

# Which Factors Influence Climate Policy Integration? Insights from Italian and Austrian Cases

*Federica Cittadino, Louisa Parks, Peter Bußjäger and Francesca Rosignoli*

This volume has documented what is described in the Introduction as the “glocal” turn in climate governance”. The complexity of climate change is not limited to the scientific conundrum of what actions are needed to avoid tipping points and maintain increases in average global temperatures below 2°C, or preferably 1.5°C, but also, as evidenced in this volume, to the intricacy of its governance. Climate change is regulated at different levels of government, from the international to the local, and, most fundamentally, is not a unitary subject matter. Mitigation and adaptation macro-goals need to be realized in the context of traditional policies, which in some key sectors, such as transport, energy and water, and spatial planning, are heavily influenced by subnational policy-making. Hence, the importance of the subnational level.

Notwithstanding the formal division of powers described in Chapters 2 and 3, this volume has demonstrated that classical debates on the division of competences between the national and subnational levels are not conclusive when it comes to explaining how climate policy integration (CPI) is realized at subnational level. Climate policy measures have so high a degree of policy complexity, with one single issue touching upon different powers, that the question of which policy level is competent to address climate change not only has to be determined on a case-by-case basis but also has no explanatory powers when it comes to understanding how CPI unfolds. CPI needs to be studied at the micro-level with attention to the formal and informal dynamics that underpin policy-making in climate-related matters. Hence the need to examine how CPI is realized in the study areas that we selected due to both their geographical and institutional characteristics, i.e. the Autonomous Provinces of Trento and Bolzano in Italy, and the *Länder* Tyrol and Vorarlberg in Austria.<sup>1</sup>

<sup>1</sup> See Introduction and Chapter 3 in this volume.

In the following, we evaluate the findings that emerge from the chapters of this volume to respond to the research questions posed in the Introduction: 1) How is CPI realized in the selected case studies? and; 2) What are the factors that influence CPI? The crucial role of subnational governments in realizing CPI is equally relevant to both mitigation and adaptation measures.<sup>2</sup> Although some reference to adaptation is made in all chapters, we decided to focus mainly on climate policies related to mitigation efforts. The main reason for this is that the development of adaptation strategies in the territories analyzed is still in its infancy, with the exception of Vorarlberg which has a more advanced framework in place. The points that we raise in the following, however, may be relevant for the development of adaptation policies in the territories analyzed.

## 1 How Is CPI Realized in the Case Studies?

In the study areas, the mitigation of climate change is both widely present as a cross-sectoral policy objective and in sectoral strategic, legislative, and administrative acts, with some important differences.

Concerning cross-sectoral policy documents, the only subnational piece of legislation dedicated to climate change in the four case studies is the one adopted by the Autonomous Province of Trento (L.P. 5/2010, then replaced by article 23 of L.P. 19/2013). Trento has also prioritized climate change through the adoption of two cross-sectoral strategies, namely the Environment and Energy Plan (*Piano energetico ambientale provinciale – PEAP*), which contains mitigation objectives in line with EU legislation, and the Sustainable Development Strategy (*Strategia provinciale per lo Sviluppo Sostenibile – SproSS*), which includes objectives related to the reduction of greenhouse gas (GHG) emissions and adaptation to climate change.<sup>3</sup> The Autonomous Province of Bolzano has not legislated on climate change, but in 2011 adopted instead the so-called Climate and Energy Plan – South Tyrol 2050 (*Klimaplan Energie – Südtirol 2050*, as amended by *Klimaplan Südtirol 2040*), currently under revision. The differing nature of the measures adopted in the two Autonomous Provinces

2 See, for instance, M.-L. Lambert *et al.*, *Adapter les territoires au changement climatique : Outils juridiques d'urbanisme et d'aménagement* (Territorial éditions 2020).

3 As reminded in Chapter 3, the Strategy for Climate Change Mitigation and Adaptation (*Strategia provinciale di mitigazione e adattamento ai cambiamenti climatici*) is under adoption in the Province of Trento in line with the process laid down in the strategic paper Trentino Climate 2021–2023 (*Trentino Clima 2021–2023*).

cannot be explained with reference to the constitutional division of powers, which as clarified in Chapters 2 and 3, does not confer general environmental powers to Italian regions, be they ordinary or special.

In Austria, similarly to the Province of Bolzano, the *Länder* analyzed have adopted no specific law dedicated solely to climate change, probably due to the entrenchment of climate change within a number of policy fields that fall under the competence of both the *Bund* and the *Länder*. Indeed, a comprehensive climate law<sup>4</sup> exists at the national level, unlike Italy. Furthermore, the protection of climate is entrenched as a *Land* aim (also referred to as a state aim in this volume) in the subnational constitutions of both *Länder* (for Vorarlberg since 2008). This legal recognition, as recalled in Chapters 2 and 3, has not so far had any specific legal consequences. However, the theoretical possibility to challenge the constitutionality of *Land* laws for violating this aim remains open. Furthermore, while Tyrol adopted, similarly to the Italian cases, cross-cutting strategies in the field of climate change (*Tirol 2050* in 2014, which contains commitments to reach energy autonomy and climate neutrality; Climate Strategy for *Land* Tyrol – *Tiroler Nachhaltigkeits- und Klimastrategie* in 2021, which is more implementation-oriented and contains specific sectoral targets, also in the field of adaptation), Vorarlberg has no general strategic document in place to guide the mitigation of climate change in the years to come.<sup>5</sup> This is probably due to the fact that Vorarlberg's activism in the field of energy autonomy, efficiency and greening of energy sources started as early as 2007 and has shaped subsequent strategic developments in the field of climate change mitigation. At the same time, Vorarlberg is the only subnational government to implement a fully-fledged adaptation strategy with related action plans that need to be updated yearly. Tyrol has instead adopted sectoral adaptation goals within the context of its abovementioned climate strategy, which do not however contain any implementing measures.

In addition to cross-sectoral measures, sectoral strategic documents also play an important role in CPI in all the case studies, with even less variation than discussed in previous paragraphs. In the Autonomous Province of Bolzano, climate change is integrated in sectoral legislation, strategies, programs (such as *CasaClima*),<sup>6</sup> and initiatives (such as Green Mobility),<sup>7</sup> especially in the fields

4 *Klimaschutzgesetz* – KSG, BGBl. I Nr. 106/2011, consolidated version as of 24 June 2022.

5 However, the climate strategy of Land Vorarlberg is based on three main objectives, namely energy autonomy, sustainable land use, and adaptation to climate change. See <https://www.energieautonomie-vorarlberg.at/de/das-ist-energieautonomie/>. All internet sources in this chapter were accessed on 25 June 2022.

6 See Chapters 3 and 5 in this volume.

7 See Chapters 3 and 4 in this volume.

of energy, water, and landscape policies. The same is true for the Autonomous Province of Trento, although spatial and urban plans contain no explicit reference to climate change. In Austria, CPI in sectoral documents occurs both at the level of legislation (in the fields of air pollution, energy, spatial planning, and building) and of strategies (for instance in the latest sectoral strategies on spatial planning in Tyrol, and in the Energy Autonomy + Strategy 2030 – *Strategie Energieautonomie + 2030* in Vorarlberg).

Concerning CPI in specific sectors in more detail, transport is one of the most critical areas of intervention in the case studies, since it is the sector with the highest level of emissions in the region.<sup>8</sup> The authors of Chapter 4 show a substantive alignment of the objectives adopted at subnational level, with a focus on less emission-intensive modes of transportation. Criticalities also tend to be similar, with a considerable gap between declared objectives and the achievement of a full shift from road to alternative modes of transport, which would allow the decarbonization objectives agreed upon at European level to be achieved.

