generation City" project, funded by the Department of Public Functions of the Ministry of Public Administration. The three-year project aims at supporting municipalities in creating a more sustainable future through the enhancement of competences and tools of strategic urban planning. Ten municipalities were selected (Avellino, Brindisi, Campobasso, Latina, Nuoro, Pordenone, Rimini, Siena, Siracusa, and Treviso) based on their candidate project's quality and respecting the geographic distribution of the territory. When interviewed on the project, President Antonio Decaro affirmed that "Municipalities are the natural protagonists of the relaunch we want for the country. And municipalities cannot be ignored if we want to lay the foundations for a rebirth. But to face this huge commitment, tools are needed, it is necessary to refine strategic planning skills, modernize skills, ease processes," stating further that ANCI will support municipalities in their transition and enhancement of their strategic competences by guaranteeing counseling, specialized training, and logistic and organizational support (ANCI, 2021).

What has been outlined so far demonstrates the ability of metropolitan and large cities to affirm themselves in the international sphere. Intermediate cities have this capacity as well and are frequently sponsored by national associations to pursue sustainable goals. Further, both large and intermediate cities are often the capital of provinces, which gives them a core institutional role that can be used to promote sustainable practices throughout their respective territory. On the other hand, small cities have a different approach. Much more than their larger counterparts, they need to assemble in local networks, other than to provide services to their citizens, to gain visibility in the international arena.

The main instruments used to develop projects at the local level and at the same time enable participation in international activities are the Local Action Groups. The LAGs are non-profit groups constituted by

representatives of the community, often in the form of trade unions or associations of municipalities. They are the organs managing LEADER projects, the EU instrument to finance rural development initiated at the local level and create jobs for the local community. The LAGs can apply for grants through the European Agricultural Fund to implement their Local Development Strategy, which aims to deliver support to the area by implementing small-scale projects. The LAGs are throughout Europe the principal actors in rural development, although they are greatly diversified from area to area (Menconi et al., 2018: 2). Some LAGs participate in international activities by adhering to the Covenant of Mayors and developing their own Sustainable Energy Action Plans, like the LAG "Terre di Comino."

One interesting case of Italian cities of different sizes uniting in their effort to decarbonize the economy is the "Charter towards climate neutrality," an initiative taken by the Green City Network, promoted by the Sustainable Development Foundation. Edo Ronchi, President of the Foundation, describes the charter as based on five points: (1) promote a new city "protagonism" within the transition to climate neutrality; (2) increase city commitment for energy efficiency and increase the use of renewable sources; (3) make urban mobility more sustainable and disincentivize the use of cars; (4) promote circular decarbonized economy; (5) increase carbon sinks (Ronchi, 2021).

The charter has already been signed by a variety of cities of all sizes, among which small cities (Albano Laziale, Aosta, Azzano Decimo, Belluno, Bisceglie, Calenzano, Caravaggio, Casalecchio Di Reno, Crispiano, Formigine, Ginosa, Lecco, Mantua, Noci, Pineto, Saronno, Segrate, Sorradile, Sorrento, Tezze Sul Brenta, Trezzano Sul Naviglio, Urbino, Valenza), intermediate (Arezzo, Bari, Bergamo, Brescia, Cesena, Cosenza, Ferrara, Firenze, Genova, Imola, Livorno, Lucca, Padua, Parma, Pescara, Pordenone, Pozzuoli, Prato, Rimini, Turin) and large (Milan, Naples). Although the network works at a national level, it is a powerful tool for cities of all sizes, especially smaller ones, to make their contribution to climate action and make their voices heard (Bailo Modesti, 2021).

2.2.2. Political Orientation of the Administration

Another major discriminating factor in city engagement with climate change is the political orientation of the city administration. The leader in this theme is the center-left. The evidence is that most of the mayors of metropolitan and large cities leading in climate action come from the Democratic Party, the center-left's largest party – for example, Mayor Dario Nardella of Florence, Mayor Matteo Biffoni of Prato, Mayor of Cesena Enzo Lattuca, and Mayor of Bari and President of ANCI, Antonio Decaro. President of Emilia-Romagna, President of AICCRE and CEMR, Stefano Bonaccini, is also from the Democratic Party. In the Memorandum of Understanding signed with the Ministry of the Environment in 2018 between the cities of Milan, Bari, and Prato, also the Assessor of Mobility of the city of Milan, Marco Granelli, who signed the pact along with the other two cities, is one of the founding members of the Democratic Party. Mayor Giuseppe Sala of Milan was until 2021 independent of center-left and currently adheres to the Green Europe Party. The other major component is the Five Stars Movement with Mayor

of Rome Virginia Raggi and Mayor of Turin Chiara Appendino (formerly part of the Left Ecology Freedom party, which ceased operation in 2016). The Five Stars Movement has in the last years proclaimed itself as an "environmentalist" party, following the growing trend of green parties in Europe (Ocone, 2019). This discriminating factor is harder to make for smaller realities as cities with under 15,000 inhabitants have "civic lists," which are mixed lists that can unify different political orientations.

The center-left interest in the climate crisis mirrors the position in European affairs. Europe places the fight against climate change as its top priority. Its position is reflected in the European Green Deal, an action plan set by the European Commission in 2019 to make Europe climate neutral by 2050 (European Commission, 2019). The center-left, being strongly pro-Europe, is in line with the environmental targets set by the Union. On the contrary, the right-wing parties in Italy – primarily the League and Brothers of Italy – have strong anti-European and sovereigntist positions and do not attach great importance to climate action in their political agendas.

This stance can also be taken on a global scale. For example, looking at the United States, former President Donald Trump, as one of his most debated actions in the administration, announced the United States' withdrawal from the Paris Agreement (Friedman, 2019). This, according to article 28.2 of the Paris Agreement, can take effect "upon expiry of one year from the date of receipt by the Depositary of the notification of withdrawal, or on such later date as may be specified in the notification of withdrawal." (United Nations, 2015). Therefore, since the formal notification was made in late 2019, the administration never completed the Paris Agreement's withdrawal. Following Trump's defeat in his second election and President Joe Biden's victory, the attention to the climate crisis completely flipped. Just a few hours after being sworn in, the newly elected President overturned the previous administration's decision to exit the Agreement, thus returning in line with the goal of containing climate change within 1.5°C. In the following week, he signed a series of executive orders aimed at stopping climate change at all levels of the federal government, putting the country on a path to 100% carbon-free electricity by 2035 and net-zero greenhouse gas emissions by 2050, and effectively placing the climate crisis at the core of his administration (Bokat-Lindell, 2021). So, looking from the macroscopic to the microscopic level, it looks evident the absolute prevalence of the center-left in the engagement with climate action, reflecting local entities' priorities.

2.3. Italian Cities in the European Dimension

Since the early 2000s, a growing literature has focused on the shift from central to local governance. Besides horizontal governing activities at the local level, progressively more attention has been paid to vertical governance arrangements in which cities are involved, arguing that the ongoing process of globalization equips cities with new challenges, creating a new kind of competition, but also new opportunities, in the form of different kinds of societal exchange. Further, it is argued that the multi-level processes of the European Union imply an opening-up of a new political sphere that favors cities to play

a central role, with growing independence from the national and subnational levels (Heinelt and Niederhafner, 2008: 173).

2.3.1. Role in EU Policy Making

This section will explore what role cities play in decision making at the EU level and how they relate to the core institutions of the Union, the European Commission, the European Parliament, and the European Council.

The Council is an institution composed of the member states' governments that defines the political orientation and priorities of the Union. In this case, direct cooperation with the local level is difficult to establish, as Member States are more focused on pursuing national interests while remaining in line with common objectives. Contacts with cities can be essential in delineating national interests, and representatives of national governments are usually receptive to interests pursued by local entities when they are in line with their positions. This has been the case in the debate on 'services of general interest' where local governments have articulated their concerns about liberalizations and, supported by regional bodies, have influenced the position of national governments, especially in Germany and France. The revised version of the resulting directive 2004/18/EC takes into greater account social and environmental standards than the previous EU legislation of 1992 and 1993 (Heinelt and Niederhafner, 2008: 174).

The Commission has a central role in the Union's legislative process as it initiates legislation and drafts legislative proposals, which requires an extensive amount of expert knowledge (information, expertise, and strategies) that cities and their organizations can provide. Technical expertise can theoretically be provided from single cities, but the role of networks and organizations is far more significant, as they can aggregate interests at the European transnational level, generate legitimacy and increase the acceptance of the Commission's initiatives. According to Heinelt and Niederhafner, "Concerning the quality of legitimacy, the local government organizations are distinct from other interest groups. As the elected government bodies nearest to the people, they are able to express the interests and concerns of the broad citizenry and do not represent just the concerns and demands of certain (self-interested) stakeholders." (Heinelt and Niederhafner, 2008: 175).

Cities can further provide a first-hand opinion regarding particular policy programs not only on what is socially appropriate but also on what is technically feasible. The Commission has acknowledged these points in the 'systematic dialogue' with local government organizations, introduced in 2004, to: "involve regional and local actors – via European and national associations of regional and local authorities – by giving them the opportunity to express their views on the European policies they help to implement before the formal decision-making processes start [and] to ensure a better understanding of the policy guidelines of the EU and European legislation, thereby making the activities of the Union more transparent and meaningful to the public." (European Commission, 2003: 3; Heinelt and Niederhafner, 2008: 175).

The European Parliament (EP) is a co-decision-making body (with the Council of Ministers) that makes amendments to proposed legislation and takes decisions. Members of the European Parliament (MEPs) need specific knowledge to assess the Commission's legislative proposals, which is often provided by cities and city networks. Information is also required in the formation of interparty coalitions influencing the negotiations between Commission, Council, and EP, especially in the case of co-decision-making procedure in which the Parliament, acting by absolute majority, has the power to propose amendments to the Council's common position or to reject it. The organizational forms to build such coalitions are called the Intergroups of the EP and are supported by several actors, including representatives from cities.

Local actors are also central in the process of selection of candidates for the EP, where they can articulate their position along with a broad spectrum of supranational organizations. Further, once elected, candidates will need local entities to create and retain links with their electorate, as these are able to provide information on domestic public issues. This is a way for MEPs to increase their independence from national party politics and better perform their role in the EU context. Heinelt and Niederhafner claim that the European Parliament has developed the function of a 'deliberative discourse forum' in which "the loose coupling of the arenas of parliamentary debates and public discourses is crucial for the 'argumentative influence' of cities. This has been reinforced by the growing (co-)decision competences and the related veto or bargaining potential of the EP." (Heinelt and Niederhafner, 2008: 176).

Cities not only influence legislation at the EU level but are also relevant actors when it comes to implementing and applying legislation at the national level. Since all EU legislation needs to be transformed into domestic law, cities can be powerful lobbying actors in the process of achieving the final policy output. Although regulations are directly applicable, and therefore included in national legislation without the need for transformation into domestic law, directives and decisions need to be integrated into national legislation. During this process, the Commission plays a crucial role in supporting local governments in conflicts with national governments. Simultaneously, local entities can act as 'watchdogs' for the Commission, providing information about the implementation process and the proper application of rules (Heinelt and Niederhafner, 2008: 176).

