

## Climate Governance and Federalism in Spain

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### 13.1 Introduction

Spain's geographical location strongly exposes it to global environmental challenges. The minimum temperature has increased over the last century by around 1.7°C and annual rainfall has been declining, while also becoming increasingly torrential (Greenpeace 2018). The most important economic sectors are considered potentially problematic for the environment: industry, tourism, transport, energy, and agriculture. The emergence of environmental policy as an independent policy area has been closely linked to an 'environmental consciousness' within public opinion that has been increasingly widespread since the 1980s due to United Nations summits, the rise of environmental NGOs, and serious environmental problems around the world.

The legal framework for climate policies derives from international treaties and European legislation as well as from the Spanish Constitution and the Statutes of the Autonomous Communities (ACs). In this regard the role of the central government in Spanish climate change governance has been characterised as falling between supranational demands for EU convergence and domestic regional divergence (Pérez Gabaldó 2013). Although the decentralisation process in Spain has been quite successful, for years now, experts have been calling for a revision of the Constitution in order to adapt the text to the current reality of the territorial model and to establish a framework granting unity and diversity and an equilibrium between shared rule and self-rule. In fact, due to regulatory overlaps and coordination deficits, economic policy, environmental protection, and energy policy are long-standing sources of tension between the central and AC governments and have been challenges to effective climate action over the past decades. Moreover, the last decade in Spain has been particularly turbulent in many aspects. Since 2015, due to the fragmentation and polarisation of the party system, no party has been able to form a stable governmental majority after elections. The fragmentation of the party system has

intensified since the 2019 general elections when twenty-two parties obtained representatives at the Congress of Deputies, the lower house of the Spanish Parliament (Ramos and Alda 2020, 32).

Despite this, in recent years more systematic climate change strategies have been adopted in Spain at all levels. The first National Plan for Adaptation (NPACC) was adopted in 2006 closely aligned with the EU regulatory framework. The ACs have also adapted strategies related to climate change within their jurisdiction on environmental issues and climate-related sectors. Finally, several plans and programmes have been implemented at the local level.

This chapter provides a brief overview of challenges and commitments in the field of climate change in Spain, analysing climate governance in the context of Spain's federal system. It aims to show that, despite the numerous climate strategies and policies adapted at all territorial levels over the last decade, there are no formal vertical channels of influence for AC or local actors on policy formulation at the federal level, which limit climate policy diffusion at the vertical dimension. Moreover, the coordination mechanisms for the implementation of climate policies are not very effective and do not consider the early phases of public action nor the participation of all involved authorities. However, the ACs and local governments have ample room for policy experimentalism in adapting their climate change strategies to the peculiarities of their different territories. In this regard the Spanish State of Autonomies has provided a favourable context for dynamic processes of climate policy diffusion between ACs and local entities.

## **13.2 Climate Change in Spain**

Spain is distinguished by its high level of biodiversity, terrestrial and maritime protected areas, low degree of population density, and high concentration in urban areas (69 per cent population in areas with more than 50,000 inhabitants) (European Commission n.d.). But Spain is also severely challenged by climate change risks.

### ***13.2.1 Climate Change Challenges***

By EU standards, Spain has an extraordinarily high level of biodiversity. The country is ranked as the largest ecological reserve in Europe, with around 8,000 plant species, 540 bird species, 95 mammal species and 80 fish species. Spain has the largest terrestrial protected area in the EU – 138,000 square kilometres, which represents 27 per cent of the total area of the country (European Commission 2021). It also has a remarkable climatic variety, ranging from humid Atlantic conditions, with annual rainfall of more than 2,000 mm, to large semi-arid areas,

with severe hydrological stress, and cold alpine climates in some isolated areas (AEMET 2018).

Spain is also one of the countries in the EU most vulnerable to climate change. In 2020, the average temperature in the country was 1.7 °C higher than the average between 1850 and 1900, and the rate of warming has accelerated in the last few decades (AEMET 2021). According to the National Institute of Meteorology the years 2017 and 2020 were the hottest since the 1960s and summers are almost five weeks longer than at the beginning of the 1980s (Gobierno de España 2020a). The sea level in Spain has risen 13.5 cm since the 1990s (UNESCO, UN-Water 2020). Seven of the ten water basins with the greatest water stress in Europe are located in Spain, and almost 90 per cent of the extension of glaciers in Spain has disappeared since 1920 (Greenpeace 2018). It is estimated that 74 per cent of the Spanish surface is at risk of desertification (at different levels).

In the near future, key climate-related hazards are predicted to increase their effects and consequences. For example, heat waves, droughts, and extreme winds multiply the risk of wildfires. The area affected by wildfires in Spain in 2019 was 94 per cent higher than the average of the last decade (Greenpeace 2020). Several studies indicate that rising sea temperatures will lead to new and more extreme weather phenomena. Coastal flooding will become more extensive when the sea level rises, and heavy precipitation will increase the risk of landslides.