As highlighted in Chapter 1, energy is also a particularly sensitive sector for climate multilevel governance because Member States retain sovereignty over energy policies, and subnational governments share powers with the national level in regulating the energy sector. Chapter 5 shows that CPI is realized via objectives on the increase of renewable energy sources (RES) and more operational standards in the field of energy efficiency, for instance in buildings. A slight advantage for the Italian case studies is noted when it comes to energy autonomy, which is more established in the Autonomous Provinces than in the Austrian *Länder*. In both Autonomous Provinces hydropower is widespread and contributes significantly to energy autonomy, with Bolzano producing 92% of its electricity locally. Vorarlberg and Tyrol have both committed to reaching energy autonomy by 2050 but they still have a long way to go. Concerning the trade-off between energy and water, instead, the opposite trend is observed, with the Austrian *Länder* more advanced in terms of adaptation plans with regard to water.

As emerges in Chapter 6, spatial planning is to some extent an overarching sector since it includes provisions that have an effect on both energy (for instance where RES plants are located or building standards) and transport policies (measures concerning the limitation of traffic in residential areas). This is probably the area where, from a constitutional point of view, the subnational

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8 *Rapporto sul clima Alto Adige* (Eurac Research 2018), at 30; *Climate Action Plan 2.0* (Alpine Convention 2021), at 8.

governments analyzed have the widest scope for action. This scope also extends to the municipal level, which holds responsibility for implementing provincial and *Land* plans concerning land use or regulation of traffic areas. It is worth noting that while in the Autonomous Province of Bolzano, the integration of climate-related standards is usually achieved through the prevalence of hazard zone plans, landscape plans, and the Stelvio National Park Plan over provincial land use plans and other spatial instruments, in the Autonomous Province of Trento landscape and hazard maps are an integral part of the Provincial Urban Plan (*Piano urbanistico provinciale*). The same holistic approach can be found in Vorarlberg and Tyrol.

Differences among the sectors are also reflected in the varying nature of the measures adopted. In the transport sector, we can observe a mix of federal laws and executive acts/strategies at the subnational level in Austria, while in Italy there is a legislative framework in place at the subnational level. In the energy sector there is a prevalence of strategic and economic instruments in both the Italian and Austrian cases. In spatial planning, relevant legislative frameworks are in place at the subnational level, but CPI mostly unfolds in sectoral plans. While strategies and long-term objectives are well established in all three sectors (perhaps less so in the field of spatial planning in Italy), implementation has not however reached its full potential and must be improved.

Another relevant point is whether there is an overall harmonious approach to CPI despite institutional differences. As said, there is substantive convergence among strategic objectives, with slight variation in terms of the nature and content of the measures adopted. From an institutional point of view, very differently from the Italian regional system, as emerges in Chapter 2, the overlapping of competences in the federal system of Austria is consolidated. Mechanisms also exist to dynamically change the formal division of competences; for instance, formally, through competence clauses and, *de facto*, through *Privatwirtschaftsverwaltung* (private sector administration). The latter includes manifold activities promoted by either the *Bund* or the *Länder* to subsidize climate-friendly behavior. These significant institutional differences do not, however, lead to comparable significant differences in how CPI is realized in the selected case studies, as one might expect. Again, this might be due to the strong imprint given to long-term climate policy objectives by the European Union (EU).

Similarly, despite the fact that activism in Vorarlberg temporally precedes CPI in the other case studies, no significantly different level of CPI in this *Land* is apparent. To recall, the constitutional entrenchment of climate protection is present in both Austrian *Länder*, and the strategic objectives are aligned with those of the other case studies. Perhaps the most significant differences in

Vorarlberg are the earlier commitment to energy autonomy by 2050, made in 2009, and the development of a fully-fledged adaptation strategy with operational implementation mechanisms.

## 2 Which Factors Influence CPI and in What Ways?

The question of how CPI is realized at the subnational level is entrenched in the question of which factors are able to facilitate or hinder CPI. In the following, we discuss the five dimensions we hypothesized as relevant to CPI (coordination, participation, information, leadership, and funding), first separately, and then with a view to understanding their mutual interrelationship.

### 2.1 Coordination

As highlighted in Chapter 7, the importance of coordination is premised on the complexity of both climate change as a policy issue and on the policy-making procedures in place in decentralized countries. Coordination in CPI is relevant both in terms of its vertical dimension, as the need for mechanisms of interaction among different levels of government that are equally entitled to regulate climate change, and its horizontal dimension, which accounts for the fact that climate change is not a unitary subject matter but instead intersects with a number of different policy sectors and because “no single policy sector alone can win the challenges represented by climate change”.<sup>9</sup>

#### 2.1.1 Vertical

Concerning vertical coordination, while constitutional principles that require cooperation among levels are enshrined in both the Italian and the Austrian constitutional systems (loyal cooperation under article 120 of the Italian Constitution and *Berücksichtigungsprinzip* – the principle of mutual consideration in Austria), important differences emerge as to the existence of formal mechanisms of vertical coordination for CPI. Italy has no formal mechanism of vertical coordination dedicated to climate matters. Austria instead has instituted the National Climate Protection Committee (*Nationales Klimaschutzkomitee*),<sup>10</sup> composed of representatives of the *Bund*, *Länder*, and non-institutional stakeholders, which was established by law to facilitate the implementation of the abovementioned Austrian Climate Change

<sup>9</sup> Chapter 7 in this volume.

<sup>10</sup> See Chapter 8 in this volume.

Act (*Klimaschutzgesetz*). Even in terms of coordination mechanisms without a specific climate mandate, the Austrian Conference on Spatial Planning (*Österreichische Raumordnungskonferenz – ÖROK*),<sup>11</sup> composed of all federal ministers and heads of the *Länder*, the presidents of the Austrian Association of Cities and Towns (*Städtebund*) and the Austrian Association of Municipalities (*Gemeindebund*), as well as relevant social and economic organizations, is an example of a formal sectoral coordination body that has no correspondent body in the Italian system. In more general terms, it should be highlighted that Austria has a more consolidated system of vertical cooperation and entrenchment among government levels, which is part of its constitutional framework. It suffices to think of both the Federal Council (*Bundesrat*), the upper house of the Austrian Parliament representing the *Länder*, and the so-called article 15a B-VG *Bund-Länder* agreements,<sup>12</sup> which are legally binding on the parties and may establish *ad hoc* forms of cooperation. The Italian system of conferences, described in Chapter 7, is by no means comparable to the Austrian experience, either in terms of its mandate or its functioning.

Vertical coordination also means cooperation with additional layers of government beyond the national, including the EU level and municipal levels. Coordination with the EU level is essential for CPI and is reflected in the substantive alignment of subnational climate-related policies to EU objectives and requirements. As emerged from Chapter 2, national climate-related strategies are often adopted as requirements of EU legislation. Furthermore, despite the view of some respondents that in Italy the state is fundamental in transposing European standards into national ones,<sup>13</sup> the implementation of EU standards is also carried out directly by subnational governments in all cases. Regarding coordination between subnational and local governments, in all cases municipal urban plans are theoretically bound by requirements established at either provincial or *Land* levels. It has however been observed that more coordination would be preferable when municipalities adopt climate-related standards in their fields of action, such as local spatial planning and traffic management. An example of effective coordination is apparent in the Austrian cases, where *Land* authorities organize training to guide municipal implementation.<sup>14</sup>

11 See Chapter 6 in this volume.

12 See art. 15a of the Austrian Federal Constitutional Law (*Bundes-Verfassungsgesetz – B-VG*). See Chapters 5–7 in this volume.

