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Understanding and Measuring Policy Integration in  
Local Climate Action: a Case Study of Padua, Italy

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Student's signature

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## **Abstract**

Policy integration studies have gained relevance in recent times, in parallel with the general consensus that complex issues are better addressed with systemic efforts for coordinated boundary-spanning actions that allow a coherent pursuit of objectives of different nature. This concept is in contrast with long-used policy practices that relied on numerous, uncoordinated measures managed by different actors limited to specific policy sectors, or so-called ‘policy silos’. In the case of climate policies, vast literature proves the benefits of the integrated approach, that in bringing together goals of different nature strives to generate synergies from actions that, whether uncoordinated, would result in policy conflicts. In this context, what the literature still widely lacks of is the effort in trying to measure policy integration analytically, which is studying the integration level of given policies, and identifying specific elements that express policy integration.

The study presented tries to fill this gap, proposing an analytical framework that allows one to study and assess the integration level of policies by analysing policy documents. The instrument advanced is built on the theoretical framework designed by Domorenok et al. (2021), that identifies institutional empirical measures relevant for policy integration, drawing from Wu et al. (2015) conceptualization of institutional capacity. The analytical framework is used in this research within the case study of the Municipality of Padova, engaged in a decades-long history of climate measures. The scope of the study is focused on the policies provided under European programme Covenant of Mayors (CoM), namely the Sustainable Energy Action Plan (SEAP) (2011) and the Sustainable Energy and Climate Action Plan (SECAP) (2021). These policies are studied through documentary analysis, which is conducted following seven dimension-specific criteria that express the above-mentioned ‘empirical measures’ relevant for policy integration; these include quantitative counts of the numbers of sectors targeted by each intervention, assessment of the coupling of adaptation and mitigation objectives, in-text search for specific terms associated with policy integration, qualitative explanation of coordination mechanisms, and so on.

The results obtained are believed to build a reliable picture of the integration level of the policies under examination and allow a systematic comparison of the two local action plans. Moreover, the main contribution of this work is that of providing a replicable analytical framework that allows a systematic analysis of policy integration at the local level.

## **Abstract in italiano**

Il tema dell'integrazione delle politiche pubbliche ha assunto rilevanza accademica di pari passo con il consenso che è generalmente ritenuto più efficace rispondere a problemi complessi con impegni sistemici e azioni intersettoriali coordinate, in modo da perseguire coerentemente obiettivi di diversa natura. Questo concetto è in contrasto con pratiche politiche utilizzate per lungo tempo, che si basano su numerosi interventi non coordinati, gestiti da entità con competenze e obiettivi limitati a settori specifici. Nel caso delle politiche climatiche, un'ampia letteratura prova l'appropriatezza dell'approccio integrato, che beneficia delle sinergie generate dal coordinamento di azioni che, se non coordinate, porterebbero altrimenti a conflitti politico-amministrativi. Ciò di cui la letteratura è ancora carente è un sufficiente impegno nel misurare tale integrazione analiticamente, ovvero studiando il livello d'integrazione di politiche specifiche ed individuando elementi che esprimono l'integrazione delle stesse. Lo studio presentato cerca di colmare parzialmente questo gap, proponendo un framework che permette lo studio e la valutazione del livello d'integrazione delle politiche climatiche studiandone i relativi documenti. Lo strumento avanzato è costruito su di un framework teorico disegnato da Domorenok et al. (2021), che basandosi sulle intuizioni di Wu et al. (2015) identificano misure empiriche rilevanti per l'integrazione. Il framework analitico è qui applicato nel caso di studio del Comune di Padova, impegnato da decenni in politiche climatiche ambiziose. Lo studio si focalizza sulle misure avanzate per il programma europeo Patto dei Sindaci, ovvero il Piano d'Azione per l'Energia Sostenibile (2011) e il Piano d'Azione per l'Energia Sostenibile e il Clima (2021). Queste politiche sono studiate attraverso l'analisi dei loro documenti, condotta seguendo sette criteri che esprimono le suddette "misure empiriche" rilevanti per l'integrazione; tra questi troviamo il calcolo del numero di settori a cui ogni intervento mira, l'analisi testuale per la ricerca di termini rilevanti per l'integrazione, l'analisi qualitativa dei meccanismi di coordinamento proposti, lo studio della natura degli interventi in termini di mitigazione e adattamento, ed altri. I risultati ottenuti creano una rappresentazione attendibile del livello d'integrazione delle politiche in oggetto, e permettono un confronto sistematico tra i due piani d'azione per ogni criterio utilizzato. Il contributo principale di questo lavoro però è considerato essere l'individuazione di un framework analitico replicabile, che permette un'analisi del livello di integrazione di politiche specifiche.

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## **List of abbreviations**

BEI: Baseline Emission Inventory

CCC: Climate-City Contract

CoM: Covenant of Mayors

EC: European Commission

ERDF: European Regional Development Fund

EU: European Union

GPP: Green Public Procurement

JRC: Joint Research Center

NRRP: National Recovery and Resilience Plan

NZCs: Net Zero Cities

SEAP: Sustainable Energy Action Plan

SECAP: Sustainable Energy and Climate Action Plan

UNFCCC: United Nations Framework Convention on Climate Change

TMNs: Transnational Municipal Networks

## **Chapter 1**

### **Introduction**

After more than two decades since the establishment of the United Nations Framework Convention on Climate Change (UNFCCC) in 1992, debates on the best practices, approaches and urgency for climate policies are still common among policy makers globally. While the mainstreaming of climate priorities was overall accomplished, political strategies followed by governments have generally failed to generate structural change, and insufficient effort has been made in addressing the issue systemically. The far-reaching impacts of climate changes on the environment, and on society at large, signal the need for better policies that transcend traditional policy-silos and address the issue more coherently. Although this is well acknowledged among scholars, who advocate for a shift towards integrated policy making, the extent to which governments have built the necessary capacity to implement such an approach is still unknown, given the complexity that lies behind it and the challenges that changing long-used policy practices represent.

At its core, policy integration refers to the process of enlarging policy mixes to reach a better alignment of goals and means that would have been addressed separately in a non-integrated policy scenario (Howlett et al., 2015). In the context of climate action, adopting this approach means to deliver coordinated and coherent measures that target both mitigation and adaptation objectives among different policy sectors. While a significant body of research investigates the theoretical dimensions of policy integration and the benefits that such an approach generates in terms of policy outcomes, a lack of attempts in framing and measuring it analytically is noticed. In fact, in spite of findings of policy studies that suggest relevant strategies and tools for integration, a standardized method to analyze policy integration is still missing in the literature.

In framing policy integration, some adopt an institutional capacity perspective, which is studying the quality of governments through specific features thought to be essential for the achievement of integrated strategies. This is for instance the case of Domorenok et al. (2021), who identify empirical measures relevant for integration using Wu et. al's (2015) conceptualization of institutional capacity. In their work, capacity is assessed on three levels, namely systemic, organizational and individual; furthermore, they suggest the ways in which features of capacity on each level appear to support policy integration. However, this theoretical knowledge has not been developed into a practical tool for policy analysis.



This study tries to fill this gap by advancing an analytical framework that allows a systematic analysis of policy integration and, ideally, marks the way for a standardized approach to measure it. In doing so, the findings obtained will help to answer questions of how we can frame and measure policy integration, how integration and institutional capacity connect, and finally as a result of the case study, to what extent the policies studied are integrated. To achieve this, the research adopts the theoretical foundation that bridges institutional capacity and policy integration (Domorenok et al. 2021); based on this theory, an analytical framework is designed to measure the integration level of policies through seven dimension-specific criteria. The instrument is finally used in this work to analyze policy documents as well as other publications relevant for the case study of Padua. More specifically, it is used to analyze the policies designed under the European programme Covenant of Mayors, namely the Sustainable Energy Action Plan (2011) and the Sustainable Energy and Climate Action Plan (2021); along with these, other publications of the Municipality of Padua is considered to integrate relevant information that was not part of policy documents.

Recognizing the importance of understanding the context and the political environment in which the policies analyzed take place, this paragraph introduces the case study of this research: the Municipality of Padua.

Located in the eastern end of the Po valley, Padua (*Padova*) is capital of one of the seven provinces of Veneto region. Its municipality, whose administrative borders include neighboring villages too, counted 210.007 inhabitants on its last census of February 2024. Its historical center attracts around one million tourists every year, and is home to two Unesco World Heritage sites, namely the most ancient botanical garden in the world, and a fourteenth-century fresco cycle. Among many other cultural and historical relevant assets, Padua hosts one of the oldest universities in the world, the University of Padua founded in 1222. As provided by the Italian Constitution in regard to local governments, the municipality is headed by an elected Mayor who chairs and appoints the members of the *giunta comunale*, the executive body of the local government. Along with the Mayor, citizens also elect the *consiglio comunale*, legislative body of the municipality. Since June 2017, mayor of the Municipality of Padova is Sergio Giordani, an independent candidate backed by a center-left coalition.

Engaged in a long history of climate action, in the last decades the Municipality of Padua has delivered multiple policies aimed at the reduction of GHGs in its territory, with the most relevant being the Municipal Energy Plan (Piano Energetico Comunale, 1999), Energy Efficiency Plan (Piano di Efficienza Energetica, 2004), Operational Energy Plan (Piano Operativo Energia, 2009). Following its accession to the European programme Covenant of Mayors (CoM) in 2009, the municipality of Padua launched the Sustainable Energy Action Plan (SEAP) in 2011, and the Sustainable Energy and Climate Action Plan (SECAP) in 2021. These policies, object of the study, are distinguished from prior climate efforts by their emphasis on an integrated approach, a key principle advocated and supported by the CoM. Emerged as a leader in local climate action - as recognized by the Covenant of Mayors Award received in 2021, and the selection of Net Zero Cities (NCZs) for the 2030 climate-neutrality project - the Municipality of Padua aims to foster the trend that saw a 37.5% reduction of CO<sub>2</sub> emissions by 2017 since the implementation of the SEAP in 2011, and plans to achieve a 55.3% reduction by 2030 in the context of the SECAP, although the NZCs initiative later scaled-up this ambition, seeking for climate neutrality by the same year.

## **Chapter 2**

### **Literature Review: policy integration capacity and local climate policies**

In this work policy integration is studied from the perspective of institutional capacity. Backed by evidence found in the literature, I support the idea that some institutional capacity features are relevant for policy integration, and I furthermore suggest that by analyzing those features we can measure policy integration. This is why the first part of the literature review reported in this chapter focuses on the concept of capacity, with the objective of summarizing the main approaches that scholars adopted in framing capacity, so as to guarantee an easier understanding of the relation between capacity and policy integration.

#### **2.1 The issue of capacity in public policy studies**

The concept of capacity has increasingly gained interest among public policy scholars as governments are faced with relatively new, cross-cutting and complex issues while looking for new ways to meet rising expectations of the public (Wu et al., 2015). At the same time, many recognized that integrated policy making is a major driver for successfully addressing such issues (Howlett & Rayner, 2007), and some suggest that policy integration can be an expression of capacity itself (Domorenok et al. 2021).

Both researchers and practitioners have called out the importance of capacity, intended as policy and institutional features that allow the establishment of coherent policy goals and consistent policy instruments (Howlett & Saguin, 2018). Although studies of this nature have been burgeoning, there is still a significant disagreement on capacity definitions found in literature, and a scarcity in systematic efforts to measure it (Ramesh et al., 2016). A “working definition” of capacity is missing, as no sufficient findings manage to explain what constitutes capacity and how resources or skills should be directed to achieve it, let alone how to measure and actualise it (Wu et al., 2015). Similarly, research gaps of the same nature are found within policy integration studies, as scholars struggle to advance methods that allow an analytical understanding of integration.

Both the focus of capacity and integration research so far seems to be that of what these phenomena can result into, in terms of policy success or failure. When these are understood according to the success or failure of particular policies though, political and other biases can be introduced due to the retrospective nature of the analysis (Painter & Pierre, 2005). Vice versa, in regards to capacity Brenton et al. (2023) don't think it's possible to

explain policy success or failure through presence or absence of capacity; rather they try to discern the ways and extent that capacity influences policies and policy outcomes, just as any other element that doesn't fall within the concept of capacity.

While the earliest literature on capacity used to be limited to state and government settings, Press' work introduces the community dimension in the discourse. He defines in fact capacity - in the perspective of environmental action - as "a community's ability to engage in collective action that secures environmental problem-solving ability". In doing so, he identifies the following as the components thought to lie behind capacity: social capital, intended as a community's social trust, civil engagement and associational life; political leadership and commitment; economic and administrative resources; collective social norms, seen as a community's habits in a policy-relevant issue; and external constraints and opportunities (Daniel Press, 1998), which in more recent literature would fall within the 'policy environment'. In the context of environmental policies, the presence of environmentalism is also considered - in terms of expectation of institutional performance in environmental protection - and sustained commitment to environmental programmes by political leaders is also relevant for the author.

The shift from state and government capacity to governance and nonstate actors' capacity fully matured in the 90s, and characterized later research. Administrative capacity and a focus on governments reemerged in the 2000s, with a border scope that includes programming, monitoring and evaluation capabilities on top of resources and leadership (Moore, 2000). An adequate level of knowledge and financial resources are evergreens in the realm of capacity (Schneider and Ingram, 1990) although in more recent literature these are understood more as factors that contribute to capacity rather than capacity itself. A dimension that has been long overlooked is that of the demand-side of capacity. When analyzing its influence on policy outcomes in fact, the demand dimension should not be underestimated. If capacity is considered to contribute to more effective and integrated policy design, then its success, and the general perception thereof, is heavily determined by the actual expectations and needs of beneficiaries too (Brenton et al., 2023). This means that for policy capacity to be a valuable concept, it should be assessed not only in terms of resources, management and policy provisions, but also in terms of public demands. Ideally, this understanding of capacity should encourage practitioners to adopt a participatory beneficiaries-driven approach, involving wide groups of policy recipients in policy discourses too.

A clear distinction in capacity meanings emerges when analyzing it at state, governance and policy level, showing how these dimensions are closely tied to each other hence underling how it is crucial to consider them all together to grasp a full understanding of the matter. State capacity research has focused on central governmental dynamics, overlooking relevant dimensions such as cross-sectoral, functional local level dynamics. Studies on governance capacity filled this gap, although only few attempts have been made to bridge structural–instrumental and cultural-institutional domains (Christensen et al., 2016). Finally the contribution brought by the concept of policy capacity is that of framing capacity as “set of skills and resources – or competences and capabilities – necessary to perform policy functions” (Peters, 2015; Wu et al., 2015). In policy capacity, the focus shifts to “knowledge-based aspects”; drawing from Moore (1995), skills are categorized under analytical, operational and political dimensions that policy actors build at systemic, organizational and individual level.

Recent work of Salvador and Sancho (2021) has been useful to explain capacity studies, as they make explicit the difference in approaches that scholars have used in analyzing public organizations’ capacity: policy approach and organization approach. Put simply, policy approach is characterized by a focus on specific policies and the system of actors involved in their formulation, while organization approach has the core of its research in the very characteristics of governments and public organizations. Major findings coming from the policy-centered scholarship are those of governance capacity, intended as the mix of resources available at the organizational and systemic level for policy-making and implementation (Ramesh et al., 2016), and the framework used to break down capacity into analytical, operational and political competences (Wu et al., 2015). Looking at the organization approach on the other hand the concept of administrative capacity has marked the research, generally referred to as the quality of government institutions (Domorenok et al., 2021b) in terms of skills, competences and procedures in policy-making processes, with particular regards to funds management (OECD 2020) and ‘street-level’ implementation (Brenton et al., 2023). According to Brenton et. al (2023), capacity is generated by three precise pillars, namely administrative capital, contingent political management and expectations satisfaction, each of which is briefly explained below, to form a “capacity value chain”. These elements are thought to generate capacities only when they can coexist simultaneously. Below, Figure 1 depicts the evolution of the relevance of each pillar through time, and their relative focus.