2.3.2. Networks at a European Level

Collective action at the European level serves to enhance the visibility and lobbying capacity of individual cities in the European decision-making process. In this section, two prominent European local government organizations, CEMR and Eurocities, will be analyzed.

The Council of European Municipalities and Regions (CEMR) is a political organization whose primary goal is to foster the development of a unified Europe based on local democracy and local cross-border operation. It is not limited to the EU and currently assembles 60 member organizations and 100,000 local governments in 41 countries (CEMR, 2021). The non-profit association was founded in 1951 by representatives of local authorities from France, Germany, Italy, Belgium, and Switzerland under French

law. The founding of the organization was sparked by French-German town twinning. It was headquartered in Paris, but in 1969, the Brussels office was established in view of a growing European integration, which quickly became of greater importance, and it is now recognized as the official headquarters.

The organization works at the supranational level with diversified national sections, whose task is to appoint delegations for the Assembly of Delegates based on national population. The Assembly is the highest-ranking body that gathers every three years and decides upon policy objectives. Further, it elects the Policy Committee from among its members. The Committee is the main governing body that gathers twice a year and decides how to enact the Assembly's decisions. It also elects from among its members the Presidency and the Executive Bureau. The Bureau is formed by 12 members who meet as necessary to carry out the Committee's decisions. The President is part of the Bureau and is the representative organ of the CEMR. For the first time in history, currently, the CEMR has an Italian President, Stefano Bonaccini.

In 1992, the issue-related committees were established, which currently are 14 and include the Committee on the Environment. They are formed by experts from the member associations and work on specific issues relevant to public policy. They also participate in various of the Commission's Committees of experts to foster a closer relationship with EU policy making. The general process in which a policy idea becomes a formal position of the CEMR involves the initiation of the bureaus of national sections together with the Secretary General, supported by the issue-related committees. These bodies bring together the policy positions of local entities and present draft policy papers to the Executive Bureau and the Policy Committee, who have the power of modifying or even annulling them. The Policy Committee and, in some cases, the Assembly of Delegates are crucial filters for determining final policy positions (Heinelt and Niederhafner, 2008: 177-179).

Eurocities is a transnational organization of medium and large cities with a goal of improving the quality of life for urban residents and provide a platform to share knowledge and experience. The requirements for acceptance into the network are a minimum population of 250,000 and a democratically elected local government. It was founded by a group of six so-called "second cities," namely Barcelona, Birmingham, Frankfurt a.M., Lyon, Milan, and Rotterdam. They are called second cities because they are second in the national hierarchy, after the capital city. The network was ideated in 1986 at the Cities as Engines for Economic growth conference in Rotterdam to better coordinate EU-related activities and exchange information. It was then officially founded in 1991 when the group received funding from the EU RECITE Program. The organization was based in Brussels to facilitate the exchange of policy expertise and form a link to EU institutions. Eurocities does not have national sections and, although it has members outside the EU, it is concentrated on EU policies.

Every member city has one vote at the Annual General Meeting (AGM), the organization's highest body. The AGM elects the Executive Committee (ExCom) and the President from among its members. The ExCom is the main governing body serving a three-year term and meeting twice a year to decide upon financial and political affairs. Eurocities also has six permanent thematic committees, among which the Environment Committee. They are led by one city elected on a three-year term. As they comprehend 50 or more members, they are too big to work on detailed topics. Therefore, non-permanent working groups with an average of 10 member cities are set up to work on specific urban issues. They are the basic mechanisms for the development of common policy positions.

Developing policy positions entails a few steps. Participating cities provide inputs. The lead city collects it, prepares a position paper, and presents it to the relevant thematic committee. The committee then decides if the paper is of technical concern, in which case is only distributed to the members interested in the topic, or if it is considered of general interest. In this case, it is presented to the ExCom, which decides if the issue should be assembled into a political position paper or taken to the AGM to be adopted as a resolution. This bottom-up pattern is very efficient for the goal of Eurocities to involve all member cities and transform their opinions into aggregated common positions (Heinelt and Niederhafner, 2008: 179-180). Today Eurocities counts 190 cities and over 130 million people from 39 countries. The network is present in Italy through the cities of Venice, Palermo, Arezzo, Rome, Pesaro, Cesena, Bologna, Turin, Florence, Cagliari, Genoa, and Milan. Concerning climate change, Eurocities adheres to the Covenant of Mayors. 64% of Eurocities members have committed to becoming climate neutral by 2050, and nearly 90% have adopted a climate adaptation strategy (Eurocities, 2021).

2.3.3. EU Initiatives for Sustainable Development

In this section, two initiatives at the European level that enhance the capacity of cities to develop sustainable development plans, coordinate, cooperate, and learn from each other will be briefly analyzed. The first, URBACT, is the 15-year-old European Territorial Cooperation program that helps cities develop pragmatic and sustainable solutions integrating economic, social, and environmental urban topics. URBACT is part of the Cohesion Policy, and it is co-financed by the European Regional Development Fund, 28 member states, Norway, and Switzerland. Dozens of Italian cities have taken part in exchange activities offered by the program, promoting local plans for sustainable urban development. The early programs, URBACT I and II, successfully enhanced sustainable integrated urban development and contributed to the delivery of the Europe 2020 strategy.

The URBACT III program is organized around four main objectives: the improvement of city capacity for policy delivery managing sustainable urban policies and practices in an integrated and participative way; the improvement of the design of sustainable urban policies and practices in cities; the improvement of policy implementation through integrated and sustainable urban strategies and actions in cities; building and sharing knowledge ensuring access to information on sustainable urban development at all levels of

governance to improve policies. URBACT III develops three types of interventions: transactional exchanges, capacity-building, and capitalization and dissemination. The total budget of URBACT III is € 96.3 million. Italian cities are among the main participants of the URBACT program, and tens of cities have taken part in the exchange activities promoted by the network (URBACT, 2021).

Urban Innovative Actions (UIA) is an EU initiative that provides resources to test new solutions to meet urban challenges. It is based on Article 8 of the European Regional Development Fund (ERDF) and had a total budget of € 372 million for the period between 2014 and 2020. The program supports cities and groupings of cities of more than 50,000 inhabitants (UIA, 2021a). The selection of innovative actions is made on the basis of calls for proposals. Then, an expert panel set up by the entrusted entity (UIA), in agreement with the Commission, makes recommendations concerning the innovative actions to be selected according to the following criteria: (a) the innovative content of the proposal and its potential to identify or test new solutions; (b) the quality of the proposal; (c) the involvement of relevant partners in the preparation of the proposal; (d) the capacity to demonstrate measurable results; (e) the transferability of the solutions proposed. The recommendations also have to ensure the territorial diversity of urban areas taken into consideration. Then, UIA selects the innovative actions on the basis of the recommendations made by the expert panel in accordance with the Commission, and grants a maximum of € 5 million, to be implemented within four years (Art. 2, EU Commission Delegated Regulation no. 522/2014).

In the context of the UIA, the city of Paris enacted the project "Co-Responsibility in District Energy Efficiency & Sustainability." It aimed at creating a new energy ecosystem in the 54-hectare eco-district of Clichy Batignolles which is expected to contribute to achieve 90% less CO2 emissions. While 93.66% of energy consumed in the city is imported, in Clichy Batignolles, 85% of energy will be self-supplied thanks to the 35,000 m2 of solar panels. Thus, the eco-district will triplicate the production of renewable energy in Paris by 2025 providing 3.5 GW of solar photovoltaic energy in 2020 (the entire city of Paris produced only 3 GW of solar photovoltaic energy in 2014). The district also duplicated the potential production of geothermal energy in Paris, as 83% of heat requirement is provided by geothermal energy in Clichy Batignolles (UIA, 2021b).

2.3.4. The Sustainable Energy Action Plan

4859 Italian cities have signed the Covenant of Mayors for Climate and Energy, making Italy the European country with the highest number of adhesions to the Covenant (European Committee of the Regions, 2021). Cities that signed the Covenant between 2008 and 2015 pledged to elaborate a Sustainable Energy Action Plan (SEAP). The Covenant is the expression of the fight Europe is leading against climate change, whose commitment was to reduce overall CO2 emissions to at least 20% below 1990 levels by 2020. Members of the Covenant need to present a monitoring report every two years in which they illustrate mitigation and adaptation goals. Every four years, the emissions inventory is updated according to the progress of emission and energy consumption mitigation (Covenant of Mayors, 2010). The commitment

pledged by the member cities was brilliantly achieved with a 24% emission reduction in 2019 – 26% including also the United Kingdom, at the time still part of the European Union. The sharp decline came before the effects of the Covid-19 global crisis, of which resulting emissions will be published by the EEA in the fall of 2021 (European Environment Agency, 2020). Following Member States' decision to strengthen the reduction of emissions, in 2015, the Covenant pledged to reach a 40% GHG emission reduction by 2030.

The city of Rome pledged to the Covenant of Mayors in 2009 and adopted the SEAP in 2013, but until 2015 the city administrations did not start enacting it. Finally, In 2016, with the inauguration of the new administration headed by Mayor Virginia Raggi, the SEAP was effectively taken into consideration, acknowledging the delay in the actuation of the actions pledged. Therefore, in accordance with the European office of the Covenant of Mayors, the administration decided to revoke the preceding SEAP and comply with the new one with the target of a 40% reduction established for 2030 (Assemblea Capitolina, 2017).

Europe recognizes that local authorities have limited resources, especially to access the financial, technical, and legal expertise needed to collect data, develop an investment program of scale, and design mature finance strategies. Therefore, to help cities reach the targets set in their SEAPs, the Union has created a financing mechanism called the European City Facility, in the context of the Horizon 2020 Work Programme for Research and Innovation 2018-2020. The Facility offers financial support to develop innovative investment concepts within a limited timeframe (usually six months to one year) and via "cascade funding," the maximum amount granted being \in 60,000. The project considers cities or groupings of cities with a minimum population of 100,000 (European Commission, 2018).

2.3.5. Recovery Plan for Europe

The Recovery Plan for Europe is the most extensive stimulus package ever financed by the Union budget, amounting to € 1.8 trillion, which combines the future Multiannual Financial Framework and a temporary instrument going over the period between 2021 and 2023, the Next Generation EU, amounting to € 750 billion. The plan's scope is to rebuild a greener, more digital, and resilient Europe in the post-COVID-19 pandemic. 30% of the total expenditure will finance the European Green Deal objectives, addressing climate projects in accordance with the EU's goal of climate neutrality by 2050, 2030 climate targets, and the Paris Agreement (General Secretariat of the Council, 2020: 1-14).

When presenting the Recovery Plan to the European Committee of the Regions, President of the European Commission Ursula von der Leyen stressed that "regions and cities will be at the core of Next Generation EU," with a direct instrument available for the next two years to finance employment subsidies, short-time work schemes and provide liquidity to SMEs. The instrument is called REACT-EU (Recovery Assistance for Cohesion and the Territories). The President of the Commission defines local authorities as "the most trusted institutions in the Union." Coming from a past of local governance, first as Municipal Councilor

and later as Cabinet Minister in the government of Lower Saxony, she recognizes the fundamental value in how politics is implemented on the ground.