13 See Chapter 7 in this volume.

14 See Chapter 3 in this volume.



### 2.1.2 Horizontal

Horizontal coordination is crucial because, as said, climate change is not a standalone subject matter, and measures that impact mitigation and adaptation standards are likely to be introduced by climate-related sectoral policies. The analysis conducted in this volume demonstrates that coformulation of strategic documents by sectoral policy-makers and policy officers occurred in all of the case studies. This took place via formal (both cross-sectoral and sectoral) and informal mechanisms of horizontal coordination.

Concerning formal cross-sectoral mechanisms, in the Provinces of Trento and Bolzano existing environmental departments (respectively *Agenzia provinciale per la protezione dell'ambiente* – APPA Trento<sup>15</sup> and *Agenzia provinciale per l'ambiente e la tutela del clima* – APPA Bolzano) have assumed a coordinating role in the elaboration of climate-related policies within their more general mandate on the protection of the environment. According to some interviewees APPAs are not fully operational as coordination units because they are themselves provincial departments with a discrete scope for action with respect to other provincial departments. Another form of non-institutional horizontal coordination in the Province of Bolzano in the field of spatial planning will be the Provincial Strategic Plan (*Piano strategico provinciale*), which will be adopted in 2023 and replace the current leading document on spatial planning (*Piano provinciale di sviluppo e coordinamento territoriale* – LEROP) by taking into account, *inter alia*, the objectives of reduced use of soil and energy and the promotion of RES.<sup>16</sup>

In Austria, the *Länder* analyzed have instead created *ad hoc* formal coordination mechanisms, i.e. the Sustainability and Climate Protection Coordination Unit (*Fachbereich Nachhaltigkeits- und Klimakoordination*) in Tyrol<sup>17</sup> and the Energy and Climate Protection Division (*Fachbereich Energie und Klimaschutz*) in Vorarlberg. Furthermore, both *Länder* have instituted climate coordinators, which however only have an overview of the measures enacted and are not able to steer action on climate protection.<sup>18</sup>

15 The coordinating functions of APPA Trento were not introduced until 2020. Before this date, horizontal coordination in the Province of Trento was ensured by an ad-hoc coordination table on climate change (*Tavolo Provinciale di Coordinamento e di Azione sui Cambiamenti Climatici*, today chaired by APPA Trento). See Chapters 3 and 7 in this volume.

16 L.P. 9/2018, artt. 2 and 43 and IntBZ\_01.

17 This unit meets regularly, within a steering committee composed also of politicians, with the Energy Coordination Unit, and the heads of climate-related sectoral departments. See Chapter 7 in this volume.

18 See Chapter 7 in this volume.



To different extents, all of these climate-specific coordination institutions have favored intra-sectoral dialogue and CPI in sectoral policies. However, more efforts to reinforce their mandates and their scope for action *vis-à-vis* other sectoral departments would ensure a stronger impetus for climate policies at the subnational level, and therefore more established leadership.

Additional formal mechanisms of coordination between subnational governments or between municipalities may also be relevant in the context of CPI. In Austria, under article 15a(2) B-VG, binding agreements can also be concluded among *Länder* in the respective competence matters.<sup>19</sup> This provision allows, at least in theory, for horizontal coordination to be ensured, for instance in cross-border regions sharing similar climate issues.<sup>20</sup> No similar binding options exist in Italy, where interregional relationships are often driven by competition rather than cooperation, especially when it comes to autonomous regions. Cross-border cooperation among subnational governments is also achieved within the context of the European Grouping of Territorial Cooperation (EGTC) Euregio. Established in 2011, it promotes cooperation between Tyrol and the Autonomous Provinces of Trento and Bolzano, especially on mobility issues and the reduction of GHG emissions (for instance through the so-called Euregio Hydrogen Strategy).<sup>21</sup>

Intermunicipal cooperation is another form of horizontal coordination that may have relevance for climate protection. For instance, in Austria, the e5-program (*e5-Programm*) is a federal framework that supports Austrian municipalities in the modernization of their climate and energy policies, thus somehow leveling the way in which CPI is realized by the local authorities that take part in the program.<sup>22</sup> Coordination between municipalities is instead mandatory for supra-local spatial planning,<sup>23</sup> whereas planning at cross-municipal level is an established practice in Vorarlberg. In Italy, coordination among municipalities on climate matters occurs mostly within the framework of the Covenant of Mayors, and is therefore driven by the initiative of single local authorities rather than supra-municipal programs of subnational or national relevance.

19 *Ibid.*

20 A relevant example is a 15a(2) agreement establishing cooperation on building matters, available at [https://www.ris.bka.gv.at/GeltendeFassung.wxe?Abfrage=LrVbg&Gesetze\\_snummer=20000743](https://www.ris.bka.gv.at/GeltendeFassung.wxe?Abfrage=LrVbg&Gesetze_snummer=20000743).

21 *Strategia per l'idrogeno Euregio*, available at <https://www.europaregion.info/it/euregio/progetti/sostenibilita/strategia-per-lidrogeno-euregio/>.

22 See Chapter 3 in this volume.

23 See Chapter 6 in this volume.

In addition to formal mechanisms of horizontal coordination, informal mechanisms emerge as an important factor for CPI: these are activated in all case studies, usually as a result of consolidated personal relationships among administrative officers or policy-makers, and as part of sectoral and cross-sectoral strategic planning processes. As emerged from some interviews, informal cooperation in strategic plans usually leads to rather vague policy objectives that lack implementing measures. It is the shared opinion of most interviewees from all study areas that climate change requires more permanent coordination mechanisms (in addition to those described as formal above), more permanent staff in the administrative units concerned with climate change, more staff dedicated solely to the purpose of coordination for climate matters, and some level of innovation in policy-making practices that extends beyond the logics of separate competence matters.

### 2.1.3 Evaluation

In light of the above, the functions of vertical and horizontal coordination in enabling CPI in our case studies are slightly different from what is usually hypothesized in the literature.<sup>24</sup> For instance, none of the existing coordination mechanisms in the case studies helps subnational authorities avoid the duplication of policies adopted at different levels. In contrast, general objectives, such as the 55% reduction in GHG emissions by 2030, are reiterated at all levels, though this is not an obstacle to increased and coherent CPI. Related to this, the case studies do not provide enough evidence to claim that coordination prevents policy fragmentation. In this respect, our cases suggest that more problems with respect to fragmentation may stem from inconsistent climate-related policies adopted at different levels, or in different climate-related sectors. This is true especially when climate protection is the result of policies that have other primary aims for sectoral policies, or when climate is only one of the aspects to be considered among different, or even conflicting aims. In this sense, we observe that, although coordination mechanisms exist to different

24 T. Rauken *et al.*, "Mainstreaming Climate Change Adaptation at the Local Level", *Local Environment*, 20 (2015) 408–423; A. Ross and S. Dovers, "Making the Harder Yards: Environmental Policy Integration in Australia", *Australian Journal of Public Administration*, 67 (2008) 245–260; P. Mickwitz *et al.*, *Climate Policy Integration, Coherence and Governance* (PEER report 2 2009); S. Brouwer *et al.*, "Mainstreaming Climate Policy: The Case of Climate Adaptation and the Implementation of EU Water Policy", *Environment and Planning C: Government and Policy*, 31 (2013) 134–153; C. Wamsler and S. Pauleit, "Making Headway in Climate Policy Mainstreaming and Ecosystem-Based Adaptation: Two Pioneering Countries, Different Pathways, One Goal", *Climatic Change*, 137 (2016) 71–87.

extents, climate protection, especially in the case of spatial planning and transport policies, is still the unintended consequence of other policy objectives rather than a primary aim in and of itself. Therefore, coordination does not necessarily succeed in avoiding inconsistencies or preventing fragmentation, although we did not document any evident mismatch between European, national and subnational standards, on the one hand, or among sectoral policy objectives, on the other. Probably one of the most obvious trade-offs among policy areas is between the promotion of RES and the objectives of enhancing the quality and quantity of water resources. Finally, we found some limited evidence that vertical cooperation may enable mutual learning, for instance by anticipating commitments at subnational levels that are then either extended to the whole national territory or required at the EU level.<sup>25</sup>

## 2.2 Participation

Participation has certainly had some influence on CPI in all of the case studies, not least because institutional participatory procedures preceded almost all processes leading to the adoption of climate-related cross-sectoral or sectoral strategic documents. The following discusses the practices, forms, and actors of participation, their internal idiosyncrasies, and their level of correlation to CPI.