Administrative capital is understood in terms of fungible resources, also referred to as inputs. These are generally within state and state-agencies' control, and comprehend human and organizational resources (e.g. governments' bodies organization, numbers of employees, expertise etc.) as well as financial and physical resources. Similar understanding of available resources to explain capacity is found both in early capacity literature (see Burgess, 1975) and in more recent publications (see Gleeson et al., 2011). Given the volatile nature of some of the elements considered, like that of financial resources which are increasingly often coming from international funding schemes rather than local capital, resources that are more embedded within a governance, such as human resources and expertise, are more likely to explain time-lasting capacity. In this line, a large consensus is found in the literature stating that a good quality civil service is crucial to ensure sound and evidence based policy decisions (Howlett, 2009; Parsons, 2004). Mentioned quality is usually expressed in terms of staff availability, skills, expertise, qualifications, professionalism and merit-based career systems (Howlett & Newman, 2010; Newman et al., 2017; Rotberg, 2014). A later evolution of this concept is that of analytical capacity.

Contingent political management concerns the actual operationalization of administrative capital for policy delivery, including institutional and environmental features (policy environment) that influence decision-making processes. Elements of this dimension are laws, existing programs, market structure, norms, values and ideological orientations. (Brenton et al., 2023) Although policy delivery is usually associated with policy outputs, political management can also be seen as the dimension that lies between policy inputs and policy outputs, or that support the transformation of the former into the latter. For this reason, frameworks for implementation like that proposed by Mazmanian & Sabatier (1983) as reviewed by Lamb (1984) tend to be limited to management and administration-related indicators, that track 'the ability to' (or capacity to) allocate resources, coordinate different practitioner agencies, lead and commit to objectives etc. More recently, street-level implementation (Peters, 2015) and monitoring and evaluation (M. Howlett, 2009, 2015) have also gained relevance.

Finally, to conclude the 'capacity value chain', satisfying expectations of policy recipients represents outcomes. Such expectations are not always expressed in terms of specific policy needs or objectives, but rather can be generally represented by the demand for better-quality governance, more consistent and coherent policies, more efficient resource management, lower corruption and so on. A balanced assessment of multiple or opposing

interests within recipients and policy priorities is recommended by scholars (Parsons, 2004), who intuitively enough stress how setting policy goals merely on recipients requests wouldn't translate into sound and coherent strategies. The highly advocated participatory approach should in fact equip policy makers with useful information, data and perspectives rather than recommending specific goals.

Broad Periods	Problem Focus	Dominant Conceptions of Capacity	Proposed 3 Dimensions
1960s	Policy failure	Bureaucratic & implementation capacity (capacity to govern)	administrative capital
1970s	Failure of particular programs	Ability to deploy resources in realizing goals (formulating, implementing, & evaluation policy)	
1980s	Economic crisis/welfare state pressure	Availability of resources to transform into services (planning, decision-making, implementation, resource management, & evaluation)	contingent political management
1990s	'Hollowing out of the state'/New Public Management	Governance capacity (roles of non-state actors & innovative solutions)	
2000s	Complex challenges & rapidly changing environments	Organizational/operational capacity & administrative capacity (management, programming, monitoring, & evaluation abilities)	expectations satisfaction
2010s	Crises	Capacity as effectiveness of state responses to pressures (importance of contested policy advice & analysis)	
now	Democratic discontent	Capacity as a function of state supply in response to public and political demands	

Figure 1 The conception of capacity through time

Source: Brenton et al. 2023, p.7

Through a policy-oriented approach on the other hand, Peters (2015) gives a slightly different interpretation of policy resources. In his work, resources are categorized as follows:

Expertise, which in turn is divided into technical knowledge and policy environment-related knowledge. The former is expressed in terms of specialization and training of individuals within the practitioners; the latter is a wider understanding of specific policy environment features that influence both policy processes and the results.

Process, which is intended as the ability of public administrators to implement action plans at 'street level'. Supporting and actualizing sound policy requests, but also slowing or

avoiding those coming out of misguided political agenda, are also considered to be part of this category of resources.

Stability, intended as the sustained commitment to specific programs and priorities, but also the ability of adapting to changes in policy agenda and sudden challenges.

Organizational politics, which explains how public bodies are not merely in charge of day-to-day administration, but rather play a major role as policy actors too. Recognizing their linkage with political leaders, hence their ideology and priorities, is crucial to understand how intrinsic administrative capacity should support politically neutral policy agendas.

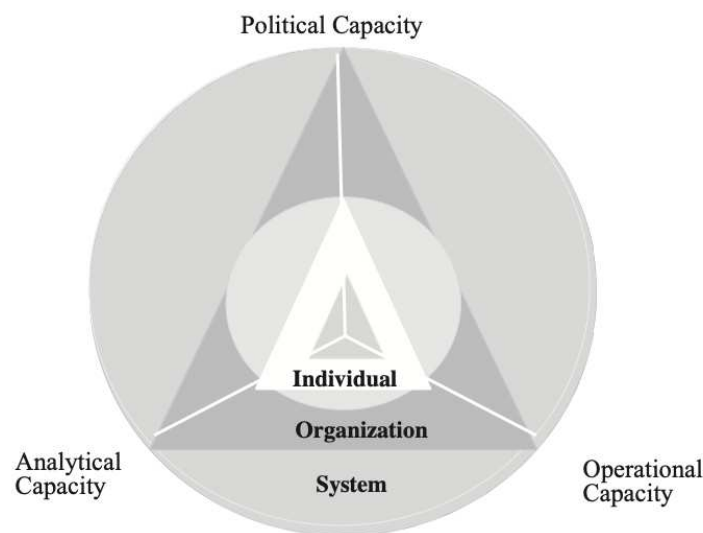
What emerges from Peters' perspective is how public bureaucracies are often time misinterpreted, and their role and influence in public policies tends to be underestimated. As described above, public organizations possess various resources to enable them to be proactive actors in the whole policy process, from formulation to street-level implementation.

Wu et al. are fathers of the most recent approach on policy capacity, through which they define capacity as a set of competences and capabilities required to ensure efficient policy functions (Wu et al., 2015). Their work and understanding of capacity, and the framework later reported in this research, is based on Moore's "strategic triangle" (1995), a concept that significantly marked capacity scholarship. This is so as Moore first broke down capacity into specific sub-capacities, namely analytical, political and operational. Furthermore, he suggested how each of these capacities are to be found through three policy levels, namely individual, organizational and systemic. To briefly introduce each dimension and how they influence policy making, analytical capacity is what enables policy actions to be technically sound, meaning that their implementation would contribute to the goal set; operational capacity ensures the alignment of resources and policy actions, so that the latter can be successfully implemented. Lastly, political capacity is associated with sustained commitment and support from political bodies to policy action plans. (Fukuyama, 2013; Gleeson et al., 2011; Rotberg, 2014)

Capacity, thus understood, is not limited to a specific stage of the policy cycle but is found in all policy processes, from goal setting to implementation and evaluation (Wu et al., 2015). An additional insight provided by this analysis is the diversity theorized in the nature of challenges faced by governments, which explains how showing 'capacity' in one specific function or dimension does not guarantee the same level of capacity in other settings too. From this perspective, capacity goes well beyond governments and recognizes the role of a



wide range of actors such as political parties, NGOs, businesses and international agencies in policy processes, and considers their contribution in determining the overall governance capacity. At the same time, the availability of capacity within governments is still considered the key driver for policy success, and could somewhat overcome the potential lack of capacity within other actors. Looking at the issue through this lens also allows one to understand how capacities available on each level influence the capacity on other levels too, hence the definition of capacity as the result of the combination of skills and resources at each level. A vast literature drew from this understanding of capacity to try and frame each of these dimensions within different contexts. As this study will later explain, the framework used to analyze capacity in the case study also derives from an adaptation of Wu et al. findings too, implemented to search for institutional capacity features relevant for policy integration.



*Figure 2 : A nested model of policy capacity*

*Source: Wu et al. 2015, p. 168*

Following the ‘nested model’ of policy capacity, an overview of the theoretical understanding of each dimension is reported below.

Analytical capacity at the individual is described as the ability to access and manage technical and scientific knowledge to enable an efficient and cost-effective policy implementation. A major focus in this dimension is on evidence-based policy making, which requires practitioners to maintain such capacity throughout the whole policy cycle, from formulation and goal-setting to monitoring and evaluation (Wu et al., 2015). Research has clearly shown that it takes a certain level of skills to feed evidence into policy-making

processes, and many cases are reported where such evidence were available but practitioners weren't able to make proper use out of them.

Coming to the organizational level, analytical capacity is referred to as the availability of 'analytically-skilled' individuals within an information and data managing system, meaning that actors involved in policy discourses can both collect, disseminate and analyze data efficiently (Davies, Nutley and Smith, 2000).

At the systemic level, analytical capacity concerns the scientific and educational facilities that assure practitioners to access both quality information and skilled individuals. At this level the general quality of education and the presence of policy-related training seems to have a strong impact on governments' capacity (Hsu as cited by Wu et al. 2015).

Likewise, the individual-operational level capacity takes the form of individual managers' ability to perform key policy functions, which requires both technical skills and leadership (Tiernan as cited by Wu et al. 2015).

Organizational-operational capacity on the other hand has less to do with skills and expertise, but rather concerns the internal organization of agencies and how they relate with the wider policy-environment such as legislative and executive institutions. (Peters, 2015)

Finally, at the systemic level, operational capacity is found majorly within coordination dynamics of governmental and non-governmental actors to address problems efficiently. In this context, the presence of shared vision, constituency building and policy research are thought to support the generation of capacity (Huges as cited by Wu et al. 2015). Political capacity at the individual level is understood as the political knowledge or 'acumen' of individuals, both in terms of political experience and the recognition of ideologies and politics preferences within a community. (Wu et al., 2017; Pal and Clark as cited by Wu et al. 2015)

At the organizational level, political capacity is needed to develop learning relationships among governance partners and the wider public. In doing so, governments are required to mainstream an issue so to attract the efforts of multiple actors that are willing to contribute to a solution (World Bank, 2008).

The systemic-level of political capacity is considered the most wide-ranging and encompassing of all capacity dimensions, with the potential to directly influence all other capacities as it represents the actual environment that shapes all policy-related activities. This capacity-level is in turn influenced by the presence of trust in the environment for policy action(Wu et al., 2015).

Drawing from the framework described, Mukherjee et al. (2021) elaborated on how effective policy design requires individuals in charge of policy formulation to have the technical know-how to conduct policy analysis and data management. Secondly, at the organizational level, the foundations of capacity are found in capabilities of information mobilization that enable relevant analysis, administrative capital for coordination between policy actors, and political backing and commitment to policy priorities. Finally, effective policy design is supported by the system level when institutions pursue knowledge generation, alongside coordination mechanisms to align different levels of government (Mukherjee & Howlett, 2016).

Through the integration of the policy approach within the public organizations approach, Salvador and Sancho (2021) managed to identify four local-government-institutional capacities considered essential to generate sound design, implementation and evaluation of policies and programs in the field of sustainable development at the local level: strategic capacity, analytical capability, organizational management, collaborative capacity. Strategic capacity is presented as a government's ability to establish clear priorities and goals to enable coherent policy-making among different sectors; analytical capability is associated with collection and management of quality data and evidence to fuel into the decision-making process and guarantee 'technically sound' actions, in terms of contribution to policy goals (Howlett & Saguin, 2018). A concept often linked with analytical capacity is that of data governance, defined as a governance model that sees data as a key organizational asset and that directs their proper use through guidelines and standards, and by establishing clear responsibilities in the decision making process (Salvador & Sancho, 2021). Organizational management concerns the definition of organizational structures and job positions, and finally collaborative capacity is intended as the ability to reach a network of external actors (i.e. citizens and Ngos) to involve in the promotion of policies. This involves sharing responsibilities and co-generation of objectives that are attainable through a participative decision-making process.

## **2.2 Policy integration**

Similarly to the idea of capacity, the concept of integrated policy-making seems to be something that governments generally aspire for, though how to achieve it is still debated (Tosun & Lang, 2017; Trein et al., 2021), as whether its achievement should be seen as a means or a goal is not obvious either. The importance of policy integration research grew along with the concern of the need for cross-sectoral solutions to face problems that go beyond singular policy sectors or administrative ‘silos’. Such an approach requires overcoming the challenges of bringing together actors from different domains with little experience in both cross-sectoral solutions and involvement in policy making processes (Howlett & Rayner, 2007). Howlett and Saguin (2018), in one of the most accredited issues on the topic define policy integration as ‘the process of reconciling incoherent policy goals and inconsistent policy instruments and pointing them towards more congruent policies’ (Howlett & Saguin, 2018). Candel & Biesbroek (2016) illustrate more efficiently the complexity behind the issue, that involves institutional changes and a systemic reform of governance systems to adapt to multi-dimensional policy making. Their contribution also identifies four dimensions of integration, namely policy frame, subsystem involvement, policy goals and policy instruments. Although often reduced to mere forms of horizontal and vertical integration (Howlett & Saguin, 2018) scholars perceive integrative strategies in policy making as tools to overcome barriers faced in addressing boundary-spanning problems with domain-specific expertise (May, Hochim and Pump 2010; as cited by Howlett and Saguin 2018). This is especially the case within SDGs, whose nature intrinsically requires the involvement of multiple actors through both vertical and horizontal integration (Giessen, 2011a, 2011b; Howlett & Saguin, 2018), as well as the support from the international community to ensure quality cross-cutting policy designs to take on multiple goals simultaneously (Howlett & Saguin, 2018).

Policy integration literature homogeneously recognizes the centrality of cross-sectoral policy making which can take the shape of horizontal integration, transcending responsibilities of specific departments, or vertical integration, coordinating different policies within the same unit (Meijers & Stead, 2004). In policy design studies, requirements for instruments and goals to be integrated have been assessed more systematically. The result is that policy integration is seen as the process of enlarging (or replacing) policy mixes to reach a better alignment of goals and means that would have been addressed separately in a non-integrated policy scenario (Howlett et al., 2015) Coherent policymaking therefore has also

been associated with integration studies, and is understood to enable mutually reinforcing processes among different policies (Howlett & Saguin, 2018). Coherence on the other hand is undermined by fragmentation in policy components, which inevitably translates in a lack of common strategy among different policy actors (May et al., 2005).

What Howlett and Saguin (2018) suggested is the different shape that policy integration can take, and the different modalities in which it can be achieved, underlining how far it can get from a mere matter of horizontal and vertical integration. In this regard for example, recognizing how policy contexts differ from one another, they theorize how diversity in policy environments should translate into diversity in policy integration processes. More specifically, they identify four pathways to policy integration, namely institutionalization, coordination, mainstreaming and harmonization. Each of these can be understood, and is recommended by the author, through the presence of consistency in policy instruments and policy goals, as depicted by table below. Policy instruments are thought to be consistent when they can be deployed together without costly trade-offs, while goals are consistent when they can be achieved simultaneously under the same effort (Kern & Howlett, 2009).

Administrations undertaking the harmonization model of policy integration have a few strategies at their disposal to instill greater consistency in the SDG policy portfolio, and they mostly revolve around standard setting for all actors (Scharpf, 1994), or policy emulation (Heinmiller, 2003). This requires a coercive and obligatory approach as it's still in the domain of traditional policy making.

Mainstreaming involves the up-scaling of the importance of a specific issue that would otherwise be recognised as marginal. Mainstreaming is mostly required when some goals are perceived to be in conflict with others (Howlett & Saguin, 2018).

Coordination is recognized as the most appropriate strategy for policymakers that do not share a homogeneous strategy for a given issue. (Howlett & Saguin, 2018) Coordination processes should bring actors together to promote bargaining and deliberating on common priorities and instruments, to reduce the risk of conflictual measures (Thomson et al., 2003).

Institutionalization entails the recognition of permanent roles within institutions to deal with cross-cutting issues. It is the most direct pathway to overcome siloed and independent decision-making, as clear roles of authority are identified (Howlett & Saguin, 2018). Institutionalization happens when goals and instruments are consistent and enable institutional changes.

### 2.3 How do capacity and policy integration relate?

Merging findings of policy capacity and policy integration, Howlett & Saguin (2018) designed a framework to analyze the different types of capacity required to develop successful integration strategies.