Local governments have "their finger on the pulse of Europe's citizens," and this is an invaluable advantage not only for solving everyday problems but also to master the significant challenges of our time. In fact, local authorities were the first line of defense when the pandemic sparked. European funds will also be invested in new hospitals and better equipment to create stronger health systems able to manage future challenges, as all European citizens have the same health rights, and the quality of healthcare varies widely across the Union. Next Generation EU will not be a mere instrument to restart the economy. It will be used to improve the air we breathe, to "mend our social fabric and repair balance sheets across Europe," and to "press fast forward towards a green, digital and resilient future." For this, local administrations must be in the driving seat. Regional and municipal entities need to be involved in the preparation of national recovery plans from the outset, as they will be the ones bringing projects to life in local realities (von der Leyen, 2020: 1-2).

According to Dario Nardella, Mayor of Florence and President of Eurocities, "one of the priorities at this time of global crisis is to strengthen the involvement of cities in the decision-making process. It is necessary for cities to sit at the tables where decisions are made, which also imply consequences for the future of the territories, given that local governments are the closest to the needs of citizens. Cities must be among the protagonists of the post-pandemic recovery." In February, after the adoption of the European Recovery Plan, he spoke on behalf of both of his positions to propose five strategies that cities should carry out to restart the economy and take a sustainable turn in the post-pandemic world.

First, he advocates for innovative and concrete projects which are at the same time technologically and environmentally sustainable, focusing on the capacity of innovation. In particular, funds need to be directed towards interventions having the capacity to create new jobs in the future, serving the next generations' needs. Secondly, he asks to assign to mayors of metropolitan cities 20% of the Next EU Generation Plan funds as these are the best entities to manage medium-sized projects and are already structured to deliver the management and reporting of EU projects. Further, decentralized intervention allows local entities to work on territories they profoundly know, manage adequate-size financing following the European Union recommendations, and work faster than in a centralized intervention. The third point concerns the simplification of the hiring process and supporting an increase in permanent employment. The fourth point concerns the modification to the Code of Public Contracts (Codice dei contratti pubblici). The fifth and last point, a corollary of all the previous ones, identifies metropolitan cities as the main contracting stations. These have in their hands the ability to manage EU funding and respect the rules required by the Union (Nardella, 2021).

One Next Generation EU achievement is the renovation wave launched in October 2020. The European Union acknowledged that buildings are responsible for 40% of energy consumption, and at the current

pace of renovation, it will take more than a century to bring emissions to zero. So, by investing in renovation, not only will buildings across all of Europe become more energy-efficient and more comfortable, but new jobs will be created in the construction sector and beyond. The renovation will focus specifically on schools, hospitals, and social housing. However, it is up to local administrators to bring the renovation wave into cities and regions, sharing an ambitious view of a greener future (von der Leyen, 2020: 2).

Italy has included the urban renovation goal in its national Recovery and Resilience Plan (Piano Nazionale di Ripresa e Resilienza, PNRR), supporting the interventions promoted by metropolitan cities aimed at the regeneration of the existing building heritage, placing particular attention on suburbs. The plan also provides for the preparation of a pilot project with a high strategic impact for urban recovery. It supports interventions promoted by municipalities for urban regeneration to reduce situations of social exclusion and degradation. It focuses on land recovery projects and increasing public housing availability to support vulnerable people and low-income housing. Lastly, the plan provides for the regeneration of peripheral areas, integrating urban recovery with the construction of sports facilities (Next Generation Italy, 2021: 139-140).

The Recovery and Resilience Plan acknowledges the centrality of sustainable mobility in cities for an effective green transition. The plan is granting 8.4 billion to green public transportation. Among other things, the funds will be used to make bus transportation full electric in the cities of Milan, Rome, and Naples. They will also fund the renewing of local trains and southern InterCitys, as well as of the railway rolling stock for transportation of goods. Finally, the funds will be used to purchase eco-boats to create a faster and more sustainable transit through the Strait of Messina (La Repubblica Finanza, 2021).

2.3.6. Horizon Europe and Climate Neutral Cities

Horizon Europe is the Union's funding program for research and innovation. It has a total budget of €95.5 billion for 2021-27. Its main aim is to tackle climate change through the achievement of the SDGs while at the same time boost sustainable growth. It has identified five mission areas, each with its own mission board and assembly. The mission areas are: adaptation to climate change, including societal transformation; healthy oceans, seas, coastal and inland waters; cancer; soil health and food; and climateneutral and smart cities (European Commission, 2021).

For what concerns climate-neutral and smart cities, the mission board proposed to achieve climate neutrality in one hundred cities by 2030. The main criteria for the selection of cities are commitment, ambition, capacity, citizens involvement, and inclusiveness. A balanced geographical representation is also taken into account (Gronkiewicz-Waltz, H., et al., 2020: 6). According to the mission board, the main obstacle to climate transition is not the lack of climate-friendly technologies but rather the incapacity to implement them. They argue that the current form of city governance, designed for traditional operations and services, cannot support such a demanding climate action. Therefore, "a systemic transformation is

urgent, accompanied by a more strategic, holistic and long-term climate investment approach, together with a new city governance for climate action. The transformation will be based on three principles: (1) a holistic approach to foster innovation and deployment, (2) a matrix of integrated and multi-level governance, and (3) a deep and continuous collaboration between all stakeholders. This model requires a strong commitment from cities and their political leadership to innovate the administration and to bring all stakeholders, business, academia and civil society on board."

Accordingly, the mission board proposes introducing a Climate City Contract, a new mechanism to deliver support to cities "in the form of more innovation, better regulation, and integrated financing." The contract will be signed by the mayor on behalf of the local government and stakeholders, by the Commission, and by the national authorities. The precondition for the contract is the active role of the citizenry, accomplished through new platforms for climate action and better resources. According to the board, at least 1% of the EU funding devoted to the Climate City Contract needs to support citizens and their platforms in achieving climate actions. The contract will allow cities to develop and implement a new innovation concept based on "system innovation on governance, transport, energy, construction and recycling, supported by powerful digital technologies (i.e. system innovation in the whole value chain of city investment)." Cities will have to work together to create economies of scale and address common challenges, serving as innovation hubs for other cities (Gronkiewicz-Waltz, H., et al., 2020: 5).

In order to achieve these goals and make the most of the Multiannual Financial Framework (MFF), the European Green Deal, and the EU Recovery and Resilience Facility, the mission board devised a new integrated form of funding and financing. The mechanism includes a "lending and blending facility" functioning as a financial umbrella that entails the cooperation between the Commission, the European Investment Bank (EIB), and national climate funding facilities. The Commission and the Member States ought to make the funding of the contracts an utmost priority in the context of the investment strategy of the Recovery and Resilience Fund. Up to 10% of climate action resources under the MFF need to be allocated towards the objectives of the climate city mission. The mission board also suggests creating a Global Knowledge Center on Cities and Climate that could "facilitate and create synergies between European and international climate initiatives." (Gronkiewicz-Waltz, H., et al., 2020: 6).

This chapter provided an overview of Italian environmental city diplomacy, examining the variables of size and political orientation to explain city engagement in climate action. Further, it placed the Italian perspective in the European dimension and analyzed the role cities and their networks can have in multilevel governance. The next chapter will present the case study of Urban 20, a city network paralleled to the G20 process that strives to make recommendations to improve urban policies, and that has placed, since its birth in 2018, at its core the protection of the environment. It is particularly timely to discuss this network in the midst of its fourth cycle under the co-presidentship of the mayors of Rome and Milan. This happens in parallel to the G20 presidency, held in 2021 by Italy.

Chapter 3: The Urban 20 (U20) Mayors Summit

3.1. Enhancing the Role of Cities as Global Leaders

In 2017, at the One Planet Summit in Paris, under the initiative of Mayor Hidalgo of Paris and Mayor Rodríguez Larreta of Buenos Aires, several cities from the G20 countries came together as Urban 20 (U20). In the following year, at the first U20 Summit in Buenos Aires, they committed to "actively engage with the G20 process and to take action in (their) cities to respond to existing and future global challenges." (Joint Statement, 2018a: 1). Twenty mayors signed the joint statement, among which Mayor of Rome Virginia Raggi and Mayor of Milan Giuseppe Sala (Joint Statement, 2018a: 6). Since then, other cities have joined the group. In 2019, U20 counted 27 member cities, representing over 230 million people. These cities are responsible for about 8% of the world GDP. This would make the U20 population larger than the fifth most populous country and the third-largest economy in the world (UN-Habitat, 2020). In 2020, a record of 39 mayors endorsed the 27-point communiqué released at the virtual Riyadh Summit, which welcomed over 500 participants from all over the world (Ansa, 2020).

U20 is a city diplomacy initiative convened by the C40 Cities Climate Leadership Group in collaboration with United Cities and Local Governments, under the leadership of a Chair City that rotates annually, and which is usually located in the country presiding the G20 for that year. For the past years, the Chair cities have been Buenos Aires for the 2018 Summit, Tokyo for the 2019 Summit, and Riyadh for the 2020 Summit. In 2021, the U20 Summit is co-chaired by the cities of Rome and Milan. During the summits, cities discuss a wide range of urgent themes, among which the central are climate action, sustainable economic growth, and social inclusion and integration (Urban 20, 2020b).

U20 seeks to ensure a seat for cities at the global table by enhancing their expertise in several global development issues to offer solutions and formulate recommendations to national leaders and the G20. Effective communication and cooperation with national governments are essential to address critical global challenges and, since its genesis, the member cities have stressed upon these points. The theme for Argentina's G20 Presidency, carried out in the context of the first edition of the U20 Summit in Buenos Aires, was "Building Consensus for Fair and Sustainable Development." Consensus is vital to face the problems arising from climate change, the future of work, and social integration. The U20 cities analyzed these issues within the broader scope of equality, prosperity, and well-being. The commitments of U20 cities include their contribution to the G20 agenda through perspective and best practices on urban issues; recommendations based on individual experiences to achieve the objectives of the G20 agenda; cooperation and dialogue between cities and G20 nations; and detailed actions to bring about the priorities of U20 (Joint Statement, 2018a: 1).

The core elements of U20 are the Participating Cities, all critical economic and population hubs, made up of major C40 and UCLG member cities from G20 countries. Each city is represented by its mayor and a 'City Sherpa.' Together, they contribute to the drafting of the communiqué, the document through which

cities issue recommendations to the G20 governments. Thanks to this document, U20 can run in synergy with the G20 process, striving to build a platform for urban centers to be shared with G20 leaders through an active collaboration with global city networks. The U20 invites other G20 and non-G20 capital cities and intermediary cities as Observer Cities under the representation of their mayors. Their participation is non-binding and revised yearly. An essential part of the U20 structure is the executive team, composed of the Chair City and representatives from the conveners, C40 and UCLG. U20 also has several partners who assist the process by providing knowledge-based contributions and evidence-based research to help cities take an informed position on the topics discussed. The partners collaborate in devising the White Papers, non-binding documents providing input and expertise to the U20 process.

U20 focuses on enriching the G20 agenda and urges G20 members to include pressing urban subjects requiring synergic solutions with national governments in each annual discussion. U20 is one of the various organizations with which the G20 works to provide diverse perspectives on socio-economic challenges. Some of these independent collectives are gathered in thematic groups called 'G20 Engagement Groups', led by organizations from the host country. These, together with other organizations from G20 countries, develop policy recommendations. U20 acts in the same spirit but, instead of being an independent collective led by organizations from the host country, it is an autonomous initiative permanently convened by UCLG and C40 (Urban 20, 2021a).