### 2.2.1 Practices<sup>26</sup>

In all case studies, we can distinguish between binding and non-binding forms of institutional participation. Binding forms of participation are usually related to specific sectors and are mostly directed to a restricted parterre of stakeholders rather than the general public. In the Austrian case of Vorarlberg, only professional associations (such as the Chamber of Commerce), municipalities, residents, and local companies have a right to comment on spatial plans or road concepts. This right is extended to the general public for noise maps and action plans in Tyrol. In both *Länder*, the right to take part in technical advisory bodies that inform public decision-making in spatial planning and nature conservation is reserved to a number of stakeholders, including environmental organizations and experts. Participation in the development of water/flood management plans is instead extended to all citizens.

25 Chapter 3 refers to the fact that *Land Lower Austria (Niederösterreich)* banned new oil heating systems in 2019 and the same ban was then introduced at the federal level; in Chapter 5: the target of reducing GHG emissions by 55% in 2030 was introduced by the Province of Trento in the proposed PEAP before the new EU Climate Law was adopted.

26 See Chapters 6 and 9 in this volume.

In both the Autonomous Provinces in Italy, the main binding procedures are those of environmental impact assessments (EIA) and strategic environmental assessments (SEA), where specific environmental stakeholders may submit written comments. For instance, in the Province of Bolzano, one of the environmental assessment procedures most participated in was one concerning the elaboration of the Water Protection Plan (*Piano di tutela delle acque*), which received two hundred and fifteen comments. In the Province of Trento, a notable example of a mandatory consultative process directed to selected stakeholders is the one that preceded the adoption of the PEAP (*Piano energetico ambientale provinciale*). Despite the structured form of this consultation and the broad parterre of stakeholders involved (from high school students to businesses), the process was criticized by some interviewees from civil society as non-inclusive, because environmental organizations decided to abandon the participatory process due to negative past experiences with the administration.<sup>27</sup> Binding forms of participation are also envisaged at the municipal level, in the forms of inquiries, consultations, motions, citizens' initiatives, and petitions.<sup>28</sup>

Concerning voluntary forms of participation, these are usually *ad hoc* processes in the context of sectoral or cross-sectoral strategic development. Concerning the Austrian cases, in Tyrol comments from selected stakeholders were collected and then evaluated as part of the development of both the Spatial Plan Habitat Tyrol – Agenda 2030 (*Raumordnungsplan Lebensraum Tirol – Agenda 2030*) and of criteria for the use of hydropower. An interesting example that goes beyond information sharing and consultation is the participatory process preceding the adoption of the Tyrolean Sustainability and Climate Strategy (*Leben mit Zukunft – Tiroler Nachhaltigkeits- und Klimastrategie*).<sup>29</sup> Not only did the participatory process include the general public, but there is evidence that comments were integrated into the final formulation of the strategy. Furthermore, an evaluation of progress is to be carried out annually with the participation of selected stakeholders.

In Vorarlberg, the adoption of two important strategic documents, *Raumbild Vorarlberg 2030* and the abovementioned Energy Autonomy + Strategy 2030, was preceded by a two-step consultation process, first with experts, then with the general public (online or in-person). For the freight transport concept,

27 See Chapter 5 in this volume.

28 See Chapter 9 in this volume.

29 [https://www.tirol.gv.at/fileadmin/themen/landesentwicklung/raumordnung/Nachhaltigkeit/Nachhaltigkeits-\\_und\\_Klimakoordination/Publikationen/Massnahmenprogramm\\_web.pdf](https://www.tirol.gv.at/fileadmin/themen/landesentwicklung/raumordnung/Nachhaltigkeit/Nachhaltigkeits-_und_Klimakoordination/Publikationen/Massnahmenprogramm_web.pdf).

instead, only interest groups and businesses were involved. A relevant example of a participatory process that goes beyond information and consultation is the model of Citizens' Councils (*Bürgerräte*). These can be initiated at the request of alternatively the government, the parliament, or at least one thousand citizens, and are usually used to promote a public debate on complex issues affecting the common good. Important structural elements are the random selection of participants (usually twelve to twenty participants), the facilitation of debates by professionals, and the free determination of the points to be discussed with or without the consultation of experts. After a first round of internal discussions, proposals elaborated within the context of Citizens' Councils are then presented to the public, including politicians, administrators, and interest groups. The feasibility of proposals is examined by public officers and finally forwarded to the parliament, which decides whether to adopt it, with or without amendments, or not. In 2020, the Citizens' Council on Vorarlberg's climate future (*Bürgererrat: Klima-Zukunft*) was initiated at the initiative of a group of citizens and went into operation. The contribution to the Mobility concept of 2019 (*Mobilitätskonzept Vorarlberg 2019*) and the Energy Autonomy Strategy + of 2009 were structured in a similar way.

In Italy, in the Autonomous Province of Trento, a citizens' initiative on sustainable mobility was launched in 2014, which resulted in a proposed bill that was not however taken forward by the administration (instead L.P. 6/2017 was adopted).<sup>30</sup> Another notable example of voluntary participation occurred in the formulation of the abovementioned Sustainable Development Strategy in the Province of Trento, where the widest participation possible was promoted in several steps. First meetings with school and university students were organized; subsequently, experts made proposals that were then incorporated into a draft that was open to on-line comments. The final step was the organization of workshops with stakeholders from institutions and civil society. In the Autonomous Province of Bolzano, one of the most relevant examples of a voluntary participatory process in the field of climate change was initiated by the provincial government for the revision of the Climate and Energy Plan – South Tyrol 2050. Participation took place between 2020 and 2021 but only in the form of written online comments. These will be evaluated by a committee of six experts.<sup>31</sup> The consultation of experts in the same process, instead, took place in a separate and less transparent way.

30 See Chapter 4 in this volume.

31 See Chapter 9 in this volume.

Finally, in all cases we found specific forms of consultation targeted towards scientific experts, where scientists are requested to provide information to public administrations with the aim of improving the responsiveness of climate-related public policies to scientific data. This may occur either as part of information exchange events (for instance conferences of experts in the transport sector and in other selected policy sectors in Austria)<sup>32</sup> or of more permanent fora. As examples of the latter, the Province of Trento will establish a scientific committee to improve exchange between scientists and policy-makers in the context of the workplan *Trentino Clima 2021–2023*.<sup>33</sup> In Tyrol, the same exchange is achieved through the *Plattform Klima, Energie und Kreislaufwirtschaft*. A final example is the Italian National Network System for the Protection of the Environment (*Sistema Nazionale a Rete per la Protezione dell'Ambiente*), coordinated by the Institute for the Environmental Protection and Research (*Istituto Superiore per la Protezione e la Ricerca Ambientale – ISPRA*). In this network, data collected by all regional and provincial environmental agencies are jointly examined with the aim of supporting public decision-making. Data are also made available to the wider public through public reports and other documents available on the dedicated website.<sup>34</sup>