Consistency of instruments	Consistency of goals	
	<i>Consistent</i>	<i>Inconsistent</i>
<i>Consistent</i>	<b>Policy institutionalization</b> <i>(Low Political Capacity, Low Operational Capacity, Low Analytical Capacity)</i>	<b>Policy mainstreaming</b> <i>(High Political Capacity, Moderate Operational Capacity, Low Analytical Capacity)</i>
<i>Inconsistent</i>	<b>Policy coordination</b> <i>(Low Political Capacity, Moderate Operational Capacity, High Analytical Capacity)</i>	<b>Policy harmonization</b> <i>(High Political Capacity, High Operational Capacity, High Analytical Capacity)</i>

*Table 1: Capacities required for policy integration strategies*

*Source: Howlett & Saguin, 2018, p. 13*

Successful harmonization will deploy the highest amount of all three types of capacity, given the high inconsistency found both in instruments and goals. Challenges faced by mainstreaming in addressing goals inconsistency on the other hand are mostly found in agenda setting, meaning the successful setting of priorities and goals and assuring that governance commits to them. This explains the need for high political capacity over operational and analytical. Coordination processes involve a limited number of actors, which translates in lower political capacity required. On the contrary, analytical capacity is needed to ensure the deployment of consistent sets of instruments. Finally institutionalization doesn't require high levels of capacities as institutions are considered to be 'self-reinforcing' (Howlett & Saguin, 2018).

The ability to establish integrated policy strategies has been referred to with different terms in the literature, such as state capacity, public sector capacity, policy capacity and governance capacity (Lodge & Wegrich, 2014), which have in part been explained before.

Although literature studying the relationship between institutional changes and integrated policy design is still scarce, some institutional arrangements have been proved to support

policy integration in different governance-oriented studies that focus on policy implementation (Domorenok et al., 2021a). Policy-oriented scholars, who mainly consider the formulation stage of policies, on the other hand showed that policy integration can be encouraged by specific instruments and strategies (Rayner & Howlett, 2009). Research of policy capacity has therefore addressed the topic of policy integration by underlining the role governments play in deciding which strategy to follow in terms of goal setting and establishment of instruments, but they haven't specified which features one administration should possess to ensure a correct policy integration (Domorenok et al., 2021b). Such gap has partially been filled by governance capacity studies that recognized cross-sectoral coordination mechanisms as the essential element to enable integrated policy-making (Catalano et al., 2015; Christensen et al., 2019; Peters, 2018). In both cases, whether one focuses on institutional arrangements or instruments and policies, scholars consider these features to be integral to the concept of capacity. Moreover, institutional, governance, and administrative capacity are often used as synonyms in numerous studies, referring to governments' ability to deliver successful policies. In this regard, Domorenok et al. (2021a) recognized a lack of considerations for variables as norms, rules, routines and values, resulting in incomplete and fragmented findings. The importance of informal aspects for integrated policy-making has recently emerged, highlighting how cross-sectoral solutions require abandoning traditional policy making (Trein et al., 2019).

#### **2.4 The Covenant of Mayors and its impact on local climate policies**

Given the scope of this research and the nature of the case study, an overview of the logic behind the policies that will be analyzed is presented in this chapter. Just like most Italian municipalities, the climate effort of the city of Padova has been actualized through the instruments and framework provided by the European programme Covenant of Mayors (CoM). This reflects in the objectives and means of the policies deployed, but also in the type of policy documents that have been prepared; more specifically the Sustainable Energy Action Plan (SEAP) first, and the Sustainable Energy and Climate Action Plan (SECAP) more recently, have been the documents through which the municipality committed to the programme and substantiated its climate mission.

As the case study will make explicit, most European cities, and in particular most Italian cities relied on one specific EU programme to actualize their climate ambitions: the Covenant of

Mayors. A vast literature reports in fact the challenges that most urban centers face when designing their own local climate policies, challenges that are often not only of financial nature, but concern the lack of adequate know-how and technical assistance too. Put differently, urban centers, especially small and medium sized, lack sufficient inner capacity to both design and implement climate policies. To overcome this, many have turned to European programmes that provide support both in terms of funding opportunities and capacity-building schemes. Contrarily to what happened at national level, EU- being one of the most urbanized regions in the world - has recognised cities as major policy actors for the climate mission (Cremaschi 2002 as cited by Haupt, 2018), and has supplied them with generous funding and tailored programmes to enhance their climate performance. The effort deployed by the EC (European Commission) seemed to be deeper than that implemented at the national levels of member states, also in regards to the overall change of focus towards the urban dimension (Haupt, 2018). Nonetheless, the implementation of mentioned action plans seems to still be a great challenge for municipalities, that oftentimes report a lack of knowledge, economic resources (Ortego et al. 2015 as cited by Haupt, 2018) and institutional capacity.

In the context of the so-called 20/20/20 targets the EC first launched the Covenant of Mayors in 2008, with the goal of operationalizing the urban level contribution for the achievement of European objectives of climate change mitigation. Since 2015 the initiative has merged with Mayor Adapt, bringing together priorities of both mitigation, adaptation and energy poverty (European Commission, website).

By joining the Covenant of Mayors as signatories, municipalities commit not only to general EU goals in terms of emission reduction, but also to specific and timely tasks in the form of deliverables and actions such as the preparation of a Baseline Emission Inventory (BEI), the submission of a SECAP (SEAP in the first edition of the CoM) and a bi-annual monitoring report. To actively join the initiative, municipalities are supposed to submit their action plan within 2 years after entering the programme (European Commission, website). Once submitted, the plan is reviewed by the Joint Research Center (JRC) before it's ultimately validated. Only after this step is completed the municipality will have access to specific funding opportunities available for CoM members (Lombardi et al., 2016). To guide the implementation of the action plans, signatories receive assistance from CoM supporters and coordinators (territorial authorities, ministries, energy agencies) that have duties of providing administrative, technical and financial assistance for the actualization of their



actions (Haupt, 2018). Additionally, the CoM network regularly proposes conferences, seminars and workshops where signatories can get new ideas and stimuli for their strategies as well as connecting with representatives of other participants. The logic behind the initiative, just like any other transnational municipal networks (TMNs), is that of cooperation and competition among governments and participants in the network (Bulkeley et al., 2003), in terms of international visibility, projects ideas and ‘good practices’ sharing, common monitoring and reporting and so on. A specific tool provided by the CoM to inform participants of strategies and measures that have been proven successful by some municipalities, and could be replicated by others, is the ‘Benchmark of Excellence’ (CoM 2017), a platform intended to allow participants to share relevant information on mentioned projects. Literature on governance networks suggests that, although being considered a soft and challenging to measure result, policy learning is one of the major assets of city networks (Pattberg & Widerberg, 2015). Stressing the centrality of this type of initiative in urban climate mission, scholars have found that for many municipalities designing an action plan served more as a fundament for an integrated sustainable urban planning approach rather than a mere energy planning document (European Commission JRC, 2015). As it is also the case for other TMNs that don’t entail a direct funding scheme for action plans, a criticality that has emerged among CoM participants is the dependence on external funding for the implementation of large-scale measures, especially in regards to small and medium sized cities. As mentioned, the scarcity of financial resources is often coupled with lack of sufficient know-how and capacity to implement complex projects (European Investment Bank 2012 as cited by Haupt 2018). To overcome these obstacles the CoM provides an extensive list of funding sources for which participants’ measures can be eligible. It’s been reported nonetheless that despite multiple funding opportunities available at the European level, most action plans are still covered by funds and incentives from their regional or national level (European Commission JRC, 2015) reinforcing the idea that many participants lack the sufficient capacity required to access international funding schemes.

Although generally deemed as being a driver for policy integration, the extent to which the CoM contributes to creating integrated policy-making at the local level is unclear. The CoM certainly provides support and framework for designing and implementing cross-sectoral local SECAPs, though extant research hasn’t investigated into depth on whether municipalities actually develop integrated strategies around the CoM initiative.

## **Chapter 3**

### **Research Design and Methodology**

#### **3.1 Introduction**

This section explains the methodology used for the presented work. In this chapter the the logic and rationale behind each step of the study are clarified, explaining the ways in which the research questions are answered. The methodology and the tools used to collect and analyze empirical data are also illustrated, based on extant scientific and grey literature, as well as policy documents of the European Union, national, regional and local governments. This is to ensure a context-specific approach to the analysis, equipping the research with a tailored methodology to best address the peculiar features of the case study and the overall scope of the research.

#### **3.2 Purpose of the study**

This study intends to contribute to policy integration studies by elaborating an original analytical framework aimed at unpacking and measuring policy integration in local climate policies. If the proposed framework proves valid for the case of Padua, the suggested methodology could be replicated for further research on the topic. Being aware of a lack of analytical efforts to operationalize policy integration, especially with regard to institutional capacity, this study aims to advance an operational framework and method to fill this gap in the research.

#### **3.3 Research questions:**

- How do policy integration and institutional capacity connect?
- How can we frame policy integration analytically and measure it empirically?
- To what extent do the Sustainable Energy Action Plan (SEAP) and Sustainable Energy and Climate Action Plan (SECAP) of Padua adopt an integrated approach?

### **3.4 Method**

This study adopts a mixed research approach using both qualitative and quantitative methods to analyze the case of Padua. The case study methodology has been chosen in order to prove an in-depth analysis of the institutional and policy dynamics at the local level. Utilizing a case study is appropriate in this case because it is the ideal method for exploring the context into detail, including the specific climate challenges it faces and the local policies that have been designed to tackle them. Studying the Municipality of Padua has been facilitated by both its proximity and the availability of policy documents and institutional information the research required to understand the local decision-making processes and dynamics. Building on an extensive review of extant studies, this research analyzes a wealth of policy documents to validate its analytical framework and answer the research questions. It does so relying on the so-called ‘formal empirical measures’ to reveal policy integration by studying policy documents and processes.

The research design is here summarized introducing objectives, processes, and the way in which the findings are presented. While reviewing existing literature allow us to understand the theoretical foundations of policy integration, the empirical analysis displays the evidence and practical implications that these produce on policies. The insights that emerged from the literature moreover serves as the basis to understand the links between institutional capacity and policy integration, which are central for this research. Far from providing a definition of these phenomena, the aim is that of shedding light on the wide range of factors and dynamics that are agreed to fall within their umbrella, so to allow one to understand the ways in which integrated policies can be achieved, and demonstrating how a certain institutional capacity is necessary to do so.

Drawing on the above findings, and especially on the theories that bridge institutional capacity and policy integration (Domorenok et al. 2021), an analytical framework is designed to study policy documents, with the objective of measuring the extent to which these are integrated. This instrument - presented in the “research design and analytical framework” chapter - allows one to assess the integration level of given policies through qualitative and quantitative criteria that study empirical measures relevant for policy integration. In this research, the framework is used to study the Sustainable Energy Action Plan (2011) and the Sustainable Energy and Climate Action Plan (2021) designed and implemented by the Municipality of Padua under the European Programme Covenant of Mayors. The objective of

this analysis is that of revealing the extent to which these policies are integrated, while at the same time testing the appropriateness of the analytical framework to conduct research of this nature.

### 3.5 Data collection and analysis:

Data was collected in two separate stages: i) acquisition of policy documents and ii) policy document analysis.

The acquired policy documents have been elaborated against the suggested analytical framework and channeled into a database that has been designed so that to collect the data and information along the analytical dimensions of the framework. The design of the research in fact requires the analysis to be conducted on documentary material, from which relevant data for the study are extracted. The acquisition process was rather simple for policies analyzed in this study. Both the SEAP and SECAP documents in fact are accessible online on the website of both the Municipality of Padua and of the Covenant of Mayors. As mentioned, the analysis of policy documents should not be intended solely as data analysis. The first objective of studying these materials is in fact that of identifying and extract relevant data out of the whole policy documentation. Data to be considered relevant - and that are selected and further analyzed in the document analysis phase - are those that fall within the sphere of the systemic, organizational and individual capacity as described by the framework used. In this context, through text analysis my goal is that of noticing when and in what ways policy documents express institutional capacity. It should therefore be clear how document analysis must also be considered an integral part of data collection.

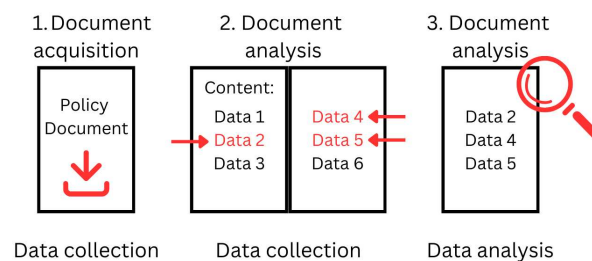


Figure 3: Data collection and analysis process

With the objective of supporting its appropriateness for this study, the method of policy document analysis is reviewed in the following section, making use of relevant publications on the matter that assess its adaptability to different research designs as well as its advantages and disadvantages.

### **3.6 Policy document analysis**

Organizational and institutional documents have been a pillar of qualitative research for decades, and a significant increase in document analysis as methodology for research has been noted in recent years, although not rarely scholars have failed in providing sufficient details of how given documents are analyzed (Bowen, 2009).

Document analysis is a systematic qualitative research method which shares the burden of data examination and interpretation with any other method of this nature in order to generate empirical knowledge (Corbin & Strauss, 2008). Document analysis can theoretically be used to analyze any type of document, including informal composition such as diaries, tv shows scripts, or even photo albums (Bowen, 2009). In the context of some research fields - such as ethnography (Cardno, 2019) - document analysis is often paired with other methods to obtain a 'multi-method triangulation' that increases the reliability of the study (Bowen, 2009). Most commonly in qualitative research these methods are interviews, participant or non-participant observation, and the study of physical artifacts (Yin, 1994). This, along with the selection of multiple documents for the analysis of the same phenomena, should ensure credibility and reduce potential biases (Patton, 1990). A combination of qualitative and quantitative methods is also possible, where document analysis can provide either or both qualitative and quantitative data. In the context of ex-post policy assessment for instance, policy documents explaining impacts in qualitative terms and policy reports with quantitative results are often combined. Using policy documents in documentary analysis research allows researchers to investigate the nature of complex problems that given policies aim to address (Cardno, 2019). Although often used in method-mixes, as described, document analysis has also been used widely as a stand-alone method too, as it is the case for specific case studies where document analysis is the only method available. In the case of qualitative research, it is particularly important to provide detailed information on the study design and procedures (Bowen, 2009).

The work of Bowen (2009) identifies five specific functions we can attribute to documentary material.

Number one, existing documents offer insights in regards to the context within which the research takes place. Such insights can be of the most diverse nature, from historical to geographical, social or economical. Their value lies in the contextualization of data coming from other methods used in the same work.

Second, similarly to how academia sees literature review at large, but in this case not limited to academic publications only, analysis of documents can suggest knowledge gaps and therefore questions to be asked in interviews or situations to look for in observations.

Third, documents can be a direct source of relevant data to generate research results. This is for instance the case for policy documents in policy evaluation studies. It is important to note here that not all documents provide the same level of credibility and consensus, and that for some studies only specific documents are eligible.

Fourth, and it's again the case for policy studies, documents are a means of monitoring change and development. This holds true in both measuring the effects of a given project, but also to study the design of the project itself; comparing older documents or document drafts with more recent versions can reveal trends in, for instance, as relevant for this work, policy or institutional capacity.

Fifth, and again similarly to literature reviews, document analysis can either support or contradict research results.

In line with what has been described, a list of advantages and limitations of the method are reported in the table below.

Advantages of document analysis method	Description
Efficiency and cost-effectiveness	Less time-consuming and costly than other methods. Data is selected rather than collected
Availability	Many relevant documents are in the public domain and/or on the web..

Lack of obtrusiveness and reactivity	Documents are unobtrusive and non reactive; their relevance and attendability is not affected by the research process, contrarily to observation methods.
Stability	Documents are stable; their content doesn't change through time, making them eligible for repeated studies and reviews.
Exactness	Documents include precise and exact information, of different nature.
Coverage	Documents coverage can be broad both in terms of time and space.
Neutrality	Documentary research is generally ethically-neutral, and doesn't require ethical approvals to conduct studies.
Limitations of document analysis method	Description
Insufficient detail	Documents are crafted for specific purposes and not for being studied by research. As a consequence, they might lack sufficient details or data to answer a research question exhaustively
Low retrievability	Documents may be hard to retrieve, because of authorization requirements or other
Biased selectivity	The collection of documents can be biased; their selection and availability in specific contexts is likely influenced by the owner's preferences.