Over the period 1980–2019, Spain was the EU member state with the fifth highest economic losses in absolute terms caused by climate-related events. According to the NPACC 2021–30, the decrease in water resources due to changing precipitation patterns and longer droughts will have important implications for agriculture and livestock farming, urban supply, hydroelectric production, and ecosystems. Moreover, the spread of invasive species, as a secondary effect of climate change, could also have potential implications for human health (Gobierno de España 2020a). Although there are important national challenges, and the ACs share certain social and institutional characteristics, the ACs are affected quite differently by climate change risks because of their different geographical situations, environmental characteristics, and economic structures. For example, between 2050 and 2100 the risk of flooding could triple in the Basque Country, but Andalusia will suffer more frequent, longer, and more intense heat waves. In 2050, Murcia's own water resources will be 40 per cent less. Most Mediterranean ACs will notice an increased torrential intensity (Gobierno de España 2020a).

### ***13.2.2 Spain's GHG Emission Profile***

During recent years there have also been successful efforts to reduce carbon emissions. The emission rates are in line with the EU average (0.1)<sup>1</sup> and below the

Table 13.1 *Spanish national evolution of aggregate emissions*<sup>2</sup>

|                               | 1990    | 2005    | 2010    | 2015    | 2017    | 2018    |
|-------------------------------|---------|---------|---------|---------|---------|---------|
| <b>CO<sub>2</sub>-eq (Kt)</b> | 289.383 | 443.440 | 358.859 | 338.245 | 340.298 | 334.255 |
| <b>% Variation vs 1990</b>    | 100%    | 153.2%  | 124.0%  | 116.9%  | 117.6%  | 115.5%  |

Source: *Informe de Inventario Nacional de Gases de Efecto Invernadero* (2020).

average of the OECD countries (0.2). The Spanish greenhouse gas (GHG) emissions inventory estimates gross emissions of 313.5 million tons of CO<sub>2</sub> equivalent for the year 2019. This means a reduction in emissions compared to the previous year of 6.2% + 8.3% compared to 1990 and –29.3% compared to 2005 (Table 13.1).

In 2019, the main greenhouse gases emissions sectors were: transport (29%), industry (20.6%), electricity generation (13.5%), agriculture (12.5%), LULUCF<sup>3</sup> sector (12%), residential, commercial and institutional (RCI) (9%), waste (4.3%), off-road machinery (3.7%), refinery combustion (3.5%), and fluorinated gases (1.5%) (Gobierno de España, 2020b). Taking the year 1990 as a reference with 100%, the variations by sector have been in 2018: waste (138.9%), energy (118.9%), agriculture (107.0%), industrial processes and product use (93.7%).

### 13.2.3 *Spanish International Commitment on Climate Change*

The central government represents Spain at the international level as a subject of public international law and is entitled to conclude international treaties on all subject matters. Commitments derived from these international treaties become part of Spanish law and are binding for the ACs. The central government is committed to existing multilateral environmental protection regimes and has ratified all main international and European agreements, strategies, or programmes related to climate change. These include the United Nations Framework Convention on Climate Change; the Paris Agreement on Climate Change; the Convention on Biological Diversity; the United Nations Convention to Combat Desertification; the Sendai Framework for Disaster Risk Reduction (2015–30); the 2030 Agenda for Sustainable Development (UN GA 2015); and the Protocol to the Barcelona Convention on Integrated Coastal Zone Management of 1995.

The main EU Strategies represent a further framework of domestic climate policies – for example, the EU Strategy on adaptation to climate change (European Commission 2013); the European strategic long-term vision for a prosperous, modern, competitive, and climate neutral economy (European Commission 2018);

the European Green Deal (European Commission 2019); and the Governance of the Energy Union and Climate Action.<sup>4</sup>

#### ***13.2.4 Climate Objectives in Climate Law and Policies in Spain***

Spain's policies regarding sustainability, protection of its exceptionally diverse natural habitats, or general environmental quality have been ineffective for decades. Since 2018 a number of new initiatives have been adopted. Complying with the obligations stated in the EU regulation on Governance of Energy and Climate action, in December 2020 Spain adopted the National Integrated Energy and Climate Plan (ENCP) 2021–30, which includes measures on both mitigation and adaptation. The long-term goal of the plan is to make Spain carbon neutral by 2050; achieve a 90 per cent reduction in GHG emissions from 1990 levels; and, also by 2050, base the electricity system exclusively on renewable sources of generation. Meanwhile, the National Plan for Adaptation to Climate Change (NPACC) for the period 2021–30 was approved in 2020 following a joint agreement with the ACs. The Plan establishes strategic objectives and defines a system of indicators for impacts and adaptation to climate change, as well as requiring the preparation of risk reports.