### 2.2.2 Evaluation

Whether institutional participation is a driving force for CPI, as theorized by scholars,<sup>35</sup> is a question that remains open. The level of correlation between participation and CPI in the study areas was not fully determined in this study. Our main interest in looking at different types of participation was to actually determine whether this is correlated with increased CPI. To the extent that the case with the longest history of CPI also has the most established tradition of participation (Vorarlberg), while CPI varies in other cases along with different attempts at participation, this appears to be true. Nevertheless, their ubiquity of such attempts across the cases also suggests that rather than a key driver of CPI *per se*, these are carried out to fulfill obligations from the Aarhus Convention, or to enhance legitimacy. The variation in the types of

32 See Chapters 3 and 7 in this volume.

33 See footnote 3 above.

34 See <https://www.snppambiente.it/>.

35 L. Parks, *Benefit-Sharing in Environmental Governance: Local Experiences of a Global Concept* (Routledge 2020); J. Knieling (ed.), *Climate Adaptation Governance in Cities and Regions: Theoretical Fundamentals and Practical Evidence* (Wiley Blackwell 2016), at 10; K. Backstrand and E. Lovbrand, "The Road to Paris: Contending Climate Governance Discourses in the Post-Copenhagen Era", *Journal of Environmental Policy & Planning*, 21 (2017) 519–532.

participatory processes in our cases suggest some more nuanced findings in this vein that point to the importance of the design and intent of participatory processes for the quality of CPI. It is also certain that participation usually precedes climate-related policy developments. In the following, we illustrate interesting results on the nature, functions, methods, effects, triggers, actors, and structure of participation in the study areas.

On the issue of how participation is intended in the study areas, we found that in all case studies there is a common strong focus on participation for the purposes of sharing information rather than for policy-making. The mechanisms examined mainly enable the sharing of information with selected stakeholders or the broader public, rather than the inclusion of citizens' proposals in public decision-making. In line with theories of civic environmentalism,<sup>36</sup> participation is promoted by administrations mainly to enhance the legitimacy and acceptability of policies. While participation is seen by the administration as a tool to promote legitimacy, the interviews with civil society representatives revealed that citizens and civil society organizations (CSOs) are generally disappointed with how participation is conducted. CSOs tend to view participation as a route for influencing policy-making, in line with discussions in the literature on, for example, ecological democracy.<sup>37</sup>

Concerning the methods of participation, the literature usually distinguishes between consultative and deliberative practices. In all case studies, participation occurs mainly in the form of consultation. Deliberation, intended as a process where actors involved exchange their arguments and come to an agreed solution or to a common understanding of a complex problem like climate change, is less common. The sole example of deliberation is that of the Citizens' Councils in Vorarlberg. However, as observed in Chapter 9, "Citizens' Councils primarily fulfil a legitimization function by increasing citizens' backing and acceptance of political decisions and their will to engage, as well as by changing personal attitudes to an issue". Be it conducted as a consultative or a deliberative process, the consequences of participation in the study areas, including the impact of Citizens' Councils on public decision-making, are far from clear. In particular, it is not clear how and to what extent the contributions and proposals made by citizens and CSOs are eventually integrated into policy documents. This is true even for the more deliberative processes, such as the Citizens' Councils in Vorarlberg, or for the most inclusive participatory processes promoted in the Province of Trento for the elaboration of

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36 K. Backstrand and E. Lovbrand, "The Road to Paris", *supra*.

37 See e.g. H. Stevenson and J. S. Dryzek, *Democratizing Global Climate Governance* (Cambridge University Press 2014).



the Sustainable Development Strategy. In this respect, participation appears to be conceived by subnational authorities as an element of traditional decision-making, meaning that, even in the field of climate change, it only contributes to the normal functioning of legislative and administrative processes. This suggests that rather than the deliberative view where participation could be thought of as contributing to create CPI, our cases indicate instead a role for participation in effective implementation through raising legitimacy and awareness.

Regarding the triggers of participation, i.e. how actors' participation is initiated, the participatory processes encountered in Vorarlberg and in the Province of Trento may be either bottom-up – activated by citizens and CSOs – such as the abovementioned citizens' initiative on mobility in Trento and the Citizens' Council on climate change in Vorarlberg, or top-down – activated by the administration. In Tyrol and the Province of Bolzano, instead, initiative is usually taken by the administration. Even when participatory processes are initiated by citizens, proposals are not usually retained in final policy documents, thus confirming the conclusion highlighted above that what is lacking is a clear understanding of how participation is incorporated into final decisions.

Concerning the subjects involved in participatory processes, although participation in environmental matters is a right as established by the Aarhus Convention (to which Italy and Austria are both parties),<sup>38</sup> in all case studies, with the exception of binding processes where the addressees of participation are determined by legislation, administrations decide who is involved in participatory processes, often with no transparency regarding the criteria. As seen, participatory processes are not usually extended to the general public, and are therefore mediated by CSOs, professional organizations, expert groups, and businesses. Though beyond the scope of this study, this begs the question as to whether organized groups are bridges or obstacles to direct participation by citizens. The literature on civil society is divided on this point: while studies on more formal interest groups and NGOs point to their role as brokers, representatives, and transmission belts to bring citizens' perspectives to decision-makers,<sup>39</sup> critical scholars underline that such organized brokerage threatens the emergence and advocacy for more radical governance ideas,<sup>40</sup> which are

38 See Chapter 9 in this volume.

39 L. Parks, *Benefit-Sharing in Environmental Governance*, *supra*; M. Kaldor, *Global Civil Society: An Answer to War* (Polity Press 2003); M.E. Keck and K. Sikkink, *Advocacy Networks in International Politics* (Cornell University Press 1998), available at <http://www.jstor.org/stable/10.7591/j.ctt5hh13f>.

40 A. Choudry and D. Kapoor, *NGOization: Complicity, Contradictions and Prospects* (Zed Books 2013).

increasingly called for in the area of climate change.<sup>41</sup> With reference to this more critical interpretation, which implies a clear difference between participation as a formally organized activity and participation through more unstructured means such as protest, a broad body of literature on collective action has noted the rise of European youth movements for climate change since 2019, in particular in the form of Fridays for Future.<sup>42</sup> This suggests that in addition to, or instead of, a possible disenchantment with formal participation processes, young people have an active preference for more contentious forms of participation on the issue of climate change.

Another issue that was not explored in this study but would be interesting to delve into is the relative weight of different stakeholder or civil society groups, i.e. both whether some of these are more present than others, and whether some actors' proposals are retained more often in final decisions. The latter point, however, is not easy to investigate since there is not always transparency on the positions of different groups and no clarity on which positions are included in policy-making.

Notwithstanding the prevalence of processes that privilege the participation of organized groups and selected stakeholders, in all study areas there are interesting examples of participation in climate-related decision-making processes that involve all citizens. Citizens are usually involved in a later phase of the participatory processes whether in one-day events or in more lengthy consultative processes, though these are usually in the form of written comments. Two interesting peculiarities emerged in the Italian cases. In the Province of Trento, many participatory processes have involved youth (high school or university students). Notwithstanding the efforts put in place by the administration to target young people, youth are seen as not engaging in participatory mechanisms to the levels wished, and there is a perceived need to find ways to attract young people to take part in climate-related participatory processes. In the Province of Bolzano, instead, some interviewees have interestingly claimed that participatory processes are not always successful because participation takes the form of political participation, mediated by traditional political parties. This might be due, as pointed out by respondents, to the fact that the same political party has been in power for many years.

Another interesting issue concerns the phase in which policy decision-making participation is required or takes place. A common result emerging

41 See e.g. B.C. Chaffin *et al.*, "Transformative Environmental Governance", *Annual Review of Environment and Resources*, 41 (2016) 399–423.