*Table 2: Advantages of document analysis method*

*Source: Re-adaptation of Bowen (2009) and Cardno (2019)*

With this being said, researchers can never trust documents blindly; rather, information and data found in documents should first be evaluated and analyzed by the researcher, accordingly with the type of research he is pursuing. The biases a non-scientific document could be influenced by are manifold, and range from the reason why a given document was first generated, to the context in which they were thought of. Additionally, in the case of

documents that use previous studies as data source, the researcher should double check the sources where that data comes from; although in scientific papers this should be done by editors before the document is published.

As far as policy studies are concerned, policy documents and policy-related documents are what research is interested in. In dealing with these specifically, Henry et al (2013) advanced a framework used and re-elaborated by many for (policy) document analysis. The framework is structured on three dimensions: context, text and consequences.

Policy context refers to the ‘environmental’ features in which the policy has been generated, in terms of values, norms, needs, public requests and so on; it could be understood similarly to the concept of policy environment discussed before. In this context, the researcher should investigate the ‘policy background’ to better understand the policy analyzed (Cardno, 2019).

Policy text is the actual content of the policy document. It is the material subject to data and text analysis, carried out to understand both the logic and the objectives of the policy (Bell & Stevenson, 2006), and potentially transfer qualitative and quantitative data.

Finally policy consequences concerns the implementation of the policy, and how this relates and is steered by the policy document, keeping in mind that policy interpretation is also a filter between the document and implementation practices (Ryan 1994 as cited by Cardno, 2019). It is the focus of ex-post policy evaluation.

Drawing from the framework presented and other policy analysis findings (Alexander, 2013; Bell & Stevenson, 2006; Busher, 2006). Cardno (2019) suggests five dimensions to be addressed during policy document analysis, along with specific questions the researcher should aim to answer in order to understand each of the mentioned dimensions; questions of which answers should be found in the same policy document. His contribution is summarized in figure 4.



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- **Document production and location**

Why was the document produced? Where was the document produced and when? Where was it located? Was it easy or difficult to access?

- **Authorship and audience**

Who wrote the document? What is their position and do they have a bias? Who was it written for?

- **Policy context**

What is the purpose of the policy (for the organisation or the state)? Are drivers or forces behind the policy evident? What values underpin and guide the policy and are these linked to local or national strategic and quality issues? Are there multiple values that might create tensions?

- **Policy text**

How is the policy structured and how does the text provide evidence of its construction or development? What are the key elements of the policy and are they associated with local or national legal or regulatory requirements? Are there related procedures specified in the text that provide guidance for practice?

- **Policy consequences**

What is the intended overall impact of the policy? How is policy implementation intended to be monitored? How and when is the policy to be reviewed? How does the text draw attention to important aspects of practice related to the policy?

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*Figure 4: the five dimensions of policy document analysis*

*Source: Cardno 2019, p. 631*

In the analysis of document contents, text analysis is the tool most commonly used to gain quantitative data in terms of word counts or frequency (Cardno, 2019). In qualitative research on the other hand this approach does not hold as appropriate, and more holistic methods can be deployed, to consider both document context and text within the same analysis (Kohlbacher 2006), but also to provide the researcher with the room of text interpretation and the chance to draw conclusions by comparing the document analyzed with existing literature. In the view of Cardno (2019), content analysis is not only the most appropriate method to study policy documents, but also the most easily accessed and cost effective way to do so in case study research. In addition, document analysis at large is considered attractive for students and first-time researchers to build background evidence and contextualize their research when dealing with documents of specific genre. However, as the same author reminds us, to avoid confusion and weak results it is crucial to have a clear conceptual or structural framework for the analysis of the policy documents. Using a framework based on existing literature in addition not only helps narrowing the focus of the research, but also enriches the study with a knowledge-based tool that has been generated elsewhere.

Many of the mentioned aspects of policy documentary analysis are relevant for this study, in line with the research design presentation that follows. Starting from the collection of data, both qualitative and quantitative information will be extracted from selected policy documents, which will be elaborated and/or commented to generate the research results. In line with what discussed above, the combination of both qualitative and quantitative data will be essential to generate sound conclusions to assess, for instance, whether policy ambitions qualitatively expressed can be confirmed consistently through specific quantitative values of planned policy measures.

Some of the key documentary analysis functions identified by Bowen (2009) are central in the research design of this study, while others could be integrated in more complex methodological approaches for research of the same kind. Function number 3, which concerns using documents as a direct source of data to generate results, is the most representative in this work, as the criteria designed to conduct the analysis are based on qualitative and quantitative measures found almost exclusively within policy documentation, and serve as basis for the elaboration of the results. Similarly function number 4, which is linked to the monitoring of change and development, is used in this study to evaluate differences noticed among policies analyzed, which in the context of the research are thought to underline changes in the institutional capacity for policy integration through time. Finally, although outside the scope of this study, function number 1 suggests that some policy documents can provide insightful information on social, economical or environmental dimensions of the study area, which could be essential for more case studies with broader objectives and that make use of more complex methodologies.

Looking at Henry's (2013) framework, structured around policy context, policy text and policy consequences, some links can be drawn with the research design of this study. Similarly to Bowen's function number 1 discussed above, policy context is only partially investigated in this study as it does not fall within the scope of this research. However, some information relevant for this field can be found both in policy documents - in terms of values, norms and needs - and in other publications consulted for demographic and social data reported in chapter "presentation of the case study".

Policy text is at the core of this research, and as stated is the material subject to data and text analysis, which will produce quantitative and qualitative results to measure policy integration.

Finally, policy consequences are those associated with policy implementation and policy impacts, which are not considered in this work.

### **3.7 Research design and analytical framework**

The documentary analysis will be conducted following the analytical framework presented below. The instrument is designed drawing from the theoretical framework advanced by Domorenok et al. (2021) with the goal of “identifying and systemating the various institutional capacity components relevant for integrated policy designs” and “bridging these theoretical propositions with the practical implications provided by the broader research on capacity issues”. In other words, the framework used allows us to recognize multiple institutional features that are associated with integrated policy designs. In this context, the design of the analytical framework was supported by this theory, as it identifies specific ‘formal empirical measures’ that should be looked for in policies. While the authors don’t specify the methods through which this framework should be implemented, this research adapts it to fit the method of document analysis. In this work, the empirical measures researched are therefore considered to be detectable through an attentive analysis of policy documents.

The general logic of the method is that of appreciating how some institutional components evolve and translate into ‘formal empirical measures’ first, and policy change in terms of policy integration then. Domorenok et al. (2021) believe that the shift from sectoral to integrated policy-making can be explained through the understanding of institutional capacity dynamics. The backbone of integrated policies is in this context represented by the “set of formal and informal rules, norms, procedures, as well as values, beliefs, knowledge and skills, enabling the reconciliation of composite policy goals, harmonization of multiple policy instruments and coordination of relevant policy actors”. In other words, institutional capacity should be understood as the ability of governments to establish and maintain policy-making features that ensure integrated policies that meet the criteria of coherence, consistency and coordination.

As table 4 shows, the framework is structured on Wu et al. (2015) conceptualization of capacity, that allows studies to be structured through three different levels, namely systemic, organizational and individual. In this research, policy integration is studied at systemic and organizational level through policy document analysis. The nature of the policies studied allows a clear understanding of goals, instruments, procedures, and organization schemes of

both design and implementation stages, as the available documentation presents the measures in full detail, giving indications on instruments deployed, actors and sectors involved, goals and benefits expected, allocation of funds, timeline and so on. At the same time, dedicated chapters of policy documents illustrate the exact organization of administrative bodies, with organization charts, lists of relevant actors, and relative responsibilities. Furthermore, additional insights on norms, values and beliefs that underpin the rationale and the procedure of the policy programmes are found in different municipal publications. Finally, although not possible in the context of this study, it is here recognized that interviews with the administration would allow deeper insights on specificities that characterized the decision-making process, revealing potential difficulties, barriers, and so on, and are therefore suggested for further studies. Analysis at the individual level would also have only been possible in case of the above-mentioned interviews, given the nature of the empirical measures listed in the framework. For this reason, the individual level is not part of the analysis in this work.

*Table 4: Analytical Framework*  
*Re-adaptation of Domorenok et al. 2021, p. 8*

<b>Institutional characteristics relevant for policy integration</b>			
<b>Level</b>	<b>Description</b>	<b>Formal empirical measure</b>	<b>Analysis</b>
<b>I. Systemic</b>	Comprehensive system of norms and rules aimed at the attainment of coherent boundary spanning policy regimes	1. Policy programmes and plans establishing coherent and coordinated interventions across several policy sector	Criterion 1.1: Diversity across policy sectors
			Criterion 1.2: Integration level of thematic areas and interventions
			Criterion 1.3: Integration in mitigation and adaptation strategy
			Criterion 1.4: Presence of terms relevant for policy integration
		2. Dedicated instruments, methods and techniques enabling policy coordination and consistency throughout the whole policy process	Criterion 2.1: Presence and relevance of interventions or administrative bodies with explicit goals of coordination
<b>II. Organizational</b>	Vertical and horizontal coordination mechanisms ensuring synergies, complementarity and cooperation between and across political and administrative structures	3. Inter departmental boards, task forces, coordination committees	Criterion 3.1: Presence and relevance of inter-departmental boards
		4. Organizational and functional charts.	Criterion 4.1: Presence of clear organizational and functional charts
<b>III. Individual</b>	Knowledge, competencies and skills facilitating actual coordination and collaborative interactions between and across levels	5. Cross-sectoral competencies and skills	not conducted
		6. Specialized training	not conducted

### **3.7.1 The criteria included in the framework**

**Analysis 1** Policy programmes and plans establishing coherent and coordinated interventions across several policy sector.

#### **Criterion 1.1: Diversity across policy sectors**

This criterion is measured by counting the number of thematic areas, as well as single interventions, that target each sector. Both SEAP and SECAP present 6 thematic areas. Namely: 1 New clean energies; 2 Greener and more efficient city; 3 Smart services and networks; 4 Better moving city; 5 Low emission economy; 6 Adapting to climate change for SEAP; 1 New clean energies; 2 More efficient city; 3 Smart services and networks; 4 Better moving city; 5 Low emission economy; 6 More resilient city for SECAP. While SECAP identifies 11 target sectors for each intervention, SEAP does not specify which sectors each intervention targets. To allow a quantitative comparison between the two documents, all SEAP interventions have been analyzed to define which sectors are affected by each of them. In doing so, same 11 sectors listed in SECAP documents have been used, which are: Buildings, Transportation, Energy, Water, Waste, Land Use, Agriculture and Forestry, Environment and Biodiversity, Health, Emergencies, Tourism. In many cases similar interventions from the two documents could be paired to make assure the same logic was followed in identifying the most appropriate target sectors. Results will be presented as depicted in the next page.

By area:

Table 5: Criterion 1.1 results sheet by area

	Buildings	Transportation	Energy	Water	Waste	Land Use	Agriculture and forestation	Environment and biodiversity	Health	Emergencies	Tourism
Area 1											
Area 2											
Area 3											
Area 4											
Area 5											
Area 6											
<b>Sectorial area diversity (1-6)</b>	$0 \leq x \leq 6$	$0 \leq x \leq 6$	$0 \leq x \leq 6$	$0 \leq x \leq 6$	$0 \leq x \leq 6$	$0 \leq x \leq 6$	$0 \leq x \leq 6$	$0 \leq x \leq 6$	$0 \leq x \leq 6$	$0 \leq x \leq 6$	$0 \leq x \leq 6$

With a focus on the number of interventions that target each sector:

Table 6: Criterion 1.1 results sheet with a focus on the number of interventions

		Sectorial area diversity											
		Buildings	Transportation	Energy	Water	Waste	Land Use	Agriculture and forestation	Environment and biodiversity	Health	Emergencies	Tourism	
3	Area 1	Number of interventions											
4		Frequency	I3 / I15	J3 / J15	K3 / K15	L3 / L15	M3 / M15	N3 / N15	O3 / O15	P3 / P15	Q3 / Q15	R3 / R15	S3 / S15
5	Area 2	Number of interventions											
6		Frequency	I5 / I15	J5 / J15	K5 / K15	L5 / L15	M5 / M15	N5 / N15	O5 / O15	P5 / P15	Q5 / Q15	R5 / R15	S5 / S15
7	Area 3	Number of interventions											
8		Frequency	I7 / I15	J7 / J15	K7 / K15	L7 / L15	M7 / M15	N7 / N15	O7 / O15	P7 / P15	Q7 / Q15	R7 / R15	S7 / S15
9	Area 4	Number of interventions											
10		Frequency	I9 / I15	J9 / J15	K9 / K15	L9 / L15	M9 / M15	N9 / N15	O9 / O15	P9 / P15	Q9 / Q15	R9 / R15	S9 / S15
11	Area 5	Number of interventions											
12		Frequency	I11 / I15	J11 / J15	K11 / K15	L11 / L15	M11 / M15	N11 / N15	O11 / O15	P11 / P15	Q11 / Q15	R11 / R15	S11 / S15
13	Area 6	Number of interventions											
14		Frequency	I13 / I15	J13 / J15	K13 / K15	L13 / L15	M13 / M15	N13 / N15	O13 / O15	P13 / P15	Q13 / Q15	R13 / R15	S13 / S15
15	Total	Number of interventions	total number of buildings interventions	total number of transportation interventions	total number of energy interventions	total number of water interventions	total number of waste interventions	total number of land use interventions	total number of agriculture and forestry interventions	total number of environment and biodiversity interventions	total number of health interventions	total number of emergencies interventions	total number of tourism interventions
16		Frequency	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%

## CRITERION 1.2: Integration level of thematic areas and interventions

Following the same logic of criterion 1.1, this criterion is measured by counting how many sectors are targeted by thematic area, and by intervention. Results will be presented as follows:

By area:

Table 6: Criterion 1.2 results sheet by area

	Buildings	Transportation	Energy	Water	Waste	Land Use	Agriculture and forestry	Environment and biodiversity	Health	Emergencies	Tourism	Area integration level (1-11)
Area 1												$0 \leq x \leq 11$
Area 2												$0 \leq x \leq 11$
Area 3												$0 \leq x \leq 11$
Area 4												$0 \leq x \leq 11$
Area 5												$0 \leq x \leq 11$
Area 6												$0 \leq x \leq 11$

By intervention (SECAP Area 1 example):

Table 7: Criterion 1.2 results sheet by intervention

	A	B	C	D	E	F	G	H	I	J	K	L	M	NO	P	Q
1		Intervention n.	Buildings	Transportation	Energy	Water	Waste	Land Use	Agriculture and forestry	Environment and biodiversity	Health	Emergencies	Tourism		Total sectors targeted by intervention (1-11)	%
2	Area 1: New clean energies	1													$0 \leq x \leq 11$	P2 / 11
3		2													$0 \leq x \leq 11$	P3 / 11
4		3													$0 \leq x \leq 11$	P4 / 11
5		4													$0 \leq x \leq 11$	P5 / 11
6		5													$0 \leq x \leq 11$	P6 / 11
7		6													$0 \leq x \leq 11$	P7 / 11
8		7													$0 \leq x \leq 11$	P8 / 11
9		8													$0 \leq x \leq 11$	P9 / 11
10		9													$0 \leq x \leq 11$	P10 / 11
11		10													$0 \leq x \leq 11$	P11 / 11
12		11													$0 \leq x \leq 11$	P12 / 11
13		12													$0 \leq x \leq 11$	P13 / 11
14		13													$0 \leq x \leq 11$	P14 / 11
15		14													$0 \leq x \leq 11$	P15 / 11
16		15													$0 \leq x \leq 11$	P16 / 11
17	Total Interventions	15													$0 \leq x \leq 11$	P17 / 11



**CRITERION 1.3: Integration in mitigation and adaptation strategy**

This criterion is measured by counting how many areas - and how many single interventions - have both mitigation and adaptation objectives. Results will be presented as follows:

By area:

*Table 8: Criterion 1.3 results sheet by area*

	Mitigation	Adaptation	Mitigation and adaptation integration
Area 1			
Area 2			
Area 3			
Area 4			
Area 5			
Area 6			
<b>Sectorial area diversity (1-6)</b>	$0 \leq x \leq 6$	$0 \leq x \leq 6$	$0 \leq x \leq 6$

By intervention (SECAP area 1 example):

*Table 9: Criterion 1.3 results sheet by intervention*

	A	B	C	D	E	F
1		Intervention n.	Mitigation	Adaptation		Mitigation and adaptation integration
2	Area 1: New clean energies	1				
3		2				
4		3				
5		4				
6		5				
7		6				
8		7				
9		8				
10		9				
11		10				
12		11				
13		12				
14		13				
15		14				
16		15				
17		Total				n. of interventions with both mitigation and adaptation goals
18		Frequency	C17 / n. of area 1 interventions	D17 / n. of area 1 interventions		F17 / n. of area 1 interventions

#### CRITERION 1.4: Presence of terms relevant for policy integration

This criterion is measured by counting how many times SEAP and SECAP documents mention terms associated with policy integration, using AntCon search engine. The list of terms analyzed is reported in tables below, and results will be presented likewise.