3.2. Common Themes

3.2.1. Climate Action

The focus on the climate crisis is, since the beginning, central to the U20 process. Climate action is key in generating opportunities and benefits ranging from economic growth and job creation to gender equality and improved health (Buenos Aires Communiqué, 2018: 3). In the 2018 joint statement, the mayors committed to delivering inclusive and ambitious climate strategies to "decarbonize the electricity grid, optimize energy efficiency in buildings, enable next-generation mobility, and improve waste management and integrated food systems," also committing to "reinforcing (their) cities' resilience, disaster preparedness, and capacity to adapt to climate-related impacts and implementing effective response, recovery, rehabilitation, and reconstruction strategies." These strategies, if well enhanced, will significantly help to mitigate the impact of climate change, drive economic growth in synergy with the improvement of the well-being of urban residents, and make cities safer, healthier, and more equitable for all urban citizens (Joint Statement, 2018a: 3).

At the Buenos Aires Summit, mayors called on G20 member states to rapidly implement the Paris Agreement and support policy to achieve its objectives, focusing on a shift towards clean and renewable energy, implementing carbon prices that reflect the shadow cost of carbon, increasing investment in climate solutions, and removing fossil fuel subsidies. Cities advocate for increasing resilience by stepping up climate ambition and preparing a long-term strategy to achieve carbon neutrality by the second half of

the century. They asked to align policies across all levels of governance and integrate cities in the transition process by allowing the latter access to financial resources to undertake climate action personally. Further, cities asked to support their commitment to "build resilience and achieve an inclusive and equitable low-carbon transition by advancing zero-carbon buildings, zero-waste, and green and healthy streets in urban areas by lending political support, resources and capacity, specifically for those cities disproportionately affected by the impacts of climate change." The mayors recognized that cities have specific challenges resulting from air pollution, natural and human-caused disasters, poverty, inequality, and increasingly climate-induced migration. They asked G20 leaders to determine policy with an eye on these challenges (Buenos Aires Communiqué, 2018b: 3).

At the Tokyo Summit, again climate action is the first item on the list. Now leaders, given the increasing hazards resulting from climate change and in line with the IPCC Special Report on Global Warming of 1.5°C, advocate for decarbonization by 2050 at the latest. They also followed up on strengthening resilience and adaptive capacity to climate change, which entails, for example, conserving and restoring ecosystems, building resilient infrastructures, and decentralizing energy supply. A central point entails encouraging zero-emission transport and enhancing energy efficiency by fully decarbonizing the energy grid. Mayors asked specifically to commit to 100% renewable electricity by 2030 and 100% renewable energy by 2050. Further, mayors asked to increase resource efficiency and promote circularity, recognizing that responsible supply chain management could limit the loss of tropical forests. In fact, due to the increasing consumption of biomass resources, our tropical forests are progressively shrinking, and with them, the environment's absorptive capacity for CO2. This is also posing an enormous threat to biodiversity. Mayors also focused on reducing plastic waste by considering the creation of a binding international agreement. This is especially in view of the critical situation in our oceans, where at least 8 million tons of plastic end up every year, and hundreds of marine species ingest or are entangled by plastic debris (IUCN, 2018). Mayors asked to promote sustainable disposal of waste, halve per capita food waste and pursue food security for all, in accordance with SDG 12 (Tokyo Communiqué, 2019: 2-4).

At the Riyadh Summit, which was held virtually, the focus was the COVID-19 pandemic and how to ensure a green and just recovery. Actions proposed entailed designing green stimulus funding to support the development of climate-resilient societies and speed up the achievement of net zero carbon emissions. Cities asked to have their funding needs duly reflected in International Financial Institutions (IFIs), tearing down the existing barriers they encounter in national and international capital markets. Further, they proposed to sustainably invest in cities' social infrastructure and carbon-neutral projects that would generate green jobs. Mayors committed to cooperate towards guaranteeing access to vaccines to all as a global public good and work with multilateral organizations to upgrade health crisis responses and improve recovery policies. Further, they asked G20 leaders to "ensure that technology and innovation equitably serve people during and following the COVID-19 recovery, enabling connectivity, distance

learning, telework, and all other universal public services, to be accessible to all communities in respect of citizens' human rights, including digital rights." (Riyadh Communiqué, 2020a: 3).

Compared to the preceding two, the Riyadh Summit is the one stressing the most the risks encountered by climate change, also thanks to the wake-up call that was COVID-19. The Communiqué dedicated to climate action three out of the four themes treated. I have just overviewed the first. The second concerns the safeguard of the planet through national-local collaboration. They restressed the commitments stated in the Paris Agreement and the IPCC Report on Global Warming of 1.5°C – to deliver a 50% global reduction of GHG emission by 2030 and reaching carbon neutrality by 2050 – and asked that cities be included in the post-2020 Global Biodiversity Framework (GBF). Local governments and country leaders ought to work together in a complementary way, and cities stress the need for an active role in the local implementation of the biodiversity, climate, and sustainability goals (Riyadh Communiqué, 2020a: 4). The third theme is specific to sustainable economic growth and will be analyzed in the next section.

3.2.2. Sustainable Economic Growth

The Tokyo Communiqué dedicates one of its three core themes to sustainable economic growth. Mayors acknowledge that the world is undergoing an accelerated technological change, with the emergence of artificial intelligence and big data significantly altering our society. We are in the midst of the so-called Fourth Industrial Revolution (4IR). New technologies have an increased potential to foster innovation and inclusiveness, increase productivity, create flexible working arrangements, and provide better social service. On the other hand, automation displaces workers, particularly those in the middle of the income distribution, increasing socio-economic inequality. The "digital divide" is expanding, and mayors recognize that the 4IR has brought both opportunities and new challenges to cities. In fact, while the current industrial revolution has brought digital infrastructure into focus, physical infrastructure is under increasing pressure. Mayors claim that the enhancement of quality green infrastructure is fundamental as the world faces more frequent and intense natural disasters.

In the Tokyo Communiqué, mayors called the G20 to collaborate with cities in promoting inclusive economic development and creating technologies that ensure the participation of diverse groups in society, particularly women and minorities. They stressed the importance of promoting "digital rights" and equal access to affordable internet, training in digital skills, and empowering disadvantaged groups to overcome the digital divide. They recognized that the internet offers a new opportunity for participatory democracy and that it can be a powerful mechanism fostering resilience in the transformation of the labor market. Mayors addressed the necessity of encouraging opportunities to develop new technologies and social services, both to stimulate the economy and solve pressing urban challenges. This can happen by eliminating impediments to innovation, promoting Open Data, and supporting start-ups and small and medium enterprises (SMEs). Enhancing sustainable growth also means fostering cooperation among cities to tackle common challenges related to the governance of new technologies and develop common policy-

guiding principles, including transparency, openness, privacy, and security. Other points made by mayors are developing sustainable and resilient infrastructure, with a focus on marginalized groups, and enhancing cities' access to finance for sustainable infrastructure. Finally, mayors focused on ensuring a just transition to zero-carbon development through local and national policies and enhancing the equitable distribution of jobs as well as the generation of new work prospects towards a resilient decarbonized society (Tokyo Communiqué, 2019: 5-6).

At Riyadh, the third theme presented focused on accelerating the transition to a circular, carbon-neutral economy and implementing the 4Rs – reduce, reuse, recycle, and recover. The mayors prompted G20 leaders to develop enabling legal environments, risk-sharing, and financial assistance instruments. They stressed the possibility for local governments to finance circular economy initiatives in the construction sector, deploying greener materials and readily available technologies. Further, they again underlined the importance of developing new industries, promoting R&D to speed up the transition process. They emphasized that it is necessary to regulate, invest, and redirect national budgets to achieve carbon-neutral mobility systems, achieve in the nearest time zero-emission mass transit, and transition to clean energy. They claimed that it is fundamental to "adopt a universal right of access to urban sanitation and waste management for all while promoting "zero waste societies," in recognition that waste rarely pays for itself and progress towards circular economy is slow but critical, in particular in rapidly urbanizing regions." (Riyadh Communiqué, 2020a: 5).

3.2.3. Social Integration and Inclusion

Social integration is a key pillar of U20 discussion, present in the communiques since Buenos Aires, where mayors asked G20 leaders to work proactively to "make our societies more inclusive, welcoming, peaceful, safe, and discrimination-free by providing spaces and opportunities for all people to interact, build connections, and form meaningful relationships together." Other critical aspects discussed in the first Summit are fostering citizen participation in policy making and city governance, particularly of women who have been historically underrepresented, and ensuring funding and power to secure access to safe, affordable housing, clean and efficient public transportation, education, and healthcare. Central is also to support the social integration of migrants and refugees and ensure that they overcome barriers to participation and inclusion, improving access to citizenship and residency rights, and implementing violence prevention programs. Mayors also focused on empowering citizens for future labor markets. They called the G20 to collaborate with cities to implement education, training, skill-building, and employment programs and coordinate development-oriented policies that empower both employers and workers in the adjustment to changing paradigms. At the same time, it is essential to adapt to and harness the opportunities stemming from the new technologies and models of production and consumption, improve girls' access to education and training, promote entrepreneurship and support SMEs that focus on youth and gender empowerment (Buenos Aires Communiqué, 2018b: 4-5).

The Tokyo Communiqué places as second theme social inclusion and integration, claiming that societies are being reshaped by striking political, economic, social, and demographic transitions. The challenges experienced by communities include rapid urbanization, income inequality, discrimination against women, hate crimes against targeted minority groups, inclusion challenges faced by migrants, and growing tides of nationalism that feed on stagnant work opportunities to create an illusionary narrative around those left behind. To achieve "more inclusive, peaceful, safe and discrimination-free cities in which every city dweller can have free and fulfilling lives regardless of their race, age, socio-economic status, ethnicity, religion, gender, sexual orientation or disability," several actions are needed.

Cities call on G20 leaders to promote equality in economic opportunities, as well as access to political participation and essential social services – including education, health, medical treatment, public safety, energy, water, and sanitation. They further ask to promote accessible, resilient, and inclusive urban development, which entails implementing housing strategies to ensure access to adequate housing to the whole population, enhance resources for local government to face real estate speculation, promote sustainable and adequately served neighborhoods, and provide access to low-carbon transport. One crucial point is to achieve greater gender equality by ensuring equal opportunities for leadership and decision-making processes at all levels, eliminating the gender pay gap, and creating cities free of domestic violence by working with local authorities and civil society on the development of policies and awareness-raising campaigns. Other points made are addressing the needs of aging populations – for example, by engaging them in activities through which they can contribute to the community – and facilitating the socioeconomic integration of migrants by developing national and regional programs to support them in documentary regularization, shelter, linguistic inclusion, and promotion of work (Tokyo Communiqué, 2019: 3-5).

The Riyadh Summit stresses that people need to be empowered to deliver a more equitable and inclusive future. This entails addressing persistent challenges in the delivery of affordable housing and sustainable public transportation, guaranteeing food security for all and strengthening the urban-rural linkages, investing in employment opportunities for young people and women, focusing on the development of digital skills and incentivizing SMEs, preparing for the future of work by guaranteeing equal access to quality education. Lastly, mayors committed to "strengthening the urban cultural and social fabric, empowering local governments to promote it as a core component of local identity and as a vector for peace and human rights and preserving world cultural and natural heritage." (Riyadh Summit, 2020: 6).