42 See e.g. J. de Moor *et al.*, "New Kids on the Block: Taking Stock of the Recent Cycle of Climate Activism", *Social Movement Studies*, 20 (2021) 619–625.

from all the cases is that participation usually precedes the development of strategic policy documents, but is completely lacking in the implementation phase. This adds some nuance to the idea of participation for legitimacy and enhanced efficiency in implementation suggested earlier. The suggestion from our cases is that legitimacy is sought at a more general strategic level rather than in connection to the implementation of specific policies. An exception to this trend seems to be the participatory process provided to monitor the implementation of the Sustainability and Climate Strategy in Tyrol. Moreover, although it did not emerge explicitly from the interviews, participation intended as consultation from experts seems to be an important factor in coordination (in line with the literature) and a way to improve policy-making.

Yet another interesting result concerns the question of whether or not participation is supported by any dedicated structure. In Vorarlberg and in the Province of Trento, there are dedicated offices for participation that facilitate processes (respectively *Büro für Freiwilliges Engagement und Beteiligung* and *Autorità per la Partecipazione Locale*). Vorarlberg has also created specific funds to promote the participation of citizens in projects relevant to climate change.<sup>43</sup> No such authorities exist in *Land* Tyrol or the Province of Bolzano. The presence of structures that facilitate participation seem to be linked to the more established nature of participatory processes in Vorarlberg, which according to interviewees has a more consolidated culture of participation. Although notions of political and participatory culture are complex<sup>44</sup> and raise myriad issues that cannot be fully accounted for in this study, additional research questions concern the extent to which a more established structure may lead to a more established culture of participation, or whether structure and culture are independent variables. A hint that structure and culture are interrelated may come from the increased openness in the Province of Trento to participation, which is backed, like Vorarlberg, by a dedicated office. On the other hand, although a legislative framework on participation exists in the Province of Bolzano (L.P. 22/2018), this structure has not led to the same level of citizens' engagement in public decision-making.

Finally, what emerges clearly from all case studies, aside from the need for dedicated research on the intricacies of the impacts of participation for CPI, is that "Participation is limited by informational asymmetries".<sup>45</sup> Information

43 See Chapter 9 in this volume.

44 See e.g. A. Delwiche and H.J. Jacobs, *The Participatory Cultures Handbook* (Routledge 2012), at 3–9.

45 Chapter 9 in this volume.

was hypothesized to be a separate factor and is explored in the following subsection.

### 2.3 Information

As pointed out in the Introduction, information relates to the extent to which “climate change-related data and analyses are available” both to policy-makers and to the public. In our study, we decided to concentrate mainly on the latter because information for policy-makers is usually realized through consultation, and therefore we included it in our discussions of participation for this research (see above). The following discusses the main forms and examples of information in the case studies.

#### 2.3.1 Practices

Chapter 9 rightly distinguishes between reactive (and usually binding) information, intended as a duty of public authorities to inform the public upon request, and proactive (and usually non-binding) information, which is spontaneously provided by public authorities to raise awareness on climate issues and enable participation.

The right to access environmental information is entrenched in the Aarhus Convention, but there is no constitutionally protected duty in Austria at the *Bund* level, although a constitutional amendment is currently under discussion. In the Constitution of *Land* Tyrol, instead, information is conceived as an obligation for the government to inform the population about matters of general interest, rather than an individual right. In Italy, the Constitutional Court’s position is that the right to access information is entrenched in the right to freedom of thought, protected in the Italian Constitution. The implementing legislative framework implies both a general right to environmental information, which does not require any specific interest to be demonstrated, and a duty for any administration to proactively collect and disseminate information.

Within these different theoretical frameworks, the dissemination of climate-related information to the public is achieved in very similar ways in all case studies, and namely through the publication of climate and energy reports (especially in the Austrian cases), dedicated websites (for instance, in Italy, through the websites of APPA Trento and APPA Bolzano), the organization of informative events with specific target groups including the general public, initiatives in schools, and information campaigns via social networks (the latter is more established in Vorarlberg and in the Province of Trento).

Noteworthy examples of each of the forms of information described above can be found in all of the areas studied. In Tyrol, climate reports are updated regularly pursuant to the abovementioned Sustainability and Climate Strategy.

Dedicated websites have been created *inter alia* for the Energy Autonomy Strategy + in Vorarlberg and for the Climate Plan South Tyrol 2040 in the Province of Bolzano.<sup>46</sup> The Province of Trento, in cooperation with scientific experts (such as the University of Trento, Fondazione Edmund Mach, Fondazione Bruno Kessler, and MUSE), has created a general information portal on climate change, the *Climatrentino* website, where climate data of regional relevance are presented and constantly updated. The Province of Trento has also produced teaching material on climate change to be used in schools. Awareness-raising campaigns are also organized in the Province of Trento as part of a general climate-dedicated initiative, the so-called *Forum provinciale per i cambiamenti climatici*. Information campaigns are furthermore promoted through traditional media, such as the Green Mobility initiative in the Province of Bolzano, which is often covered in local newspapers. Examples of targeted information events abound in the Austrian *Länder*, such as the Double Plus Program in Tyrol and the *e5-Gemeinden* program and the V-Mobil initiative.<sup>47</sup> In the Province of Bolzano informative events on energy policies were organized in pre-Covid times in municipalities within the context of the *ComuneClima* initiative.

### 2.3.2 Evaluation

As highlighted in section 2.2.2 above, information sharing lies at the core of most public participation initiatives in the territories analyzed. Given the complexity inherent in regulating climate change and the scientific uncertainties surrounding the actions needed to ensure effective mitigation and adaptation, information is certainly a key factor in enabling participation. As emerged from interviews, participation may be prevented when information is not sufficiently shared before participatory processes take place. This is reflected in the obligation to share expert reports in the course of EIA and SEA processes, but it is equally important, and perhaps even more decisive, in voluntary participatory mechanisms. The ability of the general public to effectively engage in consultative or more deliberative decision-making processes on climate matters is in particular likely to be affected in a negative way by a lack of supporting information. In this sense, the hypothesized disaffection of young people with regards to participatory mechanisms could be explained in light of the general absence of information campaigns targeting young people, as well as the preference for participation via protest actions pointed to earlier (an exception is

46 Some civil society interviewees in the Province of Bolzano highlighted, however, that relevant information often remains undisclosed and is not provided even upon request.

47 See Chapter 9 in this volume.

the Province of Trento, which for instance elaborated training materials for schools and pays particular attention to the involvement of youth). As with young people, marginalized groups, such as the elderly, migrant communities (with particular attention to the languages in which information is provided), and economically disadvantaged groups that might not have regular access to internet and social media campaigns might also need more targeted information campaigns. Finally, although information is a precondition for promoting participation and must be generally improved, alone it is certainly not sufficient to ensure participation. Information, moreover, if properly shared, may be a powerful parameter for the public to check on climate policies, demand more climate action, and, ultimately, to steer leadership.

## 2.4 *Leadership*

Leadership is defined in the Introduction as the existence of a “clear impetus for CPI from politicians or top-level managers” at the subnational level. The following discusses whether the case studies reveal the existence of a separate leadership additional to that ensured by the European and national levels. To this end, it shows how urgent climate change is perceived to be and depicted as such by politicians and top-level managers in the case studies, with reference to specific initiatives and political programs.

### 2.4.1 Forms of Leadership

First of all, the EU’s leadership position is undisputed and is referred to in numerous interviews.<sup>48</sup> EU leadership may take the form of some Member States pushing for more climate-friendly policies and produce emulation in other Member States (such as Germany).<sup>49</sup> Most importantly, however, EU legislation produces a knock-on effect on subnational policies, which in most of the cases incorporate EU standards on climate change into subnational policy documents.<sup>50</sup> This is particularly evident in the transport and energy sectors, but has some effects also on spatial planning due to the close link between this policy sector and transport and energy.<sup>51</sup> In this sense, references to EU law in subnational documents are abundant.

48 In contrast, the role of the national level did not emerge as critical in terms of leadership in the interviews.

49 See Chapter 1 in this volume.

50 The extent to which subnational governments may anticipate EU developments is briefly discussed in section 2.1.3 above.