Table 10: Criterion 1.4 results sheet

Term	Frequency		Term	Frequency	
	SEAP	SECAP		SEAP	SECAP
<b>Integration:</b>			<b>Multi-level governance:</b>		
integrazione			governance		
integrare			multi-livello		
integrato			bottom-up		
<b>Coordination:</b>			partecipazione		
coordinare			partecipare		
coordinamento			partecipato		
coordinato			coinvolgimento		
collaborazione			coinvolgere		
collaborare			coinvolto		
collaborato			<b>Boundary-spanning</b>		
organizzazione			multisetoriale		
organizzato			trasversale		
organizzare			intersetoriale		
verticale			multispecifico		
verticalmente			multidisciplinarietà		
orizzontale			multidisciplinare		
orizzontalmente			multifunzionalità		
sinergie			multifunzione		
<b>Coherence:</b>			multifunzionale		
coerenza			olistico		
coerente					
coerentemente					
<b>Consistency:</b>					
consistenza					
consistente					
congruenza					
congruo					
continuità					
concordanza					
concordare					
concordante					
conformità					
conforme					
mainstreaming					

\* nouns are searched in both singular and plural, masculine and feminine forms; verbs are searched in all tenses.

**Analysis 2** Dedicated instruments, methods and techniques enabling policy coordination and consistency throughout the whole policy process.

**CRITERION 2.1: Presence and relevance of interventions or administrative bodies with explicit goals of coordination**

This criteria is pursued by listing and presenting SEAP and SECAP interventions with explicit goals of coordination, as well as administrative bodies provided by the plans with coordination responsibilities. More specifically, through policy-text analysis I aim to identify mentioned interventions and bodies, and to explain how these relate to and facilitate policy integration.

**Analysis 3** Inter departmental boards, task forces, coordination committees

**CRITERION 3.1: Presence and relevance of inter-departmental boards**

This criterion is pursued by listing and presenting existing inter departmental boards. More specifically, existing inter departmental boards will be searched for through the analysis of publications found on the website of the Municipality of Padova ([www.padovanet.it](http://www.padovanet.it)) and the same policy documents. Once identified, their functions and responsibilities relevant for policy integration will be reported as explained by mentioned documents.

**Analysis 4** Organizational and functional charts

**CRITERION 4.1: Presence of clear organizational and functional charts**

This criterion is pursued by presenting organizational and functional charts relevant for policy integration provided by the Municipality of Padova either within policy documents or in other publications.

### **3.7.2 Appropriateness of the analytical framework**

The framework proposed is considered adequate for this study, and is believed to be replicable for future research of the same nature. This is so as it allows an insightful coverage of the multiple dimensions of policy integration, in line with the findings emerged from the literature review. The main strength of the instrument is the wideness of its scope. Coherently with the very concept of policy integration, the operational framework is designed to cover

numerous dimensions of policies from different perspectives, from the alignment of goals of different nature to the establishment of sound coordinating mechanisms. Addressing both qualitative and quantitative measures, the analysis allows the understanding of intervention-specific features while also giving a wider overview of policy rationale, motives and trends. Being intended for documentary analysis, the operational framework is furthermore believed to be highly replicable. Although some criteria were influenced by policy-specific characteristics (i.e. number of thematic areas or sectors), the design of the framework allows adaptations to meet different context-specific or policy-specific attributes.

### **3.8 Limitations**

The main limitations of the study are those frequently associated with the use of a case study. As mentioned in previous paragraphs data availability did emerge to be challenging for the initial aim of the research, which I intended to conduct on a larger selection of policies. The lack of sufficient primary documentation has however forced the research to be limited to fewer policies, and focused in particular on one policy document (SECAP). This implies a narrower scope that does not delve into past programmes and policies sufficiently enough to draw trends and appreciate policy changes through time. Interviews with administrators could have possibly contributed to mitigate this limit, with information of different nature that could have been backed by triangulations with the data and information found autonomously in policy reviews and other documents found online.

Another limit that this study shares with any other case study analysis is that of limited generalizability. This is somewhat mitigated by the nature of the main policy analyzed. The design of the SEAP and SECAP is in fact not arbitrary, but rather follows precise guidelines provided by the European Commission, who established the CoM programme under which the policies were ideated, as explained in previous chapters. Backed by publications such as “Guidebook ‘How to develop a Sustainable Energy and Climate Action Plan (SECAP)’” the idea is that all action plans submitted to the CoM are standardized and share similar features both in design structure and contents. This should therefore allow researchers to replicate the method proposed in this work to conduct similar analysis within the circle of CoM signatory municipalities, as one should be able to find and use the same information and type of data presented and analyzed in this study.

The last limitation that I recognize in regards to the research design described concerns the method of documentary analysis, which used as a stand-alone method might fail to identify

and include in the research some elements of institutional capacity that are hard to be found within documentary material. This is for instance the case for 'informal rules, values and beliefs'. While information on this issue is found in different publications, it's hard to assess its validity and reliability given the biases that the municipality could have been affected by in publishing such materials. For the scope of this research, it is however assumed that major institutional features relevant for policy integration are detectable within documentary analysis. Finally, the use of the framework presented as a guideline for how to conduct the analysis, and for what features to look for, should mitigate the limitation presented by the arbitrary nature of text analysis conducted by the researcher.

## Chapter 4

### Results

#### 4.1 Analysis 1: Policy programmes and plans establishing coherent and coordinated interventions across several policy sector

##### 4.1.1 Criterion 1.1: Diversity across policy sectors

The results related to criterion 1.1 for both the SEAP and SECAP by policy area are presented below

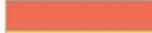



Table 11: Criterion 1.1 SEAP results by area

SEAP	Buildings	Transportation	Energy	Water	Waste	Land Use	Agriculture and forestation	Environment and biodiversity	Health	Emergencies	Tourism
Area 1: New clean energies			y		y						
Area 2: A greener more efficient city	y		y			y	y				
Area 3: Smart services and networks			y		y						
Area 4: A better moving city	y	y	y						y		
Area 5: A low emission economy		y	y	y	y				y		
Area 6: Adapting to a changing climate											
Sectorial area diversity (1-6)	2	2	5	1	3	1	1	0	2	0	0

Table 12: Criterion 1.1 SECAP results by area

SECAP	Buildings	Transportation	Energy	Water	Waste	Land Use	Agriculture and forestation	Environment and biodiversity	Health	Emergencies	Tourism
Area 1: New clean energies			y				y				
Area 2: A more efficient city	y	y	y		y				y		
Area 3: Smart services and networks		y	y	y	y	y			y		
Area 4: A better moving city		y	y				y		y		
Area 5: A low emission economy	y	y	y	y	y	y	y	y			
Area 6: A more resilient city	y	y	y	y	y	y	y	y	y	y	y
Sectorial area diversity (1-6)	3	5	6	3	4	3	4	2	4	1	1

Legend.

Color	Sectorial area diversity
	0-1 No diversity
	2 Low diversity
	3-4 Sufficient diversity
	5-6 High diversity

In the context of criterion 1.1, tables below go deeper in explaining how sectors are targeted by the 6 areas, showing the number of interventions that target each sector.

Table 13: Criterion 1.1 SEAP results with a focus on the number of interventions

SEAP		Buildings	Transportation	Energy	Water	Waste	Land Use	Agriculture and forestry	Environment and biodiversity	Health	Emergencies	Tourism
Area 1: New clean energies	Number of interventions	0	0	14	0	1	0	0	0	0	0	0
	Frequency	0,00%	0,00%	51,85%	0,00%	33,33%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%
Area 2: A greener more efficient city	Number of interventions	5	0	6	0	0	1	1	0	0	0	0
	Frequency	83,33%	0,00%	22,22%	0,00%	0,00%	100,00%	100,00%	0,00%	0,00%	0,00%	0,00%
Area 3: Smart services and networks	Number of interventions	0	0	4	0	1	0	0	0	0	0	0
	Frequency	0,00%	0,00%	14,81%	0,00%	33,33%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%
Area 4: A better moving city	Number of interventions	1	8	1	0	0	0	0	0	3	0	0
	Frequency	16,67%	80,00%	3,70%	0,00%	0,00%	0,00%	0,00%	0,00%	75,00%	0,00%	0,00%
Area 5: A low emission economy	Number of interventions	0	2	2	1	1	0	0	0	1	0	0
	Frequency	0,00%	20,00%	7,41%	100,00%	33,33%	0,00%	0,00%	0,00%	25,00%	0,00%	0,00%
Area 6: Adapting to a changing climate	Number of interventions	0	0	0	0	0	0	0	0	0	0	0
	Frequency	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%
Total	Number of interventions	6	10	27	1	3	1	1	0	4	0	0
	Frequency	100%	100%	100%	100%	100%	100%	100%	null	100%	null	null

Table 14: Criterion 1.1 SECAP results with a focus on the number of interventions

SECAP		Buildings	Transportation	Energy	Water	Waste	Land Use	Agriculture and forestry	Environment and biodiversity	Health	Emergencies	Tourism
Area 1: New clean energies	Number of interventions	0	0	15	0	0	0	1	0	0	0	0
	Frequency	0,00%	0,00%	24,59%	0,00%	0,00%	0,00%	5,00%	0,00%	0,00%	0,00%	0,00%
Area 2: A more efficient city	Number of interventions	11	1	19	0	1	0	0	0	2	0	0
	Frequency	52,38%	2,94%	31,15%	0,00%	5,88%	0,00%	0,00%	0,00%	6,25%	0,00%	0,00%
Area 3: Smart services and networks	Number of interventions	0	2	6	1	5	0	0	0	1	0	0
	Frequency	0,00%	5,88%	9,84%	4,55%	29,41%	0,00%	0,00%	0,00%	3,13%	0,00%	0,00%
Area 4: A better moving city	Number of interventions	0	17	11	0	0	0	1	0	17	0	0
	Frequency	0,00%	50,00%	18,03%	0,00%	0,00%	0,00%	5,00%	0,00%	53,13%	0,00%	0,00%
Area 5: Low emission economy	Number of interventions	2	8	4	1	8	1	1	3	0	0	0
	Frequency	9,52%	23,53%	6,56%	4,55%	47,06%	6,67%	5,00%	21,43%	0,00%	0,00%	0,00%
Area 6: A more resilient city	Number of interventions	8	6	6	20	3	14	17	11	12	10	2
	Frequency	38,10%	17,65%	9,84%	90,91%	17,65%	93,33%	85,00%	78,57%	37,50%	100,00%	100,00%
Total	Number of interventions	21	34	61	22	17	15	20	14	32	10	2
	Frequency	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

\*Tables should be read *vertically*, as the focus is on the sectors rather than thematic areas,

#### 4.1.2 CRITERION 1.2: Integration level of thematic areas and interventions

The results related to criterion 1.2 for both the SEAP and SECAP by policy area are presented below.

Table 15: Criterion 1.2 SEAP results by area

SEAP	Buildings	Transportation	Energy	Water	Waste	Land Use	Agriculture and forestation	Environment and biodiversity	Health	Emergencies	Tourism	Area integration level (1-11)
Area 1: New clean energies			y		y							2
Area 2: A greener more efficient city	y		y			y	y					4
Area 3: Smart services and networks			y		y							2
Area 4: A better moving city	y	y	y						y			4
Area 5: A low emission economy		y	y	y	y				y			5
Area 6: Adapting to a changing climate												0

Table 16: Criterion 1.2 SECAP results by area

SECAP	Buildings	Transportation	Energy	Water	Waste	Land Use	Agriculture and forestation	Environment and biodiversity	Health	Emergencies	Tourism	Area integration level (1-11)
Area 1: New clean energies			y				y					2
Area 2: A more efficient city	y	y	y		y				y			5
Area 3: Smart services and networks		y	y	y	y	y			y			6
Area 4: A better moving city		y	y				y		y			4
Area 5: A low emission economy	y	y	y	y	y	y	y	y				8
Area 6: A more resilient city	y	y	y	y	y	y	y	y	y	y	y	11

Legend		
Color	Area integration level	
	0-1	No integration
	2-3	Low integration
	4-6	Sufficient integration
	7-11	High integration



Table 17 below reports the results of criterion 1.2 for the SEAP at intervention-level.

Table 17: Criterion 1.2 SEAP results by intervention

SEAP	Intervention n.	Buildings	Transportation	Energy	Water	Waste	Land Use	Agriculture and Forestry	Environment and Biodiversity	Health	Emergencies	Tourism	Intervention integration level (1-11)	% Integration level (1%)
Area 1: New clean energies	1			Y									1	3.03%
	2			Y									1	3.03%
	3			Y									1	3.03%
	4			Y									1	3.03%
	5			Y									1	3.03%
	6			Y									1	3.03%
	7			Y									1	3.03%
	8			Y			Y						2	15.15%
	9			Y									1	3.03%
	10			Y									1	3.03%
	11			Y									1	3.03%
	12			Y									1	3.03%
	13			Y									1	3.03%
	14			Y									1	3.03%
Total interventions	14	0	0	14	0	1	0	0	0	0	0	0	2	15.15%
Area 2: A greener more efficient city	15	Y		Y									2	15.15%
	16	Y		Y									2	15.15%
	17	Y		Y									2	15.15%
	18			Y									1	3.03%
	19	Y		Y									2	15.15%
	20			Y			Y	Y					2	15.15%
	21	Y		Y									2	15.15%
Total interventions	7	5	0	6	0	0	1	1	0	0	0	0	4	30.30%
Area 3: Smart services and networks	22			Y									1	3.03%
	23			Y									1	3.03%
	24					Y							2	15.15%
	25			Y									1	3.03%
	26			Y									1	3.03%
Total interventions	5	0	0	4	0	1	0	0	0	0	0	0	2	15.15%
Area 4: A better moving city	27		Y							Y			2	15.15%
	28		Y							Y			2	15.15%
	29		Y										1	3.03%
	30		Y							Y			2	15.15%
	31			Y									1	3.03%
	32	Y											1	3.03%
	33			Y									1	3.03%
	34			Y									1	3.03%
	35			Y									1	3.03%
	36			Y									1	3.03%
Total interventions	10	1	8	1	0	0	0	0	0	3	0	0	4	30.30%
Area 5: A low emission economy	37		Y							Y			2	15.15%
	38		Y	Y	Y	Y							4	30.30%
	39			Y									1	3.03%
Total interventions	3	0	2	2	1	1	0	0	0	1	0	0	5	40.45%
Area 6: Adapting to a changing climate		null	null	null	null	null	null	null	null	null	null	null	null	
Total interventions	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%
SEAP Total interventions	39	6	10	27	1	3	1	1	0	4	0	0	8	72.73%

Legend	
Color	Integration level
	0-1 No integration
	2-3 Low integration
	4-6 Sufficient integration
	7-11 High integration

The following 3 pages report the results of criterion 1.2 for the SECAP at intervention-level.