Common Themes	
Climate Action	Implement the goals of the Paris Agreement

	Step up climate ambition and prepare strategy to achieve climate neutrality by 2050 Design green stimulus funding with local entities as beneficiaries to support the development of climateresilient societies
Sustainable Economic Growth	Promote inclusive economic development and creating technologies that ensure the participation of diverse groups in society, particularly women and minorities Promote digital rights and participatory democracy Support start-ups and SMEs Accelerate transition to a circular, carbon-neutral economy and implement the 4Rs
Social Integration and Inclusion	Foster citizen participation in policy making and city governance, particularly of women Ensure funding to secure access to safe and affordable housing, clean and efficient public transportation, education and healthcare

3.3. 2021 Rome-Milan Summit

The 2021 Summit, the fourth since the creation of U20, will be held in Rome in September 2021, under the leadership of Mayor of Rome Virginia Raggi and Mayor of Milan Giuseppe Sala. As it is customary, it will build on the legacy of previous summits and focus particularly on a green and just recovery from the COVID-19 pandemic by "strengthening local public service provision, accelerating climate action and fostering social inclusion and prosperity within communities." The primary output of the U20 2021 cycle is the Rome-Milan Communiqué, which was released on 17 June 2021, and it will be shared with Prime Minister of Italy and G20 2021 President Mario Draghi before the G20 Summit in Rome takes place in October 2021 (Urban 20, 2021a).

The Italian G20 Presidency has issued its priorities statement claiming that the pandemic has made one thing clear, that "we live in an era in which local problems swiftly become global challenges." Therefore, the presidency focuses on three core pillars – people, planet, and prosperity – acknowledging that

multilateralism is a practical necessity in our increasingly interconnected world and the response to the planet's concerns. Although a classical reading, following the Westphalian approach, would limit to consider solely states as international actors, cities today have a far-reaching role in global affairs – as demonstrated by the several city networks and, in particular, by the U20 process. Local governments need to actively cooperate with their nations and with each other to face the current crisis and to build differently in the aftermath, in order to ensure sustained prosperity. This entails a better use of renewable energy and firm commitments to protect our planet at all levels of governance (Italian G20 Presidency, 2021).

The chairmanship of the 2021 Summit recognizes that we are living a unique time in history, as the COVID-19 pandemic has caused millions of deaths and displaced hundreds of millions of workers worldwide. What had started as a health crisis quickly turned into a human and socio-economic crisis. At the same time, the world entered the 'Decade of Action,' which calls for accelerating sustainable solutions to the world's most significant problems, ranging from inequality to climate change. To be able to reduce global GHG emissions by 50% entails, according to UN Secretary-General Guterres, to mobilize all sectors of society for a decade on three levels: global action, securing smarter leadership, resources, and solutions to achieve the SDGs; local action, embedding the necessary transitions in the legal frameworks, policies, budgets and institutions of cities and local authorities; and people action, including civil society, unions, the media, academia, and the younger generations, in particular, to spark a global movement pushing for sustainable transformation (Urban 20, 2021b: 1; United Nations, 2020).

In this context, G20 countries are better equipped to face the health crisis, thanks to their substantial economic resources. Nevertheless, since they are also the major producer of carbon emissions, they have a responsibility to be at the forefront of the fight against climate change. In the aftermath of the pandemic and the year of COP26, G20 national governments have announced to cumulatively pitch in 13 trillion dollars in fiscal support, incentive packages, and recovery plans, which ought to be spent wisely and sustainably to reduce GHG emissions significantly, create job opportunities and increase resilience. In view of this conspicuous sum of incentives, mayors propose to formulate recovery plans that are green, just, and local.

Although at first sight sustainability seems a redundant topic, still only 7% of the COVID-19 incentive packets are explicitly devoted to green projects. Mayors advocate the full deployment of funds to contribute to the goals of the Paris Agreement. This particularly entails halting the financing of fossil fuels and rather investing in sustainable public transports and food systems. Another key aspect is the development of sustainable cities with abundant green areas that are accessible to everyone. G20 countries ought to sustain developing countries to guarantee a global and fair green transition.

In this time of mass unemployment and economic recession, the most vulnerable communities are hit the hardest. Therefore, job-creating is an absolute priority of all recovery plans. Mayors suggest that a green and just recovery has the potential to create up to 50 million jobs before the end of 2025 in C40 cities,

which accounts for more than one-third of what a traditional carbon-based recovery would do. Equal opportunity of work, sustaining the increasing participation of women in the workforce, and regulating informal work in key sectors are essential aspects of a fair and just transition.

Finally, the recovery needs to be local. Although cities host the majority of the population in G20 countries and were the hardest hit from the COVID-19 pandemic, they were not adequately involved in the development of recovery plans, and the majority will not benefit directly from them. The co-presidents of the 2021 U20 Summit ask G20 leaders that cities be the receivers of incentive packages and that national recovery plans include at least 30% of urban projects. They maintain that cities already have ambitious climate action plans and ought to be supported in introducing recovery measures at the local level as to be able to "build back better" and become an essential ally of nations in the achievement of climate objectives.

The recovery needs to be based on enhancing local public services, as the pandemic has highlighted the decisive role of maintaining their functionality and the need to guarantee equal access to all. The copresidents stress that "from health services to environmental hygiene, water and waste management, housing, mobility, digital technologies, education, food safety and services that protect the most vulnerable groups of the population, it is clear that the sustainability of local public service delivery must be maintained to contain the pandemic, address inequalities and lead to a green and just recovery." The copresidentship affirms that a prime example of these needs is public transportation, which ought to be resilient and well-resourced not only to achieve ambitious climate actions, but also to create jobs and therefore enhance economic prosperity. At the same time, the co-presidents acknowledge that public transportation systems in many cities around the world are "financially at risk and facing a level of service cuts and job losses that significantly hinder a green and just recovery." Therefore, it is an urgent priority for all recovery plans to invest in mass urban transportation (Urban 20, 2021b: 1-3).

To be able to sustain local public service provision, protect citizens and ensure a green, just, and sustainable recovery from the pandemic, cities must have direct access to funding from international and national sources, primarily but not only to national recovery plans. According to U20 mayors, fiscal decentralization and autonomous local and financial administrative institutions are to be seen as multipliers for economic development. The principle of subsidiarity is the key to improve territorial governance and create multi-level governance framework processes that increase the impact of policies and investments. Mayors claim that "a more inclusive multilateral system where cities have a seat at the decision-making table must also be in place to acknowledge that international agendas depend on local action, and to foster transformative tools such as Voluntary Local and Subnational Reviews." (Rome-Milan Communiqué, 2021: 2).

Twenty-eight cities signed the 2021 Communiqué and urged G20 leaders to "deliver a green and just recovery from COVID-19, ensure global vaccine equity, strengthen local public service provision and expand collaboration with local governments to achieve an inclusive, sustainable, and prosperous future."

(Urban 20, 2021c: 1). Consistent with SDG 17 and advancing city partnerships so as to implement the 2030 Agenda and in particular SDG 11, mayors invite all levels of government, as well as trade unions, academia and youth movements, businesses and investors, and the whole civil society to join them in recognizing the global climate emergency and help deliver science-based actions to overcome it (Rome-Milan Communiqué, 2021: 2). They again emphasized that greater cooperation between national and local governments is needed "to scale up solutions, sustain critical public service provisions, and ensure that no one – and no place – is left behind." (Urban 20, 2021c: 1). Building on the three core pillars of the G20 2021 Presidency, the U20 advocates a green, just, and local recovery through:

- 1. People. This entails, first of all, strengthening health systems and public services. Mayors have realized that facing health challenges needs not only a health response but also strong public institutions and service provision, which are essential to the cohesion of communities and to guarantee universal access to vaccines. They asked leaders to ensure, in a perspective of global equity, that cities in less developing countries are not left behind. Building on the legacy of the past summits, mayors focused on policies fostering social cohesion. These include guaranteeing equal access to essential public services (e.g., housing, education, and public transportation) and social safety nets, protecting the most vulnerable and those in informal working occupations, promoting gender-inclusive policies, and fighting structural racism, discrimination, and sexism. Lastly, mayors acknowledge the primary role of cultural life as a key pillar of sustainable development. This entails supporting self-expression, indigenous knowledge, and the education of young generations. They further recognize that the pandemic had a strong negative impact on the cultural sector and that culture needs to be at the core of the cities' social and economic recovery as it bears the power to strengthen communities and personal identities, while at the same time spark innovation and positive change.
- 2. Planet. As previously discussed, the primary concern of U20 mayors is to deliver a green and just recovery from the COVID-19 pandemic. This entails accelerating the disinvestment from fossil fuels, shifting investments from high-carbon infrastructure to green solutions, and ensuring that 40 to 50% of climate investments are directed to vulnerable communities. Mayors claim that this should happen "firstly via investment in retrofit technologies, capacity-building and research in sustainable, safe public transportation, net-zero carbon buildings, deployment of mature clean energy technologies, innovative clean energy solutions such as green hydrogen, green and blue infrastructure, carbon removal, circular economy towards zero waste, transit-oriented development and a climate-friendly food system. Secondly by dedicating funding for adaptation and climate resilience and restoration, to empower cities by securing financial streams and capacity building to accelerate and scale urban climate resilience. Foster urban rehabilitation through greener spaces, regenerating natural living systems, and ensuring smart cities are designed to center the needs of residents."

Mayors focused on accelerating climate action in the year of COP26 by committing to the Race to Zero-keeping global warming to 1.5°C, pledging to reach net zero carbon emissions possibly by the 2040s and by 2050 at the latest. This entails phasing out internal combustion engines and achieving 100% zero-emissions vehicles sales no later than 2035; ensuring that new buildings are resource-efficient and operate at net zero carbon by 2030 and that all existing buildings are renovated and retrofitted to operate at net zero carbon by 2050. Mayors asked to set an interim target to achieve in the next decade, in accordance with the goal of 50% reduction of CO2 by 2020 identified by the IPCC Special Report on Global Warming and following the principle of common but differentiated responsibilities and capabilities. The target entails enhancing Nationally Determined Contributions (NDCs) and Long-Term Strategies (LTS); and securing an appropriate financial package, including through at least 0.7% ODA (official development assistance), to support developing countries to achieve these goals, recognizing that for many countries, climate ambition and action depend heavily on the availability of external funding.

Mayors recognize that intermediary cities have great potential as catalyst for sustainable development and therefore they should be supported through direct investments. Other topics treated are ensuring territorial cohesion, resilience, and equality between urban and rural areas; empower cities to enhance nature-based solutions to reduce climate risk and minimize the impact of natural disasters; protect biodiversity and help frontline communities to build resilience to adapt to the impacts of climate change; and empower cities as key actors of sustainable food systems capable of sparking change in production and consumption through policies promoting the fight against hunger, conscious consumption and preserving agricultural land and water resources. This entails facilitating cities' access to funding and innovative solutions for the sustainable development of biodiverse food environments and for the creation of circular economic models in order to ensure food security for all and at the same time minimize carbon footprint.