51 As explained in section 1.

The strong repercussions of EU leadership at the subnational level can be explained by three factors. First, although climate-related standards are usually binding, they are normally contained in EU directives, legislative instruments that leave plenty of room for maneuver with regard to implementation at both the national and subnational levels. Second, EU leadership is enhanced by the role of the Commission, which oversees implementation processes in Member States and provides these with assistance that can be targeted to specific subnational needs. The Commission also supports increased leadership in climate action by subnational and local governments through several initiatives, such as the Covenant of Mayors and the related Covenant of Territorial Coordinators, made up of regional or provincial governments supporting the municipalities that are members of the Covenant of Mayors. Third, EU leadership is also ensured because EU cohesion programs provide dedicated funding for climate protection initiatives at the subnational and local level.

Concerning political leadership, while the level of impetus coming from the adoption of climate-related strategies is very similar across all cases, the Austrian *Länder*, and especially Vorarlberg, have prioritized climate protection in much more explicit terms. Both Tyrol and Vorarlberg, the latter as early as 2008, have enshrined climate protection in their subnational constitutions.<sup>52</sup> Vorarlberg, however, has taken more operational initiatives to translate leadership into political action, which are far from present in the other cases. In 2019, the State Parliament (*Landtag*) of Vorarlberg declared a climate emergency.<sup>53</sup> Following this declaration, Vorarlberg announced that it would carry out a preventive check on all of its new legislation in light of climate-related requirements with a view to mitigation and adaptation. Furthermore, Vorarlberg is preparing a general law amending all existing legal provisions to adapt these to the challenge of climate protection. Notwithstanding these operational measures, the issue of whether they will translate into more effective climate measures and more effective CPI is far from clear, and has not been the object of specific analysis in this book. A limited consideration of emissions trends shows that there was no reduction of GHG emissions to date compared to 1990 levels in the case studies.

If we look at party politics, no strong leadership can be detected at the subnational level. The governing political parties in Bolzano and Trento placed

52 See Chapters 2 and 7 in this volume.

53 For an overview of all governments that made such a declaration, see <https://climateemergencydeclaration.org/climate-emergency-declarations-cover-15-million-citizens/#nationalgovernments>.



no particular emphasis on climate issues in their electoral programs; the only reference was to a vague concept of sustainability. A more explicit focus on climate issues is instead present in the programs of all parties in Tyrol and Vorarlberg.<sup>54</sup>

Regarding leadership in administration, interviews were not conclusive. It could be said that there is some leadership in policy-making as testified by the long-term vision provided for in the cross-sectoral and sectoral strategic documents adopted in all case studies. However, there is no binding requirement at the subnational level to integrate climate change into sectoral policies. This occurs mostly as a result of contingent strategies that may change in the future, and therefore on a voluntary basis. Given the dependence of informal mechanisms of cooperation on the personal relationships between policy officers and policy departments, it can be assumed that the impetus towards sectoral CPI depends partially on the initiative of individual administrative officers. However, more precise timelines to verify the effectiveness of commitments are lacking. More generally, less sense of direction can be derived from climate-related subnational strategies when it comes to monitoring implementation and enforcing rules.

#### 2.4.2 Evaluation

Leadership is less discussed and less acknowledged as a factor for CPI at the subnational level, but its propulsive function cannot be underestimated, at least when it comes to determining strategic priorities. Whether there is room for a subnational leadership independent from the national and European levels is difficult to ascertain in the areas we studied. We have pointed out above that in very limited cases the subnational level has promoted innovation and anticipated European targets. This is also true for the municipal level: municipalities adhering to the Covenant of Mayors show a high level of local leadership that is anchored to EU goals but this initiative promotes actions that are additional to what is required by EU law (which, for instance, does not provide explicit climate obligations for municipalities). Furthermore, among the case studies analyzed, Vorarlberg clearly stands out in terms of leadership in that it has created operational mechanisms to realize CPI.

There is also some evidence from the interviews to suggest that leadership may be influenced by participation or, more broadly, the engagement of civil

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54 See Chapter 7 in this volume.

society and citizens. Chapter 9, for instance, referred to the influence of Fridays for Future movements on the political agenda concerning climate change.<sup>55</sup>

Finally, leadership appears to be related to horizontal coordination: the level of commitment of policy officers in different sectors is likely to influence the informal mechanisms of coordination, which in most cases are influenced by personal relationships. Conversely, leadership at subnational level needs to be supported by strong horizontal coordination at subnational level, because our cases indicate that visions for CPI need to be sustained by structures.

## 2.5 *Funding*

Funding is intended in Chapter 8 as the spending capacity of the subnational governments analyzed. There is little doubt that funding can facilitate CPI, since it seems to be instrumental for all the dimensions described in the previous sections. Funding is important for coordination because it allows institutions to operate. Funding is essential in enabling participation, also by means of more targeted information campaigns that need to be financed with public money. It is also essential to operationalize leadership, since visions without funds are not achievable. The extent to which the study areas have climate-dedicated funding is difficult to answer for the reasons that are explained in the following.

### 2.5.1 Critical Overview of Subnational Budgets

Climate-related spending policies are highly fragmented for two main reasons. First, dedicated climate-budgets do not exist in the case studies, with the exception of the Province of Trento (Climate Fund – *Fondo Clima* since 2010). This lack of dedicated climate budgets likely reflects the lack of organizational units (administrative departments) dedicated solely to climate change in the study areas. Second, climate protection can be the indirect result of activities that have a different primary interest at their core. For this reason, relevant budgets are not only those explicitly classified as related to environmental protection and sustainable development, but also all sectoral budgets financing sectoral policies that pursue climate-related objectives. Sectoral budgets, however, do not explicitly earmark climate-related resources and this exacerbates the difficulty in interpreting budgetary data for the purpose of CPI. Specific

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55 Chapter 7, however, acknowledged that the influence of civic movements on institutional climate agendas might be considered more as the expression of those movements' leadership rather than leadership of both the administration and political actors.

climate-related budgets in the Austrian cases may also derive from the programs developed by the *Bund* or the *Länder* under the private administration clause (*Privatwirtschaftsverwaltung* – articles 17 and 116 B-VG).

Fragmentation also prevents the comparability of data. Comparing data across study areas is also problematic for demographic reasons in Austria, since differences in the number of inhabitants between Tyrol and Vorarlberg are substantial (more than 750,000 in Tyrol and less than 400,000 in Vorarlberg). In Italy, due to the reform of 2016 that changed accounting rules, data preceding the reform are not comparable with post-2016 budgets. Finally, comparability is negatively affected by the fact that it is difficult to distinguish between funds dedicated to the running costs of the administrative units that implement climate-related policies and portions of the budget that are specifically dedicated to either implementing climate-related policies or steering private activities.

Notwithstanding these limitations, some trends emerge. In the Province of Trento, the funds allocated to *Fondo Clima* have decreased over time. Yet in climate-related sectors, a continuous increase in budgets across all of the areas studied was seen. In Austria, no available data were available for the sectoral budgets of spatial planning and water management. A slight decrease in the funds allocated to the energy sector for 2020 was instead observed compared to previous years. This sector again includes, across all case studies, a high share of monetary incentives and subsidies to promote the transition to RES and energy efficiency. Although data on the oscillation of climate-related budgets across the years are difficult to interpret, the authors of Chapter 9 conclude that, based on the long-term climate objectives of the selected subnational governments, funding in these matters will be increased in the future. This is also likely in light of the fact that EU funds complement dedicated national and subnational budgets in a way that will likely increase public expenditure in climate-related matters.