Area 1, 2, 3:

Table 18: Criterion 1.2 SECAP results by intervention (Areas 1, 2, 3)

SECAP	Intervention n.	Buildings	Transportation	Energy	Water	Waste	Land Use	Agriculture and forestry	Environment and biodiversity	Health	Emergencies	Tourism	Intervention integration level (1-11)	%
Area 1: New clean energies	1			y									1	9,09%
	2			y									1	9,09%
	3			y									1	9,09%
	4			y									1	9,09%
	5			y									1	9,09%
	6			y									1	9,09%
	7			y									1	9,09%
	8			y									1	9,09%
	9			y									1	9,09%
	10			y					y				2	18,18%
	11			y									1	9,09%
	12			y									1	9,09%
	13			y									1	9,09%
	14			y									1	9,09%
	15			y									1	9,09%
<b>Total interventions</b>	15	0	0	15	0	0	0	1	0	0	0	0	2	18,18%
Area 2: A more efficient city	1	y		y									2	18,18%
	2	y		y									2	18,18%
	3	y		y									2	18,18%
	4	y		y									2	18,18%
	5	y		y									2	18,18%
	6			y									1	9,09%
	7	y		y									2	18,18%
	8			y									1	9,09%
	9	y		y									2	18,18%
	10	y		y									2	18,18%
	11			y									1	9,09%
	12	y		y									2	18,18%
	13	y		y									2	18,18%
	14			y			y						2	18,18%
	15			y									1	9,09%
	16			y									1	9,09%
	17			y									1	9,09%
	18	y		y							y		2	18,18%
	19		y	y							y		3	27,27%
<b>Total interventions</b>	19	11	1	19	0	1	0	0	0	2	0	0	5	45,45%
Area 3: Smart services and networks	1			y									1	9,09%
	2		y	y									2	18,18%
	3			y									1	9,09%
	4			y			y						2	18,18%
	5						y						1	9,09%
	6			y									2	18,18%
	7						y			y			1	9,09%
	8			y			y						2	18,18%
	9		y				y						2	18,18%
	10					y							1	9,09%
<b>Total interventions</b>	10	0	2	6	1	5	0	0	0	1	0	0	5	45,45%

Color	Integration level	
	0-1	No integration
	2-3	Low integration
	4-6	Sufficient integration
	7-11	High integration

Area 4, 5:

Table 19: Criterion 1.2 SECAP results by intervention (Areas 4 and 5)

SECAP	Intervention n.	Buildings	Transportation	Energy	Water	Waste	Land Use	Agriculture and forestry	Environment and biodiversity	Health	Emergencies	Tourism	Intervention integration level (1-11)	%
Area 4: A better moving city	1		y	y						y			3	27.27%
	2		y							y			2	18.18%
	3		y										1	9.09%
	4		y	y						y			3	27.27%
	5		y							y			2	18.18%
	6		y							y			2	18.18%
	7		y							y			2	18.18%
	8		y	y						y			3	27.27%
	9		y							y			2	18.18%
	10		y										1	9.09%
	11			y									1	9.09%
	12		y	y						y			3	27.27%
	13		y	y						y			3	27.27%
	14		y							y			2	18.18%
	15		y							y			2	18.18%
	16		y							y			2	18.18%
	17		y										1	9.09%
	18				y								1	9.09%
	19				y					y			2	18.18%
	20				y					y			2	18.18%
	21				y					y			2	18.18%
	22		y							y			2	18.18%
	23				y				y				2	18.18%
<b>Total interventions</b>		0	17	11	0	0	0	1	0	17	0	0	4	36.36%
Area 5: Low emission economy	1		y										1	9.09%
	2		y										1	9.09%
	3		y										1	9.09%
	4		y										1	9.09%
	5	y	y	y	y	y			y				6	54.55%
	6			y			y						2	18.18%
	7								y				1	9.09%
	8								y				1	9.09%
	9						y						1	9.09%
	10						y						1	9.09%
	11			y	y		y						3	27.27%
	12			y			y						2	18.18%
	13				y								1	9.09%
	14	y	y					y					3	27.27%
	15						y		y				2	18.18%
	16						y						1	9.09%
<b>Total interventions</b>	16	2	8	4	1	8	1	1	3	0	0	0	8	72.73%

Legend	
Color	Integration level
	0-1 No integration
	2-3 Low integration
	4-6 Sufficient integration
	7-11 High integration

Area 6:

Table 20: Criterion 1.2 SECAP results by intervention (Areas 6)

SECAP	Intervention n.	Buildings	Transportation	Energy	Water	Waste	Land Use	Agriculture and forestry	Environment and biodiversity	Health	Emergencies	Tourism	Intervention integration level (1-11)	%
Area 6: A more resilient city	1	y		y	y					y			4	36,36%
	2				y		y	y	y	y			5	45,45%
	3	y					y	y					3	27,27%
	4						y				y		2	18,18%
	5	y	y				y	y	y	y	y		7	63,64%
	6									y	y		2	18,18%
	7										y		1	9,09%
	8	y			y							y	3	27,27%
	9					y			y				3	27,27%
	10					y			y	y			3	27,27%
	11							y	y	y	y		4	36,36%
	12								y	y	y		3	27,27%
	13							y	y	y	y		4	36,36%
	14							y	y				2	18,18%
	15								y		y		2	18,18%
	16			y		y			y				3	27,27%
	17	y				y		y					3	27,27%
	18					y		y					2	18,18%
	19					y		y	y			y	4	36,36%
	20					y		y		y			3	27,27%
	21				y	y							2	18,18%
	22			y		y							2	18,18%
	23					y							1	9,09%
	24					y			y				2	18,18%
	25					y						y	2	18,18%
	26					y							1	9,09%
	27					y							1	9,09%
	28					y							1	9,09%
	29										y		1	9,09%
	30								y		y		2	18,18%
	31	y	y	y	y	y	y	y	y	y		y	9	81,82%
	32	y	y	y	y	y	y	y	y	y	y	y	11	100,00%
	33	y	y	y	y	y	y	y	y	y	y	y	11	100,00%
<b>Total interventions</b>	33	8	6	6	20	3	14	17	11	12	10	2	11	100,00%
<b>SECAP Total interventions</b>	116	21	34	61	22	17	15	20	14	32	10	2	11	100,00%

Legend

Color	Integration level
	0-1 No integration
	2-3 Low integration
	4-6 Sufficient integration
	7-11 High integration

### CRITERION 1.3: Integration in mitigation and adaptation strategy

The results related to criterion 1.3 for both the SEAP and SECAP by policy area are presented below

Table 20: Criterion 1.3 SEAP results by area

SEAP	Mitigation	Adaptation	Mitigation and adaptation integration
Area 1 New clean energies	y		
Area 2 A greener more efficient city	y	y	y
Area 3 Smart services and networks	y		
Area 4 A better moving city	y		
Area 5 A low emission economy	y		
Area 6 Adapting to a changing climate			
<b>Total</b>	<b>5</b>	<b>1</b>	<b>1</b>

Table 21: Criterion 1.3 SECAP results by area

SECAP	Mitigation	Adaptation	Mitigation and adaptation integration
Area 1: New clean energies	y	y	y
Area 2: A more efficient city	y	y	y
Area 3: Smart services and networks	y		
Area 4: A better moving city	y	y	y
Area 5: A low emission economy	y	y	y
Area 6: A more resilient city	y	y	y
<b>Total</b>	<b>6</b>	<b>5</b>	<b>5</b>

Legend:

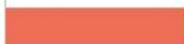



Color	Areas with integrated mitigation and adaptation strategy
	0
	1-2
	3-4
	5-6

Table 22 below shows criterion 1.3 results for the SEAP at intervention-level.

Table 22: Criterion 1.3 SEAP results by intervention

SEAP	Intervention n.	Mitigation	Adaptation	Integration mitigation and adaptation
Area 1: New clean energies	1	y		
	2	y		
	3	y		
	4	y		
	5	y		
	6	y		
	7	y		
	8	y		
	9	y		
	10	y		
	11	y		
	12	y		
	13	y		
	14	y		
<b>Total interventions</b>	14	14	0	0
<b>%</b>		100,00%	0,00%	0,00%
Area 2: A greener more efficient city	15	y	y	y
	16	y	y	Y
	17	y	y	Y
	18	y		
	19	y		
	20	y	y	Y
	21	y	y	Y
<b>Total interventions</b>	7	7	5	5
<b>%</b>		100,00%	71,43%	71,43%
Area 3: Smart services and networks	22	y		
	23	y		
	24	y		
	25	y		
	26	y		
	<b>Total interventions</b>	5	5	0
<b>%</b>		100,00%	0,00%	0,00%
Area 4: A better moving city	27	y		
	28	y		
	29	y		
	30	y		
	31	y		
	32	y		
	33	y		
	34	y		
	35	y		
	36	y		
<b>Total interventions</b>	10	10	0	0
<b>%</b>		100,00%	0,00%	0,00%
Area 5: A low emission economy	37	y		
	38	y		
	39	y		
<b>Total interventions</b>	3	3	0	0
<b>%</b>		100,00%	0,00%	0,00%
Area 6: Adapting to a changing climate				
<b>Total interventions</b>	0			
<b>%</b>		0,00%	0,00%	0,00%
<b>SEAP Total interventions</b>	39	39	5	5
<b>%</b>		100,00%	12,82%	12,82%

Legend:	
Color	Interventions with integrated mitigation and adaptation objectives
	No
	Yes

Following tables show criteria 1.3 results for the SECAP at intervention-level.

Area 1, 2, 3:

Table 23: Criterion 1.3 SECAP results by intervention (Areas 1, 2, 3)

SECAP	Intervention n.	Mitigation	Adaptation	Integration of mitigation and adaptation
<b>Area 1: New clean energies</b>	1	y	y	y
	2	y	y	y
	3	y	y	y
	4	y	y	y
	5	y	y	y
	6	y		
	7	y		
	8	y		
	9	y		
	10	y		
	11	y		
	12	y		
	13	y		
	14	y		
	15	y		
<b>Total interventions</b>	15	15	5	5
<b>%</b>		100%	33,33%	33,33%
<b>Area 2: A more efficient city</b>	1	y	y	y
	2	y	y	y
	3	y		
	4	y	y	y
	5	y	y	y
	6	y		
	7	y	y	y
	8	y		
	9	y	y	y
	10	y	y	y
	11	y		
	12	y	y	y
	13	y	y	y
	14	y	y	y
	15	y		
	16	y		
	17	y	y	y
	18	y	y	y
	19	y		
<b>Total interventions</b>	19	19	12	12
<b>%</b>		100%	63,16%	63,16%
<b>Area 3: Smart services and networks</b>	1	y		
	2	y		
	3	y		
	4	y		
	5	y		
	6	y		
	7	y		
	8	y		
	9	y		
	10	y		
<b>Total interventions</b>	10	10	0	0
<b>%</b>		100%	0%	0%

Color	Interventions with integrated mitigation and adaptation objectives
	No
	Yes

Area 4,5:

Table 24: Criterion 1.3 SECAP results by intervention (Area 4 and 5)

SECAP	Intervention n.	Mitigation	Adaptation	Integration of mitigation and adaptation
Area 4: A better moving city	1	y		
	2	y	y	y
	3	y		
	4	y		
	5	y		
	6	y		
	7	y		
	8	y		
	9	y		
	10	y		
	11	y		
	12	y		
	13	y		
	14	y		
	15	y		
	16	y		
	17	y		
	18	y		
	19	y		
	20	y		
	21	y		
	22	y		
	23	y		
<b>Total interventions</b>	23	23	1	1
<b>%</b>		100%	4,35%	4,35%
Area 5: Low emission economy	1	y		
	2	y		
	3	y		
	4	y		
	5	y		
	6	y		
	7	y		
	8	y		
	9	y		
	10	y		
	11	y		
	12	y		
	13	y		
	14	y	y	y
	15	y	y	y
	16	y		
<b>Total interventions</b>	16	16	2	2
<b>%</b>		100%	12,5%	12,5%

Legend:	
Color	Interventions with integrated mitigation and adaptation objectives
	No
	Yes



Area 6:

Table 25: Criterion 1.3 SECAP results by intervention (Area 6)

SECAP	Intervention n.	Mitigation	Adaptation	Integration of mitigation and adaptation	
Area 6: A more resilient city	1		y		
	2		y		
	3		y		
	4		y		
	5		y		
	6		y		
	7		y		
	8		y		
	9		y		
	10		y		
	11		y	y	y
	12		y	y	y
	13		y	y	y
	14		y	y	y
	15			y	
	16			y	
	17			y	
	18			y	
	19			y	
	20			y	
	21			y	
	22			y	
	23			y	
	24			y	
	25			y	
	26			y	
	27			y	
	28			y	
	29			y	
	30			y	
	31		y	y	
	32			y	
	33		y	y	
<b>Total interventions</b>	33	6	33	6	
<b>%</b>		18,18%	100%	18,18%	
<b>SECAP Total interventions</b>	116	89	53	26	
<b>%</b>		76,72%	45,69%	22,41%	

Legend:	
Color	Interventions with integrated mitigation and adaptation objectives
	No
	Yes

#### 4.1.4 CRITERION 1.4: Presence of terms relevant for policy integration

Table 26 below reports criterion 1.4 results for both the SEAP and SECAP.

Table 26: Criterion 1.4 results (SEAP and SECAP)

Term	Frequency	
	SEAP	SECAP
<b>Integration:</b>		
integrazione	2	27
integrare	5	19
integrato	6	43
<b>Coordination:</b>		
coordinare	3	5
coordinamento	7	19
coordinato	1	8
collaborazione	4	29
collaborare	0	5
collaborato	0	0
organizzazione	3	35
organizzato	2	19
organizzare	1	1
orizzontale	0	3
orizzontalmente	0	0
sinergie	2	6
verticale	0	4
verticalmente	0	0
<b>Coherence:</b>		
coerenza	1	5
coerente	4	8
coerentemente	3	1

<b>Consistency:</b>		
consistenza	0	1
consistente	1	3
congruenza	0	0
congruo	0	0
continuità	0	6
concordanza	0	0
concordare	0	0
concordante	0	0
conformità	0	1
conforme	0	4
mainstreaming	0	3
<b>Boundary-spanning</b>		
intersettoriale	0	19
multisetoriale	0	1
multispecifico	0	1
multidisciplinarietà	0	0
multidisciplinare	0	2
multifunzionalità	0	2
multifunzione	0	0
multifunzionale	0	9
olistico	0	1
trasversale	1	8
<b>Multi-level governance:</b>		
bottom-up	0	2
coinvolgimento	8	40
coinvolgere	44	20
coinvolto	43	43
governance	0	13

multi-livello	0	1
partecipazione	15	26
partecipare	4	9
partecipato	2	20

## **4.2 Analysis 2:** *Dedicated instruments, methods and techniques enabling policy coordination and consistency throughout the whole policy process*

### **4.2.1 CRITERION 2.1: Presence and relevance of interventions or administrative bodies with explicit goals of coordination**

Within the SEAP information about coordination goals and responsibilities are found both in the presentation of the policy and in intervention sheets. Following the document page order, the first entity with coordination responsibilities is found in the chapter “Organizational and financial aspects”, where all offices in charge of the preparation and implementation of the SEAP are presented. This coordinating-entity is the Urban planning Office, which is explained to have coordination duties for the implementation of all public works. The same office is also in charge of the management of “Piano degli interventi” (Interventions plan), which is the municipal urban planning master plan, designed for the city of Padova by architect Stefano Boeri and MATE società cooperativa (see <https://www.stefanoboeriarchitetti.net/project/padova-piano-degli-interventi/> and <https://www.padovanet.it/informazione/piano-degli-interventi-pi-mappa-interattiva-ed-elaborati>).

For what concerns the management of the SEAP, it is the municipal Environment office, and more specifically the Agenda 21 Unit to be in charge of the coordination of the whole work group under the supervision of General Directorate. It is also relevant to notice that the document, under the paragraph “Organization and structure of the plan”, specifies how the coordination of the work group is not limited to the implementation of the action plan, but rather covers the whole policy cycle involving its formulation and its monitoring phases too.

With regard to interventions listed in the action plan, the SEAP presents two that provide coordination mechanisms for inter-departmental action. Both interventions are part of

thematic area *A greener and more efficient city* (2), namely intervention n. 18 and intervention n. 19.