3. Prosperity. The first concern of U20 mayors is adapting the future of work by empowering cities to address its structural changes, for example labor polarization sparked by the digital economy. In view of the increasingly necessary climate mitigation, local governments ought to invest in well-paying jobs generating revenue from mitigation activities. Further, mayors call on G20 leaders to strengthen local democracy by elevating local decision-making and participatory mechanisms; and rebuild cities' fiscal autonomy to "secure revenue streams for better planning, borrowing and investment and establishing enabling conditions to create an ecosystem of public and private financial partners that can mutually support each other and aid in securing much needed financing."

Other essential points are fostering local economic development by enhancing production and consumption models based on green manufacturing, sustainable tourism, and local SMEs, recognized as the backbone of our economy. Mayors recognized the importance of maintaining the consistency and sustainability of local public services, even in times of economic shocks. Finally, mayors upheld the protection of digital rights, acknowledging "the lasting impacts of digitalization on equity and citizen

engagement during and after the pandemic by urgently enabling new forms of data regulation and digital governance, which adapt human rights to the digital age by fostering digital rights, transparency and privacy, and which take into account the regulation and tax consequences of operating and providing digital services internationally." An essential aspect of the growing digitalization is to strive to bridge the digital divide, supporting digital literacy, and ensure that smart cities will be based on ethical digital standards. (Rome-Milan Communiqué, 2021: 2-5).

In this chapter, I have examined the case study of Urban 20, a city network that runs in parallel to the G20 process and is currently in its fourth cycle, under the co-presidentship of Rome and Milan. In the conclusion, I will look at the future challenges that European cities will face in the next decades and the possible role that city diplomacy will take in the future, in continuing to fight climate change and ensure the achievement of a sustainable and more equitable world. I conclude this chapter with two quotes from the co-presidents of the 2021 Urban 20 Summit.

"I applaud the work of fellow U20 cities, that once more have demonstrated their clarity of vision and commitment to act for the future of our communities. The U20 Communiqué is built around G20 priorities' People, Planet and Prosperity' in a way that shows how aligned cities' goals are to governments' ambitions: cities are governments' best allies towards a green and just recovery, and beyond. I am confident that the Italian G20 Presidency will take into high consideration the concrete and meaningful contributions of U20 cities to the G20 final statement." Mayor Giuseppe Sala of Milan (Urban 20, 2021c: 2)

"The principles set out in the U20 Communique are a big step forward towards the creation of a just, resilient and sustainable society. We are very proud of this result achieved by the Italian Presidency of U20, and we are ready to contribute to the work of the G20 on basic issues for the future humanity." Mayor Virginia Raggi of Rome (Urban 20, 2021c: 2).

Conclusion: European Cities in Climate Action and Future Challenges

Among the many actions that European cities are taking towards sustainable development, one of the most outstanding regards the deep renovation interventions. There are currently over 90 deep renovation interventions to make cities more sustainable, focusing on specific neighborhoods to be used as case studies for future action. 54 of these projects have begun later than 2011 and are still in progress, and 80 are European. France is at the top of the list with 12 cases studies. One interesting case, which strongly convenes the commitment of the city of Paris, is that of the eco-district of La Marine, of about 10 hectares and a population of 2,000. The project of renovation began in 2011 and will be concluded in 2023. From an energy transition point of view, the project enacted the total annulment of fossil fuel energy production, substituting it with an energy mix that implements renewable sources such as solar and geothermal energy with a substantial contribution of biomasses. The goal is to reduce carbon emissions by 80%, which currently has been nearly accomplished.

Concerning bio-climate responsiveness, one key strategy is building design and renovation with passive bio-climate solutions. Buildings have been integrated with solar greenhouses, bio-climate patios, buffer space, and solar shading systems. Concerning the functional deployment of space, the area has been transformed from fully residential to a mix of social and public services (68%) and living arrangements contributing, especially during the COVID-19 pandemic, to the effective deployment of resources, a higher standard of living for the population, and the possibility of making the neighborhood socially mixed by providing public housing. Regarding resource circularity and self-sufficiency, the neighborhood deals with waste by enacting sorting with a pneumatic system and intermediate storage of waste, employing nearby production sites with the placing of the organic waste directly to the biomass power plant, also located nearby. Circularity also aims at zero waste of rainwater in the sewers by collecting it, filtering it or phytodepurating it, and reusing it to irrigate green areas and re-enter buildings.

Concerning sustainable mobility, the neighborhood is predominantly made of walking areas. 80% of the streets are reserved for light traffic and tramway mobility. Cycle paths have been increased. Electric car charging stations have been implemented so that citizens are strongly incentivized to buy electric vehicles. Also, all buildings are equipped with space for storing bicycles. There have been established over 40,000 m2 of public green spaces in the neighborhood, with sharing of use and maintenance by the neighborhood's population and that of the adjacent areas. Overall, about 10% of decarbonization in the district is due to green areas, reaching about 78% of total decarbonization, nearly meeting the target set of 80%. Projections expect that the complete decarbonization of the neighborhood will be reached in 2040 (Tucci, 2021).

That of the district of La Marine, as well as the district of Clichy Batignolles in the context of UIA described in Chapter 2, puts us in the hope of a greener future for European cities, which could help mitigate the effects of climate change. However, climate threats are many and increasing. According to

Mauro Petriccione, Director-General for Climate Action (DG CLIMA) at the European Commission, the impact of climate change is already visible, for example, through summer fires even in Northern countries, floods, and droughts. What is less visible but more substantial is the impact of climate change on the local level. It suffices to think of the decreased standard of living in cities, impaired health, and damages to agriculture and tourism due to rising temperatures. Climate change has already become a part of our lives, and it will be only more pressing in the future. The target of the Paris Agreement of keeping the global temperature rise within 1.5°C, even if entailing and ambitious, will still deliver a much less comfortable world than the one we are used to.

The European Union has set the target to make the economy climate neutral by 2050 and to reduce CO2 emissions by at least 55% before 2030, setting a precedent for other parts of the world to follow. Japan, South Korea, and the United States have set similar targets, and even China has set a target to 2060. In the second part of the century, Europe aims to eliminate carbon from the atmosphere to attempt to restore the world to a status similar to pre-industrialization. Clean mobility is a necessary tool to reach this goal. Cities such as Rome, Milan, and Naples have pledged to fully operate electric public buses by 2030. Other fundamental aspects are repopulating our forests and changing our land use by employing sustainable agriculture that is respectful of the natural rhythm and, accordingly, its capacity to absorb carbon.

The targets that the EU has put in place for 2030, on the path to climate neutrality, will help create a prosperous and resilient economy with flourishing work opportunities and investment in new technologies. At the same time, it will be necessary to sustain the vulnerable strata of the society for whom sustainable development will substantially impact their personal lives. Changing the system at its roots is the only way to enable citizens to start changing their behavior. Here the role of cities is essential because it is where most citizens in Europe live, work, create economic activity, and produce CO2 emissions. Sustainable building renovation is another necessity. Our society already disposes of the working force, the new technologies needed, and green materials that can effectively accomplish energy efficiency. Although there are more cases of deep renovation in Europe than in the rest of the world, overall these efforts are not enough to have a lasting impact. The ability to enact these projects again needs to start from the local level and from citizens' demand. We are seeing how the local governments' ambitions to phase out polluting vehicles are sending a strong signal to car companies to finally shift the production to electric. Technologies and resources to invest in charging stations exist, and we have to deploy these resources earlier than we thought for our planet's sake. Finally, it is essential to rethink the spatial organization of our cities. The pandemic has shown that commuting is not a necessity, and to be able to decrease the problematic flux of traffic and reduce the impact on the transportation system, society ought to rethink the working patterns, creating space when possible for remote work.

Reforestation and sustainable land usage mean recovering only 5% of global emissions. Therefore the complete stop of emissions is an absolute necessity. Those few activities that are impossible to carry

without fossil fuels will have to be compensated by improving land use and increasing forests. Improving the presence of water and greenery has a massive impact on the quality of life, lowering the average temperature up to 5°C, and as a consequence diminishing energy consumption, which in recent years has seen a significant rise in the summer due to air conditioning. Rethinking how we organize our cities directly impacts stopping climate change and improving livability in cities (Petriccione, 2021).

Despite growing trends in worldwide population, in the next decades European cities will face a decline in their population, which means that most of the change needed for making cities more sustainable will have to take place in an integrated and affordable fashion with the pre-existing urban fabric. Cities will cover greater areas than in the past and will have to be able to optimize the design and use of their public spaces, adapting the needs of both infrastructure and services to the aging population. Local authorities will need to cope with major issues such as providing affordable housing, ensuring integration among diverse communities, and, most of all, reducing environmental impacts. Cities are both the front runners in fighting climate change and those suffering the most from its effects, among which energy poverty and water scarcity. The use of technology and innovation will be ever-more increasing, from mobility to citizen engagement, and technology will need to be integrated, interoperable, and implemented in an inclusive way benefitting the overall functioning of cities. Citizen engagement in the policy process will give rise to more inclusive forms of urban governance. The interaction and cooperation between EU institutions and European cities will put Europe on a path to identify, experiment, and apply solutions to future urban challenges.

The role of city networks and associations already plays an increasingly crucial role in shaping global agreements, and their importance is recognized in the Urban Agenda for the EU and the New Urban Agenda on a global scale. According to JRC, "cities and city networks have a large collective power to act and to scale up solutions quickly and efficiently. Their influence can be significant, from supporting global commitments to providing efficient local solutions. The EU has successfully created an environment of sharing of good practices between cities, both within and outside Europe. In this sense, cities also have a certain responsibility to act towards societal change."

Some of the challenges that European cities will face in the future include a shift from the sharp increases in housing prices to affordable housing; a decrease in ownership of private vehicles in favor of efficient and connected public transport and a shift towards electric vehicles; sustainable and efficient public services; improved urban health through effective urban planning; de-segregation of neighborhoods, which have increasingly polarized over time, through inclusive and equitable place-based policies. In regard to our environmental footprint, urban needs for water, energy, and food security have already resulted in significant environmental pressure, and four of nine planetary boundaries have already been exceeded due to human activities. Cities will have to adapt to several behavioral changes to reduce their

environmental footprint significantly. This includes choosing sustainable energy sources, increasing the use of public mobility modes, shifting to a healthy diet, and reducing waste.

One solution to meet these challenges entails a better use of available physical space, increasing green areas — improving air quality and providing microclimate regulation, other than enhancing social integration and public health. Other solutions include technological advancement and innovation addressing environmental and sustainability challenges, other than increasing productivity (but this point also raises several issues, e.g., data privacy and cybersecurity); enhanced citizen participation in strategies to tackle urban challenges; and increased city resilience. Communities in particular will play a substantial role in shaping their future, as greater efforts will be needed to anticipate the impacts of climate change and to help become more resilient.

According to JRC, "strengthening local administrations and empowering citizens will contribute to building urban resilience to new challenges and better protecting human, economic and natural assets in cities and their surroundings." A key solution to face future challenges is urban governance, which has recently gained a central role in global development affairs, as at least 65% of all new urban agenda's goals can only be achieved at the local level. In the European Union, there is a growing trend towards strengthening urban governance, which has led to the establishment of a variety of new governance bodies across European cities. This, of course, includes the large city networks that are "significantly empowering cities and accelerating the evolution of urban governance towards more horizontal cooperation and knowledge exchange." (JRC, 2019: 2-8).