### 2.5.2 Evaluation

The lack of a clear understanding of the resources available to finance public expenditure in climate-related matters is certainly a problem for a discussion evaluating the importance of this factor for CPI, *inter alia* because administrations cannot count on a clear overview to plan future actions. A dedicated climate budget would improve this aspect, and would also ameliorate implementation as a means “allowing the political statements to be translated into concrete initiatives and ... enabling the impact of these actions – including the

economic impact – to be assessed in the appropriate fora”.<sup>56</sup> Closer scrutiny of public expenditure would in turn highlight any possible waste of resources, and could create incentives for virtuous competition in that subnational governments would be required to justify why they spend less than others on climate issues.

Another important consideration is that, although the availability of funding is a precondition for all dimensions, funding alone cannot trigger the necessary mechanisms of coordination, participation, information, and leadership.

### 3 Concluding Remarks and Additional Research Avenues

This study demonstrates a strong correlation between the five dimensions of coordination, participation, information, leadership, and funding with CPI. In particular, dedicated coordination mechanisms, leadership at subnational level, dedicated funding, a sufficient degree of information, and more participation in both policy-making and implementation mechanisms with increased clarity on how suggestions are incorporated into final documents are deemed to play a particularly significant role in CPI.

Although all of these factors are necessary to achieve CPI, they are not in themselves sufficient to trigger increased CPI. This is due to two main reasons. First, the quality of CPI ultimately depends on the quality of the processes put in place to create coordination, participation, and information. Second, all factors seem to be intertwined with one another and mutually constitutive.

Concerning the quality of process, the existence of a functioning structure (for instance, climate coordination units within the administration, mandatory participation processes with information campaigns targeted to different groups) is essential for creating the environment, or so to say the culture that is more conducive to CPI. Participation is in this sense perhaps the most nuanced factor: it is important (although not always sufficient) for legitimacy, but there are clear wishes for it to be more substantive that are also linked to critical comments about scope and inclusivity, the role of organized actors, and more.

Structure is certainly a strong determinant also when it comes to leadership and funding. For the former, procedures to prioritize climate change in policy-making appear to be necessary to operationalize leadership. Furthermore, stable coordination units guarantee CPI over time (*infra*). Concerning the latter,

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56 See Chapter 8 in this volume.

dedicated budget lines would ensure more planning capacity and enable more public control.

While coordination seems to be equally important for both policy-making and implementation, the relevance of the factors described may change depending on the stages of the policy process. Participation is more established in policy-making but our study demonstrates that it should play a stronger role in policy implementation. This would allow the concerned public both to understand the extent to which their proposals in decision-making have been translated into applicable standards and to make sure that these standards are followed up. In both respects, proactive information campaigns become crucial, because it is extremely difficult to judge implementation solely on the basis of information available on institutional websites. Leadership, instead, seems to be more relevant to policy-making, for instance in the case of Vorarlberg, which operationalized its declaration of a climate emergency with the institutionalization of a preventive climate check of proposed laws/acts. Funding is certainly more critical when it comes to policy implementation.

Regarding the connections existing among factors, these are multiple. The dimensions described are so interlinked with one another that they create an almost inextricable web in the contexts analyzed. Some examples of bilateral links are useful to illustrate this point.

- 1) Vertical coordination and leadership: the existence of coordination among levels may promote the diffusion of policy innovations adopted at subnational level, thereby enhancing subnational leadership with respect to the other governance levels. This has occurred in a very limited way in the case studies.
- 2) Horizontal coordination and leadership: more structure for horizontal coordination (either dedicated agencies in Italy or more resources and more clarity on their mandate in general) may lead to enhanced leadership, intended as the capacity of coordinating units to effectively influence policy-making in climate-related sectors. Furthermore, more leadership, intended as the level of commitment of single officers, may lead to more established practices of informal coordination. In this sense, a critical point is that horizontal coordination and leadership in the case studies are too dependent on individuals, and cannot be guaranteed over time in the absence of dedicated mechanisms.
- 3) Horizontal coordination and participation: coordination is necessary for participation, in that participation in the case studies was most commonly envisaged for the elaboration of broad strategies that require cross-sectoral coordination.

- 4) Information and participation: the former should precede the latter since full, prior, and undisclosed information is a prerequisite for any successful public participation process. A critical point in this respect is represented in the case studies by the presence of information asymmetries between the administration and subjects who would like to take part in public decision-making, thus hindering participation.
- 5) Leadership and information/participation: a good level of public information leading to a good level of participation has repercussions on leadership, since well-informed citizens are able to act as the watchdog of public decision-makers using the information at their disposal as a parameter to check on the adoption of climate policies, demand more climate action, and, ultimately, steer leadership. In this sense, imbalances in participation, that is the fact that some actors (mostly organized ones) are more able (or even the only ones authorized) to intervene in public decision-making, may have different effects on the capacity of public authorities to take the leadership in climate protection. Even subjects excluded from the institutional channels of participation, however, such as usually youth in the case studies, may have a way to influence policy-making and leadership through social movements, such as Fridays for Future. Whether political and administrative leaders reacting to CSOs and civic movements' requests is an expression of their leadership is deemed contentious by some commentators, since civic movements are expressions of their own leadership.<sup>57</sup> Indeed, uncovering the influence that civic movements' leadership has on CPI was not part of this research, since civic movements are never the only players seeking to shape climate policy or any policy.<sup>58</sup> That is why this book focuses instead on how the political and administrative leadership of institutional figures influences policy-making in climate matters and CPI.
- 6) Participation and coordination: the level of integration of expert opinions in public decision-making that is achieved through consultation enhances the capacity of sectoral policy officers to understand the importance of CPI, and therefore of more established cross-sectoral coordination.

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57 We thank one of the anonymous peer-reviewers for drawing our attention to this point.

58 This also leads to the need for particular methodological approaches to deal with the complexity of influence. See e.g. L. Bosi, M. Giugni and K. Uba (eds.), *The Consequences of Social Movements*. Cambridge (Cambridge University Press 2016). See also Introduction in this volume.

- 7) Funding and all dimensions: funding is linked to coordination because structure needs dedicated funding; it is connected to participation, because this needs large-scale information campaigns and the overcoming of participation barriers that require public investment; it is related to leadership, both because visions need means to be implemented and because more transparent climate-budgets would allow for more public scrutiny.

The web of dimensions leads us to discuss some important cross-context findings. It emerges from all case studies that a long-term culture of participation does not mean anything on its own but needs to be backed up by structures (coordination and information above), which alone can ensure the quality of the participatory processes and therefore the relevance of participation for CPI. Another cross-context finding concerns the overarching importance of transparency, and therefore of information, for public budgets to be more predictable for policy-makers and accessible to the public, and as said for ensuring the quality of participatory processes. Finally, the importance of EU leadership, groupings, and funding opportunities for CPI is extremely clear regardless of context.

Are these findings applicable in other contexts? First, the conclusions discussed are relevant within the context of the case studies mainly for mitigation policies, but can give some guidance to policy-makers when developing or implementing urgently needed adaptation policies. Second, although the peculiarity of this research lies in the fine-grained level of the analysis, so that even the study of different Italian regions and Austrian *Länder* may give different results on specific dimensions, the same research questions and factors could be used to approach the issue of CPI in different study areas and systems of decentralized policy-making. The reflections on processes and structure made above are therefore suited to being extended to different contexts. An interesting issue to discuss in different contexts could be the relative importance of factors/dimensions, which in the cases analyzed in this book did not emerge as particularly crucial. In order to this point, however, a discussion on the effectiveness of CPI and how to evaluate it would be necessary.

It is undisputable that CPI needs to be studied further at the subnational level, since the intricacies of effectively achieving climate protection are embedded within these systems. This public endeavor is more urgent than ever and requires institutional and non-institutional actors at all levels to act in a collaborative way.