Intervention n. 18 is titled “creation of partnerships with public entities (University, Healthcare centers, Regional and Provincial bodies etc.) to develop energy efficiency interventions on public buildings”. For this action, the intervention sheet only mentions that the municipality has the responsibility of coordinating the inter-institutional working group, but does not elaborate on how this is actualized.

Similarly, intervention n. 19 titled “Creation of partnerships with trade associations representatives to support energy efficiency in buildings” states that the municipality coordinates work groups with trade associations to promote initiatives aimed at reducing each partner's emissions level. While specific information about how this is implemented are not reported, it is specified which municipal department is in charge of the activity (Environment and commerce), contrarily to intervention n.19.

Finally, although thematic area n. 6 “Adapting to climate changes” does not provide any specific intervention, a broad presentation of related objectives and actions is reported. Among these, the chapter states how the local administration is committed to create coordination mechanisms based on citizens and civil society participation, with the goal of identifying and limiting extreme weather events risks.

The SECAP provides a dedicated chapter *Ufficio di Piano* (the plan’s office) for the structure of the policy and the organization of offices and agencies behind it. For what concerns coordination dynamics, it is here stated that activities of design, implementation and monitoring of the SECAP and other obligations under the CoM programme (BEI, bi-annual monitoring report) are coordinated by the Environment and Territory department of the municipality. More specifically, the activities the office has to coordinate are those of:

- implementation of the action plan and of his biannual monitoring;
- organization and promotion of information and educational events;
- monitoring of municipal energy consumption levels;
- management of relationships with local entities;
- ideation of new policies and programmes that cover issues of energy and climate change;
- promotion of public-private partnerships and stakeholders engagement.

The implementation of the plan involves multiple public and private departments, each of which nominated a responsible person to act as representative for the coordination with the Environment and Territory office. An exhaustive list of these offices is provided in the same chapter, along with a list of external actors that do not necessarily play an active role in the implementation of the plan, but are considered relevant for its overall success. These include citizens, civil society associations, NGOs, private businesses, and so on. A coordination scheme with neighboring municipalities, the Province of Padova, and Veneto Region is also provided to ensure coherence among measures planned within the territory.

References to coordination, both as a mean and as a goal, are numerous within the SECAP interventions sheets.

Intervention n. 15 area 4 titled “Sustainable mobility for home to work and work to work commuting: promotion of Mobility Management” acts in the context of the sustainable mobility decree, which provides large enterprises within urban centers to establish a Mobility Manager, who is a person in charge of designing strategies to make commuting more efficient, while promoting collective and sustainable modes of transportation. The intervention presented establishes a central Mobility Manager at municipal level, in charge of coordinating the various mobility managers in the territory and relative commuting plans, linking the managerial and political dimensions.

Intervention n. 5 area 5 titled “Green Procurement Plan 2018-2022 of the Municipality of Padova” is aimed at reducing the environmental impacts of public procurement through the application of Minimum Environmental Criteria, triennial action plans for green procurement in all municipal departments, awareness campaigns and so on. For these objectives, the department of Environment and Territory is in charge of coordinating the implementation of the action plans through *Informambiente*. In this context, a memorandum of understanding among the municipality, the University of Padova, the Chamber of Commerce of Padova, and the coordination of Local Agenda 21 offices was established, ensuring a more integrated and coordinated implementation of the measure. The memorandum also provides the creation of a work group among the actors involved, with the goal of ideating and implementing relevant actions coherently.

With intervention n. 15 area 5 titled “Drafting of a food plan” the municipality intends to design an integrated plan for the sustainable development of the territory that revolves around food systems. The intervention sheet states that it is possible to address issues and

opportunities of economic, environmental and social nature through the *coordination* of policies and measures that, in the past, used to target food systems independently and incoherently.

Intervention n.5 area 6 titled “New interventions plan 2030” presents the design of the new ‘intervention plan’, which is the main urban planning instrument for the government of the territory. The presentation states that the plan has to be coordinated with SECAP measures, although no specific coordination instruments, techniques or bodies are mentioned.

Intervention n.9 area 6 titled “Realization of the Agriculture and Landscape plan of Padova” aims to the development of a *metropolitan multifunctional agriculture system*, through the support of innovative projects and instruments for the protection, development, and valorization of rural territory quality and economy. One of the goals listed for the intervention is that of “promoting the active involvement of social and economic components, coordinating the participation between different actors and different territorial levels”. For the drafting and implementation of this plan, the municipality has established a scientific committee and the aforementioned *Ufficio di Piano* with responsibilities of coordination among the Green, Parks and Urban Agriculture department and other offices, making use of multi-disciplinar and multi-sectorial competences.

Intervention n.31 area 6 titled “Establishment of the inter-sectorial work group for the implementation and monitoring of SECAP ” is one the most significant actions relevant for the coordination of the policy. Given the nature of the SECAP document, which requires multi-disciplinar competences and the interaction of numerous municipal offices, the presence of policy-wide coordination schemes is reported to be essential. In line with this view, the intervention established a municipal mechanism for the coordination of all administrative offices involved in the operationalization of the SECAP. The inter-sectorial work group manages the action plan under the coordination of the Environment and Territory department, through *Informambiente* and *Energy Manager* offices. Municipal departments part of the group are: Environment and Territory; Public Works; Green, Parks and Urban Agriculture; Private Constructions; Urban Planning; IT services; Local Police and Civil Protection. This body manages the correct implementation of each intervention planned, directly deploying those under its responsibility or supporting other implementation actors. Moreover, the work group is described to be particularly important for the adaptation strategy.

Finally, intervention n.32 area 6 “Establishment of Climate Resilience Management office” is intended to integrate municipal rules and processes with the new adaptation strategy

ideated through SECAP, under the supervision of the Environment and Territory department. As for coordination duties, the established office is responsible for coordinating activities of municipal work groups, monitoring the implementation status of each action and collecting relevant data for the assessment of the results achieved. Furthermore, the office has strategic importance for the relation with partner municipalities under the CoM programme, promoting successful initiatives implemented by others and facilitating the exchange of information among partners.

#### **4.3 Analysis 3** *Inter departmental boards, task forces, coordination committees*

##### **CRITERION 3.1: Presence and relevance of inter-departmental boards**

As no inter-departmental body operating in climate-relevant measure was found within the SEAP policy document, nor in any other documentation that covers the period of time in which the policy was designed and implemented, results of this analysis only concern the SECAP. For the latter, five inter-departmental bodies were found, as presented below.

An inter-sectorial work group for the implementation and monitoring of the SECAP has already been mentioned in chapter 4.2.1. As explained, the inter-sectorial work group is in charge of managing the action plan under the coordination of the Environment and Territory department, through *Informambiente* and *Energy Manager* offices. Municipal departments part of the group are: Environment and Territory; Public Works; Green, Parks and Urban Agriculture; Private Constructions; Urban Planning; IT services; Local Police and Civil Protection. The work group manages and monitors the correct implementation of interventions planned, and implements itself those under its direct responsibility and supports other implementation actors. Also referred to as “control room”, the work group is supported by the municipality to serve as a reference for all offices and actors dealing with SECAP-relevant actions. In doing so, the strategy followed to integrate the work group within all policy-relevant activities has been that of institutionalization.

Provided with intervention n.5 thematic area 5, a specific inter-sectorial work group has been established for the management of the Public Green Procurement Plan, approved by the municipality in 2022. Referred to as “GPP technical group” in municipality’s publications, it is made up of *Informambiente* personnel and representatives of various municipal departments. The sectors involved are: Environment and Territory; Contracts and Public Tenders; Culture and Tourism; Private Constructions; Cabinet of the Mayor; Public Works;



Assets and Shareholdings; Local Police and Civil Protection; Programming Control and Statistics; Financial Resources; Human Resources and Organization; Demographical services; IT services; Advocacy and Institutional services; Education; Social services; Sport services; SUAP and businesses; Taxes; Urban planning; Mobility; Green, Parks and Urban Agriculture. (Gli acquisti verdi del Comune di Padova, Padovanet 2023)

Similarly with what has been said for the SECAP work group, GPP technical group is in charge of the implementation of actions listed in the procurement plan, managing directly those that fall under its direct responsibility and supporting external actors with implementation duties. Furthermore, the technical group contributes to the monitoring of the Green Public Procurement Plan, and can update or integrate its activities with the goal of promoting a more sustainable performance within municipal operations. (Gli acquisti verdi del Comune di Padova, Padovanet 2023)

Intervention n. 15 area 5 “Drafting of a food plan” also entails the establishment of an inter-sectorial board. Guided by Environment and Territory department, the group is composed of personnel from the following departments: Environment and Territory, Green Parks and Urban Agriculture, Education, SUAP and businesses. Because of the cross-disciplinary competences of its components, the board is in charge of tasks of the most diverse nature, that range from identifying the most appropriate measures to include within the Food Plan, to conducting yearly monitoring analysis, but also organizing educational and informational events, managing relationships with provincial and regional institutions, promoting public-private partnerships and collaborations with local stakeholders and so on (Il Comune di Padova verso il Piano del cibo, Padovanet 2023). Most importantly, the work group has the responsibility, for the medium-long future, to propose multi-disciplinary projects that can provide significant contribution in achieving SDGs n.2 (Zero hunger), 6 (Clean water and sanitation), 8 (Decent work and economic growth), 11 (Sustainable cities and communities), 12 (Responsible consumption and production) and 13 (Climate action) (Il Comune di Padova verso il Piano del cibo, Padovanet 2023).

Although not solely related to climate action, the inter-departmental municipal office for the management of European and international funds is here reported as it is considered relevant for climate policies implemented within the municipality. This office has been established with the objective of identifying funding opportunities, and to support municipal applications to EU funding calls. ( Progetti europei e internazionali, Padovanet). Additionally, the office hosts the Urban Authority for the 2021-2027 programming period, during which it

is responsible for the Integrated Strategy for Sustainable Urban Development (SISUS) (Autorità Urbana dell'Area urbana di Padova (2021/2027), Padovanet 2024). The inter-departmental office for the management of funds also conducts research and analysis of calls for projects, assisting the municipality with the design of proposals relevant for the integrated and sustainable development of the territory. Finally, it provides administrative support during implementation and monitoring stages too. Specific tasks for which the office is responsible are (Ufficio progetti di finanziamento, Padovanet 2024):

- Monitoring of national and international funding opportunities, with a focus on EU programmes;
- Support to municipal departments for the identification and elaboration of project proposals, and for implementation and monitoring of funded projects;
- Support in engaging with european and international partners and coordination of the municipality adhesions to international networks.
- Supervising, coordination and technical assistance for the implementation of systemic programmes such as the European Regional Development Fund (ERDF) and National Recovery and Resilience Plan (NRRP).
- Elaboration of strategic documents and development of specific instruments for the monitoring and management of projects.

Selected for the NetZeroCities project launched under the Horizon 2020 Research and Innovation Programme, the Municipality of Padua is currently undergoing the design phase of so-called Climate City Contract (CCC), which is the governance innovation tool ideated to “collaboratively address the barriers to reaching climate neutrality by 2030”(Climate City Contracts, NetZeroCities). The NetZeroCities project aims to achieve climate neutrality in 100 European cities by 2030, which will also serve as pilot cities and references for all cities committed to the 2050 climate-neutrality goal. Within this context, the municipality partners with the University of Padova to develop the CCC document, which should finally be the result of an iterative co-creation process that involves stakeholders from various governance levels other than the wider ecosystem of private and civic actors. To assist this participative design process, it's been reported that the municipality has established an inter-sectorial work group, although information on its structure, components and responsibilities are still not public.\*

- This information was provided by Francesco Sarti, PhD student at the University of Lausanne, who had the chance of interviewing a representative of Agenda21 office in Padova during his research.

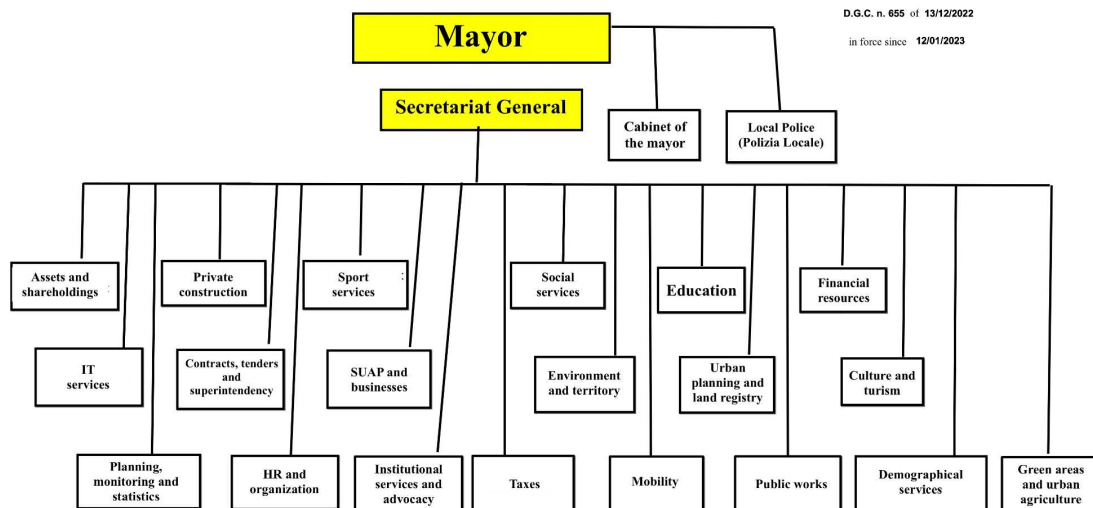
#### 4.4 Analysis 4 Organizational and functional charts.

##### 4.4.1 CRITERION 4.1: Presence of clear organizational and functional charts

Easily accessible on the municipality’s website, the organizational chart presented in figure 5 depicts the structure of all municipal sectors, each of which has a dedicated webpage with information on the department's structure, responsibilities and administrators in charge. Although most of the departments listed in the chart play an active role in the policies analyzed, additional information is here reported only for the Environment and Territory office, as this is the office in charge of supervising and coordinating climate-relevant measures, and more specifically the SEAP and SECAP.

Figure 5: Municipal organizational chart

Source: Padovanet, *L’ufficio del sindaco*, 2023



As presented on the municipality’s website, Environment and Territory department has responsibilities of prevention, monitoring and intervention in the field of pollution, energy saving, waste disposal, highly polluting and hazardous industries, environmental regeneration, animals protection, environmental information and education, protection of the soil, and relationships with organizations in charge of managing water, waste and energy. Although

both the SEAP and SECAP documents clearly state that Environment and Territory department has responsibilities of supervising and coordinating the action plans, no mention of this information is found within the own department’s webpage. Additionally, no organizational chart is found for this department, but a list of offices is presented to explain how it is structured through multiple offices. These offices are: Air and Air pollution, Heating Systems, Energy Manager, Noise and electromagnetic pollution, Protection of the territory from pollution, Management of municipal solid waste, Animals protection, Informambiente. Particular attention is given to Informambiente, which is presented as the “urban center for sustainable development and environmental education for the Municipality of Padua”. The office is also in charge of coordinating selected sustainability-relevant policies. In this context, it coordinates and supervises the inter-sectorial group for the implementation and monitoring of SECAP and for the Green Public Procurement Plan. Finally, since 2001 Informambiente has been an Agenda21 office. (Informambiente: Informazioni generali, Padovanet 2023).

In the SEAP policy document, one organizational chart is found in chapter “Organizational and Financial Features”. The chart (see Figure 6), provides an intuitive yet comprehensive presentation of the structure of municipal offices and main actors involved with the supervision coordination and implementation of the action plan.



Figure 6 : SEAP organizational chart

Source: Sustainable Energy Action Plan of Padua, 2011

Similarly for SECAP, an organizational chart is provided in chapter “*Ufficio di Piano* (the plan’s office). Sharing the same structure with SEAP organizational chart, figure 7 shows a moderately wider list of municipal departments and external actors involved in the implementation of the interventions.



Figure 7: SECAP organizational chart

Source: Sustainable Energy and Climate Action Plan of Padua, 2021

Additional organizational documents found only in the SECAP are the so-called governance maps. In this context the policy presents two tables elaborated under the Veneto Life Adapt project, that are designed to track local stakeholders for climate change adaptation measures. These maps are compiled by area of interest, namely water cycle and heat waves, and structured through six categories of actors: local experts, planning authorities, operational bodies, decision-makers, stakeholders, uncategorized local experts.