In the future, green city diplomacy will have to play in accordance with the challenges that cities will face and find sustainable and just solutions to ensure a good standard of living to urban populations. As we move towards an ever-more interrelated and digitalized world, the role of cities is increasingly crucial to shape the lives of future generations. The growing trend of city networks and associations is creating a commonly held knowledge hub to face global issues in a unified manner. In particular, Urban 20 has a strong role in enabling the voices of local governments to be heard at the national and international level.

The COVID-19 pandemic has led many cities to adopt bolder climate policies. This is due primarily to two factors. The first is that studies suggest that there is a correlation between pollution and the spread of the virus. The second is that the lockdown has had a profound psychological impact on urban residents. In fact, the limited access to parks and green areas, coupled with the spread of images of mountains once blocked by pollution, fishes in canals and wild animals in city centers, was an important factor in raising awareness on the environmental impact of the current capitalist system, strengthening the public's call for less polluted cities. Such a trend has pushed mayors around the world to enact green policies, for example creating new bike lanes and pedestrian zones. According to Kihlgren Grandi, "should this environmental trend reveal to be permanent, it might also lead to more environmentally friendly national governments, at least in democratic countries. This would undoubtedly advance city networks' and international

organizations' campaigns for strengthened multilevel climate governance." (Kihlgren Grandi, 2020: 119-120).

This work has shown how city networks are key tools to tackle environmental challenges and build a commonly shared knowledge on the threats that the world is facing and will face in the future. I walked through the general characteristics of city diplomacy, the leading international agreements for the protection of the environment, and the most prominent global city networks at the forefront of the fight against climate change. Then I narrowed the scope and looked specifically at the role of Italian cities cooperating with each other and other cities across the border to achieve a common green transition. I also have seen the role that city networks play at the European level to shape policy making. Finally, I have explored the case study of Urban 20, a city network that runs in parallel to the Group of 20 process and is responsible for recommending possible solutions in tackling global and urban challenges to the G20 leaders.

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IL RUOLO DELLA DIPLOMAZIA DELLE CITTÀ NELLA LOTTA AL CAMBIAMENTO CLIMATICO

Nel 2008, per la prima volta nella storia dell'umanità, la popolazione urbana ha superato quella rurale. Oggi 4,2 miliardi di persone vivono nelle città – il 55% della popolazione mondiale – ed è previsto che nel 2050 sette persone su dieci vivranno in città. Le aree urbane generano più dell'80% del PIL mondiale, consumando due terzi dell'energia globale, tanto da essere responsabili di oltre il 70% delle emissioni di gas serra. Le città sono sempre più esposte a una grande varietà di rischi ambientali e climatici. In modo particolare le città costiere corrono il rischio di inondazioni dovute all'innalzamento del livello del mare, con gravi perdite economiche e del patrimonio culturale. Per le loro peculiari caratteristiche, il loro considerevole impatto sull'ambiente e la loro centralità nell'economia globale, le città devono essere in prima linea nella lotta al cambiamento climatico.

La diplomazia delle città è un importante mezzo per renderle più sostenibili. Il termine copre tutte le attività internazionali in cui sono convolte direttamente le città: dai gemellaggi alla governance globale, dai network di città ai summit internazionali. I network sono un importante tassello nella diplomazia delle città e vengono definiti come associazioni formali di governi locali attraverso le quali le autorità urbane condividono sapere, collaborano con attori pubblici e privati e difendono gli interessi urbani collettivi. Negli ultimi anni, queste reti sono cresciute esponenzialmente, diventando sia più internazionali che incentrate su tematiche specifiche. Attualmente ci sono oltre 200 network formali, con una crescita di 4 nuovi ogni anno. Le tematiche principali trattate sono l'ambiente (29%), la povertà (16%), l'energia (12%), la cultura (11%), la pace (11%) e le discriminazioni di genere (8%).

Uno dei principali network che agisce a livello ambientale è lo United Cities and Local Governments (UCLG), anche attraverso la sua Global Taskforce of Local and Regional Governments. Questo network è stato direttamente coinvolto nelle trattative ambientali internazionali ed ha contribuito ad aumentare la consapevolezza pubblica sull'impatto del cambiamento climatico sugli insediamenti urbani. L'UCLG ha sostenuto attivamente l'inclusione dell'SDG 11 (Città e comunità sostenibili) nell'Agenda 2030, sottolineando la sua importanza come unico obiettivo con un focus subnazionale. Molte città e altre entità subnazionali che fanno parte dell'UCLG hanno allineato i loro piani strategici con gli SDG e hanno lanciato varie iniziative innovative, come l'organizzazione di seminari di sensibilizzazione e la formazione di professionisti per comprendere il legame tra le loro politiche e ciò che fornisce l'Agenda 2030.

Due network ambientali, che si distinguono per la loro capacità di valorizzazione degli impegni delle città in azioni concrete e di advocacy per il riconoscimento globale del ruolo delle città nella lotta al cambiamento climatico, sono C40 e ICLEI.

Il C40 Cities Climate Leadership Group riunisce 97 città, che rappresentano un dodicesimo della popolazione mondiale e il 25% del PIL globale. Il gruppo ha intrapreso oltre 10.000 azioni per combattere il cambiamento climatico. Unisce 16 network che forniscono servizi a sostegno delle città nei loro sforzi

di contrasto del *climate change*. Questi coprono temi di sostenibilità con alto potenziale di impatto climatico e aiutano le città a migliorare ed accelerare le loro azioni climatiche. Un terzo delle azioni segnalate dalle città membri è stato direttamente influenzato dalla collaborazione con altre città del gruppo e il 70% delle città C40 ha implementato azioni per il clima più efficaci, che sono il risultato dell'approccio dei network basato su quattro obiettivi primari: (i) il collegamento tra i funzionari delle città di tutto il mondo per fornire soluzioni ai rischi climatici; (ii) il processo di ispirazione per l'innovazione dalle principali città globali che mostrano idee e soluzioni di successo alle sfide climatiche; (iii) la consulenza e cooperazione tra autorità urbane basata sull'esperienza con progetti e politiche simili e (iv) l'influenza sulle agende politiche nazionali e internazionali e una spinta al mercato facendo leva sulla voce collettiva delle città.

ICLEI – Local Governments for Sustainability è un network globale che riunisce oltre 1.750 governi locali e regionali in più di 100 paesi. I membri città si impegnano nello sviluppo urbano sostenibile, influenzano le politiche e guidano l'azione locale per uno sviluppo a basse emissioni, basato su un'economia resiliente e circolare. Il network è stato creato da 200 città riunite alle Nazioni Unite nel settembre 1990, sotto il nome di International Council for Local Environment Initiatives. Successivamente è stato ribattezzato ICLEI e rappresenta attualmente la più ampia coalizione di città impegnate nello sviluppo urbano sostenibile. La rete copre oltre il 20% della popolazione mondiale e il 25% della popolazione urbana mondiale. Ha sede a Bonn, in Germania, e attualmente conta 22 uffici in tutto il mondo. Fornisce alle città membri diverse opportunità di miglioramento, avendo realizzato oltre 1000 attività di formazione. Fornisce inoltre un quadro per progetti congiunti e scambi tra pari e dispone di 200 iniziative di sostenibilità attive. È membro della Global Taskforce of Local and Regional Governments e della World Assembly of Local and Regional Governments.

Il Patto globale dei sindaci per il clima e l'energia (Global Covenant of Mayors for Climate and Energy, GcoM) è la più grande alleanza globale per la leadership climatica delle città. È stato istituito nel 2016 dalla fusione del Patto dei sindaci e del Patto dei sindaci dell'Unione europea con l'obiettivo di creare una coalizione globale di città che si impegnano a ridurre le emissioni di gas a effetto serra. È partner di network urbani globali come C40, ICLEI e UCLG e con UN-Habitat, a cui si unisce nella lotta contro il riscaldamento globale. Conta 10.544 città in 138 paesi per un totale di 969 milioni di persone e si impegna a ridurre le emissioni annuali di CO2e di 24 miliardi di tonnellate entro il 2030.

Attualmente, il sistema italiano delle autonomie locali è caratterizzato da un'eccessiva "polverizzazione," citando il giurista Massimo Severo Giannini. Infatti, la maggior parte dei 7.904 comuni italiani è significativamente ridotta per dimensioni e popolazione rispetto agli standard internazionali. Il comune più piccolo del paese è Monterone, in Lombardia, con soli 30 abitanti. Questo fatto complica notevolmente l'erogazione dei servizi, in quanto la maggior parte delle strutture – ad esempio i sistemi di smaltimento dei rifiuti – necessitano di una soglia minima di capacità territoriale per risultare efficienti. Dalla necessità

di garantire servizi accessibili nasce il dovere del legislatore di promuovere l'associazione dei piccoli comuni. Ciò nonostante, l'importanza dei borghi è fondamentale per la tradizione italiana ed è vitale preservarne il valore culturale e storico, nonostante quest'ultimi siano progressivamente sempre più spopolati.

Anche le città metropolitane in Italia hanno una popolazione ridotta rispetto alle loro controparti europee e mondiali. Ad esempio, l'area metropolitana di Roma ha una popolazione di circa 4,2 milioni. Si tratta di meno di un terzo della popolazione dell'area metropolitana di Londra, che conta circa 14,3 milioni di persone, e meno di un quinto della popolazione della sola città di Pechino, che conta quasi 21 milioni di persone. Nonostante le dimensioni ridotte, grazie ad una solida tradizione culturale, le città italiane hanno una spiccata capacità di proiettarsi sulla sfera internazionale e di connettersi positivamente con altre realtà europee e internazionali.

Diverse variabili influiscono sul modo in cui le città interagiscono tra loro per cooperare e condividere informazioni sullo sviluppo sostenibile. A causa delle caratteristiche del sistema italiano delle autonomie locali, è rilevante analizzare come la dimensione possa svolgere un ruolo importante nel plasmare il coinvolgimento della città. Infatti le metropoli e le grandi città sono le più avvantaggiate a cooperare a livello internazionale, per il loro spessore politico e tradizione culturale. Ne sono esempio Roma e Milano che nell'anno corrente rappresenteranno l'Italia all'Urban 20, il meccanismo parallelo al Group of 20 che offre raccomandazioni per politiche nazionali di sfondo urbano.

Anche le città intermedie hanno questa capacità e sono spesso sponsorizzate da associazioni nazionali, come l'ANCI, per perseguire obiettivi sostenibili. Inoltre, sia le città grandi che quelle intermedie sono spesso capoluoghi di provincia, il che conferisce loro un ruolo istituzionale fondamentale che può essere utilizzato per promuovere pratiche sostenibili nel rispettivo territorio. Ne è esempio Prato, leader italiano dell'Urban Agenda europea per l'economia circolare. D'altro canto, le piccole realtà hanno bisogno di aggregarsi in network locali, oltre che per fornire servizi ai propri cittadini, anche per acquisire visibilità in ambito internazionale. I principali strumenti utilizzati per sviluppare progetti a livello locale e al tempo stesso consentire la partecipazione ad attività internazionali sono i Gruppi di Azione Locale (GAL), gruppi senza scopo di lucro costituiti da rappresentanti della comunità, spesso sotto forma di sindacati o associazioni di comuni. Sono gli organi che gestiscono i progetti LEADER, lo strumento dell'UE per finanziare lo sviluppo rurale avviato a livello locale e creare posti di lavoro per le comunità.