## Chapter 5

### Local policy integration for climate: empirical findings and discussion

#### 5.1 Policy coordination and coherence of local plans

##### 5.1.1 The diversity of interventions in each sector

In terms of coherence and coordination across policy sectors, the analysis based on criterion 1.1 “sectorial area diversity” shows that the Sustainable Energy Action Plan (2011) overall registered low values. Six sectors out of eleven were either not addressed throughout the entire action plan, or targeted within one thematic area only, demonstrating a complete lack in sectorial area diversity. Buildings, Transportation and Health sectors are considered lowly diversified, being targeted by only 2 thematic areas. Finally, only two sectors, namely Waste and Energy, resulted sufficiently diversified. While Waste has interventions from half the thematic areas, Energy sector scored the highest diversity result with five thematic areas involved: *New clean energies* (1); *A greener more efficient city* (2); *Smart services and networks* (3); *A better moving city* (4); *A low emission economy* (5). Moreover, and as could be expected, we notice that the majority of interventions (51.8%) that target the Energy sector belong to thematic area *New clean energies* (1). What constitutes a positive indicator however, is the way in which the rest of the interventions are spread throughout the areas, which shows how the sector was consistently targeted throughout the whole action plan, with 22.2% of interventions coming from area *A greener more efficient city* (2), 14.8% from *Smart services and networks* (3) 3.7% from *A better moving city* (4) and 7.4% from *A low emission economy* (5).

Although with a much smaller pool of interventions, Waste sector shows an even distribution through the three areas involved too: one intervention from area *New clean energies* (1), one intervention from area *Smart services and networks* (3), and one intervention from *A low emission economy* (5).

It is finally important to notice that no interventions are planned within thematic area *Adapting to a changing climate* (6), whose in-text presentation only mentions broad and long-term objectives of the municipality in the fields of climate change adaptation, resilience-building, and nature-based solutions.

Moving to the Sustainable Energy and Climate Action Plan (2021), we observe a much improved situation in terms of sectorial area diversity. In this document in fact only the

Emergencies and Tourism sectors reported a negative score of 1, while Environment and Biodiversity is the only sector to report a low diversity with just two areas involved, namely area *A low emission economy* (5) and *A more resilient city* (6). All other sectors report a sufficient or high diversity record. Similarly to the SEAP, Energy is the most diversified sector, having interventions coming from all six thematic areas. Following, Transportation sector has five areas involved; all others have either three or four.

When looking at the number of interventions concerned, we notice a generally even distribution of interventions among areas involved for each sector. With the exception of Water and Agriculture and Forestry sectors, which have namely 90.9% and 85% of interventions coming from one thematic area, all sectors with sufficient or high diversity show values of 53% (Health sector) or lower for their most frequent thematic area.

Overall, significant differences are highlighted between the two policies . This is confirmed both by the number of thematic areas with sufficient or high diversity records (two for SEAP, eight for the SECAP), and from the distribution of the interventions among the thematic areas. The latter is an important indicator that validates the results calculated at area-level. In fact, as mentioned before in the case of Water sector in SECAP policy, the positive result obtained at area-level loses much of its significance when the investigation is conducted at intervention-level, as this revealed how out of the three thematic areas concerned, 90.9% of interventions come from area *A more resilient city* (6), while *Smart services and networks* (3) and *A low emission economy* (5) are only involved with one intervention each.

Finally, the number of interventions per sector shows how much focus each received. What emerges in this context is that the SEAP is highly focused on the Energy sector, which is targeted with 27 interventions out of the 39 planned (69% of all interventions). While Transportation (25%), Buildings (15%), Health (10%) and Waste (7%) can also be considered sufficiently addressed, the six remaining sectors (Water, Land use, Agriculture and Forestry, Environment and biodiversity, Emergencies and Tourism) are clearly under-addressed, or completely neglected. Contrarily, although the SECAP also counts most of its interventions in the Energy sector (52.59%), all other sectors with the exception of tourism (1.7%), are also sufficiently addressed, with the median value for the number of interventions per sector amounting to 20.

### **5.1.2 The level of integration of thematic areas and interventions**

The analysis of SEAP at area-level shows significantly better results than those discussed above, with three of the six thematic areas showing a high integration level, which is targeting four or more different sectors; these are namely area *A greener more efficient city* (2), *A better moving city* (4), and *A low emission economy* (5). Following, thematic areas *New clean energies* (1) and *Smart services and networks* (3) show a minimum integration level, which is given by targeting two sectors out of the eleven total. Finally, and as explained previously, thematic area *Adapting to a changing climate* (6) does not provide any intervention.

Looking at the results at intervention-level, the situation does not change. What is interesting to notice here is how the final integration score at area-level can result positive even if no single intervention is highly integrated. This is for instance the case for area *A greener more efficient city* (2), where the sum of numerous lowly integrated interventions result in a sufficient number of sectors targeted at area-level.

Results for the SECAP show much more consistent positive values: while three areas have sufficient integration levels, namely *A more efficient city* (2), *Smart services and networks* (3), and *A better moving city* (4), areas *A low emission economy* (5) and *A more resilient city* (6) registered high integration records, targeting namely eight and eleven sectors. Finally, *New clean energies* (1) is the only thematic area with a low integration level, targeting Energy and Agriculture and Forestation sectors only.

Given the large number of interventions, visualization of results at intervention-level is not quite immediate for the SECAP. What appears clear however, is how interventions from thematic area *A more resilient city* (6) are generally those with highest levels of integration. In fact, this is the only area that reports single interventions with seven or more sectors targeted, and interventions with sufficient integration level are multiple too. Finally, looking at thematic area *A low emission economy* (5), we notice how the final score of an area can be determined by the integration level of just one or a few interventions. In this case, we see how intervention number 5 targets six sectors alone, and although being the only intervention with a positive integration level, it sets a positive result at area-level.

### **5.1.3 The degree of integration in the mitigation and adaptation strategy**

Results of this analysis reveal the absence of an integrated strategy for mitigation and adaptation in the SEAP, which is given by the general lack of measures with adaptation goals. As the results show, only thematic area *A greener more efficient city* (2) has interventions that



target adaptation. While it is legitimate to argue that adaptation strategies a decade ago were not as popular as they are today, the importance of adapting to climate changes is well acknowledged within the policy document. In this regard, the policy text titles its action plan “the plan for mitigation and adaptation”, failing however to transfer this aim sufficiently within the interventions planned. This is furthermore confirmed by noticing how all interventions have mitigation objectives, while only 12.8% pursue adaptation.

If at area-level the SECAP seems to have a perfectly integrated strategy, the same can not be totally confirmed looking at the intervention-level, although efforts for mitigation and adaptation are quite balanced overall. Thematic areas *New clean energies* (1) and *A more efficient city* (2) have a good number of interventions that target adaptation and mitigation in an integrated way, namely 33.3% for area 1 and 63.1% for area 2. While thematic area *Smart services and networks* (3) is the only area with no integrated intervention, the positive score of area *A better moving city* (4) is determined by the presence of just one single integrated intervention out of 23 total. Finally, area *Low emission economy* (5) and *A more resilient city* (6) have namely 12.5% and 18.1% of integrated measures. In the case of thematic area 6, what draws one’s interest is how, contrarily to all other areas, adaptation objectives are the large majority.

In conclusion, while the total number of interventions in the SECAP with an integrated mitigation and adaptation objective are just 22.4%, the overall balance of adaptation and integration measures throughout the policy is rather consistent: out of 116 total interventions, 89 (76.7%) target mitigation and 53 (45.7%) target adaptation.

#### **5.1.4 The frequency of terms relevant for policy integration**

In the context of text analysis and specific word counts, The SEAP shows a strikingly low usage of the term 'integration'. Similarly, terms related to coordination also appear infrequently. An absence of consistency and boundary-spanning terms is also noticed which, given the relevance of the latter for integrated policy-making, could signal a lack of familiarity with policy integration practices. Finally, those associated with multi-level governance are by far the most used integration-relevant terms in the document. This suggests that the municipality made use of some practices associated with new governance models, such as the adoption of a participative approach and the inclusion of a wide number of actors and stakeholders in the policy cycle.

Before moving to the SECAP, the difference in the total word count between the two documents must be acknowledged. In fact, if the SECAP counts more than 120 thousands words, the SEAP only counts around 24 thousands, setting the expectation that this will reflect on the results discussed. Despite this difference in size though, some clear distinctions can be noticed between the two policies.

A large use of the term 'integration' is made within the SECAP, where the policy text stresses how the integrated approach and the aim for an integrated strategy are priorities for the correct implementation of the policy. Similarly, and in line with the wide scope of the action plan, organization-and-coordination-relevant terms are frequently used, especially in relation with the implementation phase of the action plan.

While terms associated with coherence and consistency are scarcely used, words relevant for boundary-spanning attributes are found with higher frequency, and are used to present both the multi-sectoral nature of goals and the role of inter-departmental boards. Finally and similarly to the SEAP, we notice a great use of multi-level-governance related terminology.

What emerges when comparing results between the two policies is a much more consistent use of integration-related terms in the SECAP. This is especially the case in specific categories, such as that of 'integration' and 'boundary-spanning', that are scarcely found or not found at all within SEAP policy text. This could indicate a better understanding of the importance of integrated policy making, but also a more exhaustive understanding of the concept of policy integration itself.

Discussion regarding criteria "Presence and relevance of interventions or administrative bodies with explicit goals of coordination" (2.1), "Presence and relevance of inter-departmental boards" (3.1), and "Presence of clear organizational and functional charts" (4.1) is mostly integrated within the results chapter, given the qualitative nature of the analysis. Following however, the main differences in results between the two policies analyzed are reported.

## **5.2 Policy coordination mechanisms and strategies**

In line with what has emerged in discussing previous results, the SECAP continues to provide an overall more exhaustive and comprehensive use of practices relevant for policy integration. While the SEAP also shows the presence of efforts towards coordination, a difference in quality and quantity of information is noticed when compared to the SECAP. This difference is mainly found in the policy coordination mechanisms which, although similar and under the responsibility of the same municipal department, is much more elaborated and well presented in the SECAP. Additionally, the number of interventions that directly or indirectly refer to coordination also marks a difference between the two policies. If in the SEAP only two interventions - both from thematic area *A greener more efficient city* (2) - fall in this category, the SECAP explicitly refers to coordination as both a mean and a goal throughout all thematic areas, with interventions reported in the results chapter being only the most relevant.

## **5.3 Inter-departmental boards.**

As presented in the results chapter, no inter-departmental board was found for what concerns the ideation and implementation of the SEAP. Contrarily, three such bodies are provided by the SECAP, and two more were separately established in recent years, namely for the management of European and international funds, and for the formulation of the Climate City Contract under the Net Zero Cities initiative.

## **5.4 Organizational and functional charts.**

Unlike previous results discussed, this analysis revealed smaller differences between the two policies. When looking at the organizational chart for the management of each policy in fact, we do not notice structural differences, but rather a small increase in the number of bodies involved in the management of the SECAP. Additionally, the SECAP includes two organizational charts for the so-called 'governance maps' - tools that track relevant stakeholders for water cycle and heat wave management. While these are not provided for the SEAP, they are not considered features directly relevant for policy integration, but rather issue-specific instruments that assist an inclusive decision making process.

## Chapter 6

### Conclusions and recommendations

The objective of the research was that of contributing to policy integration studies by advancing a method that allows one to frame and measure policy integration analytically. This has been pursued drawing from a theoretical framework that, in explaining policy integration through the lens of institutional capacity, identifies empirical measures that express policy integration. Starting from this framework, an analytical tool was designed to assist the analysis of a case study, which was centered on the assessment of two policy documents. While recognizing the complexity of policy integration, which in parts explains the lack of general consensus in how to measure it analytically, this work proved that it is possible to design methods and instruments that help us frame integration both quantitatively and qualitatively. Moreover, the results obtained from the case study shed light on the institutional capacity of the Municipality of Padua for the production of integrated policies under the Covenant of Mayors, and could serve as basis for further research.

In studying how institutional capacity and policy integration connect, what emerged is that specific empirical measures of institutional capacity support an integrated approach to policy making, which is thought to produce change in policy designs as well as in institutional settings. Drawing from this theory, it is possible to design instruments aimed at measuring policy integration analytically, as proved by this study. In fact, the theoretical foundation that bridges institutional capacity and policy integration, and identifies specific features relevant for integrated policy-making, allows one to advance quantitative and qualitative methods to measure the integration level of policies through the analysis of empirical measures found in policy documentation. Moreover, while the analytical framework advanced in this work was tailored around the case study analyzed, adaptations and re-interpretations are possible to fit different contexts and policies of different nature.

Results of the case study can be looked at through two different lenses: one focused on the level of integration of each document, and one on the trend that the differences between the two underline. At first glance, both the Sustainable Energy Action Plan (SEAP) and the Sustainable Energy and Climate Action Plan (SECAP) recognize the importance of policy integration, as they both explain how the actions delivered should be thoroughly coordinated, coherent and consistent for a successful implementation. While as far as text analysis this is exhaustively covered in the SECAP and partially in the SEAP, only the SECAP managed to

consistently translate such commitment in actual interventions planned, while the SEAP overall failed to do so with sufficient frequency. This is demonstrated by the SECAP's higher diversity of interventions across different policy sectors, and by the overall higher number of sectors targeted by each intervention compared to the SEAP. A similar dynamic also emerges looking at the integration of mitigation and adaptation strategies, which the SECAP designed successfully while the SEAP overlooked, planning almost exclusively mitigation measures with a clear focus on the energy sector.

Considering the development of integration strategies from one policy to another, which is through a 10 year time period, results are undoubtedly encouraging. Both designed under the Covenant of Mayors, hence sharing similar structures that make the documents easily comparable, the two policies reveal how the Municipality of Padua has enhanced its commitment to integration, moving from merely recognizing it as a desirable attribute within the SEAP, to actualizing it throughout the whole policy cycle for the SECAP. In other words, the SEAP is not sufficiently integrated, while the integration level of the SECAP is consistently positive both in its declarations and action plan, which delivers interventions rather evenly throughout most policy sectors.

As explained in the discussion chapter, the validation of the framework and method used was at the core of this research. In this context, the nature and the quality of the results generated show the potential of the analytical framework designed. While the scope of the analysis was somewhat limited by the impossibility of conducting interviews with the administration, excluding the individual dimension from the analysis, the applicability of the framework to documentary analysis makes it a highly versatile instrument to measure and assess the integration of policies of different nature. In this regard, the replicability of the methodology is a key finding that enriches policy integration studies with an empirically-tested instrument which can contribute to the establishment of a standardized approach to understand policy integration.

Conversely to what just mentioned for this work, future research that makes use of this framework will not have to limit the methodology solely to documentary analysis. While in this case interviews were not possible, they are still considered a valuable source of information that can tackle dimensions relevant for policy integration that this study could not touch upon. Integrating the framework into more complex research designs is therefore recommended, both to produce more exhaustive results and to test the validity of the instrument in such conditions. Following this recommendation, comparative studies among

municipalities signatories of the CoM initiative could contribute in explaining the different extents to which policy integration is pursued throughout Europe. Additionally, including policies that do not fall under the CoM - or under any European programme, if possible - in the analysis would help researchers investigate how policy makers perform in the realm of policy integration when they are not steered by the EU or other higher-level authorities, and do not receive support from external actors. As explained in the methodology chapter in fact, the design of policy documents under the CoM was not arbitrary, but was rather assisted by guidelines and support from European partners. While this is considered prolific when assessing the overall policy cycle under the programme, it also hinders the possibility to generate reliable information in regards to the institutional capacity of policy makers that produced such documentation, as one could not tell how they would perform in absence of external support.

In conclusion, the framework proved to be an effective tool for the measurement of policy integration through documentary analysis and is considered to be applicable to different methodologies, too. Moreover, testing it in the case study of Padua revealed how the relevance of and the commitment to policy integration increased significantly within the municipality over the last decade due to the European policy incentives.

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