Un'altra discriminante che non solo caratterizza il sistema italiano ma trova riscontro su scala mondiale è l'orientamento politico dell'amministrazione. Per il tema che stiamo trattando decisivo è l'orientamento progressista delle diverse amministrazioni. Infatti, la maggior parte dei sindaci delle metropoli e delle grandi città che guidano l'azione per il clima provengono dal Partito Democratico, il più grande partito di centrosinistra italiano. L'altra grande componente è il Movimento Cinque Stelle con il sindaco di Roma Virginia Raggi e il sindaco di Torino Chiara Appendino (già parte del partito Sinistra Ecologia Libertà,

scioltosi nel 2016). Il Movimento Cinque Stelle si è negli ultimi anni proclamato partito "ambientalista", seguendo il trend crescente dei partiti verdi in Europa. Questa discriminante è più difficile da rilevare nelle realtà più piccole in quanto le città con meno di 15.000 abitanti presentano alle elezioni liste civiche, in genere non collocabili in uno schieramento politico definito.

L'interesse del centrosinistra per la crisi climatica si riflette anche nell'atteggiamento che lo stesso schieramento politico ha verso l'Unione Europea. Questa pone la lotta al cambiamento climatico come priorità assoluta. La sua posizione è espressa nell'European Green Deal, una Comunicazione dalla Commissione Europea del 2019 che prospetta la neutralità climatica entro il 2050. Il centrosinistra è in linea con gli obiettivi ambientali fissati dall'Unione. Al contrario, i partiti dell'estrema destra italiana (la Lega e Fratelli d'Italia), hanno forti posizioni antieuropee e sovraniste e non attribuiscono grande importanza all'azione per il clima nelle loro agende politiche.

Dall'inizio degli anni 2000, una crescente letteratura si è concentrata sul passaggio dalla governance centrale a quella locale. Oltre alle attività di governo orizzontale a livello locale, è stata progressivamente prestata maggiore attenzione agli assetti di governance verticale in cui sono coinvolte le città, sostenendo che il processo di globalizzazione in corso fornisce alle città nuove sfide, creando un nuovo tipo di competizione, ma anche nuove opportunità, sotto forma di diversi tipi di scambio sociale. Inoltre, si sostiene che i processi multilivello dell'Unione Europea implichino l'apertura di una nuova sfera politica che favorisca le città a svolgere un ruolo centrale, con una crescente indipendenza dal livello nazionale.

Le città partecipano al decision-making a livello europeo attraverso le tre istituzioni cuore dell'Unione: la Commissione, il Parlamento europeo e il Consiglio europeo. Il Consiglio è un'istituzione composta dai governi degli Stati membri che definisce l'orientamento politico e le priorità dell'Unione. In questo caso, è difficile instaurare una cooperazione diretta con il livello locale, poiché gli Stati membri sono più concentrati sul perseguimento degli interessi nazionali pur rimanendo in linea con obiettivi comuni. I contatti con le città possono essere essenziali nel delineare gli interessi nazionali e i rappresentanti dei governi nazionali sono solitamente attenti agli obiettivi perseguiti dagli enti locali quando sono in accordo con le loro posizioni.

La Commissione ha un ruolo centrale nel processo legislativo dell'Unione in quanto avvia la legislazione e redige proposte legislative, che richiedono un'ampia quantità di conoscenze specialistiche (informazioni, competenze e strategie) che le città e le loro organizzazioni possono fornire. Le competenze tecniche possono teoricamente essere fornite dalle singole città, ma il ruolo delle reti e delle organizzazioni è molto più significativo, in quanto possono aggregare interessi a livello transnazionale europeo, generare legittimità e aumentare l'accettazione delle iniziative della Commissione. Le città possono inoltre fornire un'opinione di prima mano su particolari programmi politici non solo su ciò che è socialmente appropriato ma anche su ciò che è tecnicamente fattibile. La Commissione ha riconosciuto questi punti nel "dialogo sistematico" con le organizzazioni di governo locale, introdotto nel 2004.

Il Parlamento europeo (PE) è un organo di co-decisione (con il Consiglio dei ministri) che apporta modifiche alle proposte legislative e prende decisioni. I membri del Parlamento europeo (MEP) necessitano di conoscenze specifiche per valutare le proposte legislative della Commissione, spesso fornite dalle città e dai loro network. L'informazione è necessaria anche nella formazione di coalizioni interpartitiche che influenzino i negoziati tra Commissione, Consiglio e PE, soprattutto nel caso della procedura di co-decisione in cui il Parlamento, deliberando a maggioranza assoluta, ha il potere di proporre emendamenti alla posizione comune del Consiglio o di respingerla. Le forme organizzative per costruire tali coalizioni sono chiamate Intergruppi del PE e sono supportate da diversi attori, compresi i rappresentanti delle città.

Le autorità locali sono inoltre centrali nel processo di selezione dei candidati al PE, dove possono articolare la propria posizione insieme ad un ampio spettro di organizzazioni sovranazionali. Una volta eletti, i candidati avranno ancora bisogno degli enti locali per creare e mantenere legami con il proprio elettorato, in quanto questi sono in grado di fornire informazioni su questioni pubbliche di interesse nazionale. Questo è un modo per i deputati al Parlamento europeo di aumentare la propria indipendenza dalla politica dei partiti nazionali e svolgere meglio il proprio ruolo nel contesto dell'UE.

Le città non solo influenzano la legislazione a livello dell'UE, ma sono anche attori rilevanti quando si tratta di attuare ed applicare la legislazione europea nell'ordinamento nazionale. Sia le direttive che le decisioni dell'UE devono essere recepite dal legislatore nazionale, a differenza dei regolamenti che sono direttamente applicabili. Proprio nel processo di attuazione le autorità urbane sono in grado di esercitare forti pressioni. Al contempo, la Commissione svolge un ruolo cruciale nel sostenere le amministrazioni locali nei conflitti con i governi nazionali ed inoltre gli enti locali possono fungere da "veicoli" per la Commissione, fornendo informazioni sul processo di attuazione e sulla corretta applicazione delle norme.

Nel 2017, al One Planet Summit di Parigi, su iniziativa del sindaco della città ospitante, Hidalgo, e del sindaco di Buenos Aires, Rodríguez Larreta, diverse città dei paesi del G20 si sono unite sotto il nome di Urban 20 (U20). L'anno successivo, al primo vertice U20 a Buenos Aires, i membri città hanno dichiarato di "interagire attivamente con il processo del G20 e ad agire nelle rispettive città per rispondere alle sfide globali esistenti e future." Venti sindaci hanno firmato la dichiarazione congiunta, tra cui il sindaco di Roma Virginia Raggi e il sindaco di Milano Giuseppe Sala. Nel 2019, l'U20 contava 27 città membri, che rappresentavano oltre 230 milioni di persone. Queste città sono responsabili di circa l'8% del PIL mondiale. Ciò renderebbe la popolazione U20 più grande del quinto paese più popoloso e della terza economia più prosperosa al mondo. Nel 2020, un record di 39 sindaci ha approvato il comunicato in 27 punti rilasciato al Vertice virtuale di Riyadh, che ha accolto oltre 500 partecipanti da tutto il mondo.

L'U20 è un'iniziativa di diplomazia cittadina convocata dal C40 Cities Climate Leadership Group in collaborazione con United Cities and Local Governments, sotto la guida di una Chair City che ruota ogni anno e che di solito si trova nel paese che presiede il G20 per quell'anno. Negli ultimi anni, le città

presidente sono state Buenos Aires per il Summit 2018, Tokyo per il Summit 2019 e Riyadh per il Summit 2020. Nel 2021 il Summit U20 è presieduto congiuntamente dalle città di Roma e Milano. Durante i vertici, le città discutono un'ampia gamma di temi urgenti, tra cui centrali sono l'azione per il clima, la crescita economica sostenibile e l'inclusione ed integrazione sociale.

L'U20 cerca di garantire un posto alle città al "tavolo globale" migliorando la loro esperienza in diverse questioni di sviluppo urbano per offrire soluzioni e formulare raccomandazioni ai leader nazionali e al G20. Una comunicazione e una cooperazione efficaci con i governi nazionali sono essenziali per affrontare le sfide globali e, sin dalla sua genesi, le città membri hanno sottolineato questi punti. Il tema della Presidenza argentina del G20, svolto nel contesto della prima edizione del Vertice U20 a Buenos Aires, è stato "Creare consenso per uno sviluppo equo e sostenibile." Il consenso è fondamentale per affrontare i problemi derivanti dal cambiamento climatico, dal futuro del lavoro e dall'integrazione sociale. Le città U20 hanno analizzato questi problemi nell'ambito più ampio dell'uguaglianza, della prosperità e del benessere. Gli impegni delle città U20 includono: il loro contributo all'agenda del G20 fornendo la prospettiva sulle questioni urbane; raccomandazioni basate su esperienze individuali per raggiungere gli obiettivi dell'agenda del G20; cooperazione e dialogo tra città e nazioni del G20; azioni dettagliate per concretizzare le priorità dell'U20.

Il ruolo delle città nel panorama globale sta crescendo esponenzialmente e sarà sempre più centrale. In futuro, queste dovranno rispondere alle sfide urbane dettate dal cambiamento climatico e trovare soluzioni sostenibili e giuste per garantire un buon tenore di vita alle popolazioni. Mentre ci muoviamo verso un mondo sempre più interconnesso e digitalizzato, il ruolo dei network di città è sempre più cruciale per plasmare la vita delle generazioni future. La tendenza crescente delle reti e delle associazioni cittadine sta creando un hub di conoscenza comune per affrontare le questioni globali in modo unificato. In particolare, Urban 20 ha un ruolo fondamentale nel far sentire la voce dei governi locali a livello nazionale e internazionale.

La pandemia di COVID-19 ha portato molte città ad adottare politiche climatiche più audaci. Ciò è dovuto principalmente a due fattori. La prima è che molti studi suggeriscono che esiste una correlazione tra inquinamento e diffusione del virus. Il secondo è che il lockdown ha avuto un profondo impatto psicologico sui residenti urbani. Infatti il limitato accesso a parchi e aree verdi, unito alla diffusione di immagini di montagne un tempo bloccate dall'inquinamento, pesci nei canali e animali selvatici nei centri cittadini, è stato un importante fattore di sensibilizzazione sull'impatto ambientale dell'attuale sistema capitalista, rafforzando la richiesta pubblica di città meno inquinate. Tale tendenza ha spinto i sindaci di tutto il mondo a mettere in atto politiche verdi, ad esempio creando nuove piste ciclabili e zone pedonali. Secondo Kihlgren Grandi, "se questa tendenza ambientale si rivelasse permanente, potrebbe anche portare a governi nazionali più rispettosi dell'ambiente, almeno nei paesi democratici. Ciò senza dubbio farebbe

avanzare le campagne delle reti cittadine e delle organizzazioni internazionali per una governance climatica multilivello rafforzata."