Following years of work, in 2021 the *Climate Change and Energy Transition Law* was passed (Law 7/2021, of 20 May). This establishes the following minimum national targets for the year 2030 (article 3.1):

- Reduction of greenhouse gases emission by at least 20% compared with 1990.
- Increase in renewable energy to at least 35% of final energy consumption.
- At least 70% of electricity produced from renewables.
- Improving energy efficiency by reducing primary energy consumption by at least 35% from the baseline in accordance with EU regulations.

### **13.3 Climate Governance and Federalism**

The decentralisation process in Spain started at the end of the 1970s, after the Franco dictatorship, in parallel with the transition to democracy, economic development, and administrative modernisation. In 1986, Spain became a fully-fledged member of what was then the European Community. Even though the Constitution of 1978 eschewed the term 'federation', over the past decades the Spanish model of territorial administration, known as the State of Autonomies, has come to exhibit the basic structures and processes typical of federations and can be defined as a federation in practice, if not in name (Watts 2010). The seventeen ACs are the constituent units, in addition to which there are two autonomous cities, fifty

provinces, and 8,124 municipalities. All levels have their own legal status; however, the provinces and local level have only administrative, and no legislative, autonomy.

### ***13.3.1 The State of Autonomies and Climate Governance***

The Constitution divides powers such that some are exclusive to the central government, while the ACs are able to assume in their Statutes of Autonomy all matters not allocated to the central government, as well as the legislative development of the (central government) framework legislation and the implementation of central government legislation (Tudela and Kölling 2020). In this regard power is shared between both layers of government. This enables the central government to define nationwide standards and the ACs to adjust, at least to some extent, those laws to their own preferences. Over the last forty years, ACs have adopted their own Statutes of Autonomy defining their institutions and powers and they have assumed responsibility for the provision of a wide range of public services of a regional or local nature. There is not a specific constitutional provision for ‘climate change’ issues, which are considered as ‘environmental’ matters. While environmental protection is a shared responsibility between the two orders of government, with the central government establishing the legislative framework in which the ACs can legislate according to their own preferences, ‘climate change’ issues also concern ‘electricity, energy market and the general coordination of the economy’ clauses, and these are exclusive powers of the central government.

Although article 149.1.1 SC reserves for the central government power in respect of ‘international relations’, the so-called international clause does not exclude the ACs acting at international or EU level if their own powers are affected. However, the Constitutional Court determined that the ACs’ activities at international or EU level have to be within the framework of the central government’s policies. According to general constitutional doctrine, either the central government or the ACs may assume responsibility for the implementation and transposition of EU Law. In this regard, responsibilities regarding the domestic implementation of international commitments, environmental issues, energy production, natural resources, public emergencies, or natural disasters are shared between the two orders of government.

Since 1978, the Spanish Constitution has been amended only twice, both times because of external pressure from the European Union. However, practically all seventeen Statutes of Autonomy have been modified and climate change clauses have been included in several statutes.<sup>5</sup> In particular, the so-called Wave of Reforms taking place in 2007<sup>6</sup> has been characterised as an example of emulation also regarding environmental matters, for example, the reformed Statues of Aragón and Castilla-Leon included powers over ‘policies that contribute to mitigating

climate change'.<sup>7</sup> Over the years, the Statutes have also included environmental powers by adding new categories such as 'ecosystems', 'biological corridors', or 'soil pollution'.

Given the fact that Spain has evolved since the end of the 1970s from a unitary state with a long-standing centralist tradition to a highly decentralised state without constitutional reforms, the Constitution approved in 1978 can be characterised by a certain openness and flexibility. But the 'openness and flexibility' as regards the division of powers and relations between the central government and the ACs and between the ACs themselves have given rise to, and continues to generate, conflict – especially in economic policy, environmental protection, energy, water, and emergency planning (Alberton 2020, 36). As a consequence of this, together with the fact that climate governance involves different powers belonging to both the central government and the ACs, the Constitutional Court assumed a specific role in determining powers and responsibilities in climate governance. Since 1980, environmental issues have been among the most conflictual issues for the Court, reaching a total of 200 appeals. Constant sources of dispute were protected areas, biodiversity, and forests. Other matters, such as water, land planning, and energy, were also highly controversial (Alberton 2021). In the many conflicts over jurisdiction brought before the Constitutional Court, the constitutional provisions on energy and economy coordination have been insistently applied contrary to the environmental clauses invoked by the ACs (Galera Rodrigo 2018). Moreover, implementing EU environmental law, the central government tends to invade AC powers (Nogueira 2012). Based on recent case law, some scholars have thus pointed to a re-centralization of environmental powers (Casado Casado 2018).

### ***13.3.2 The Institutional Framework and Intergovernmental Relations***

The Constitution does not establish an institutional framework that would reduce the conflicts of jurisdictions and facilitate continuing dialogue and cooperation between the levels of government. There is neither a permanent institutionalised representation of regional interests at the national level, nor a framework for intergovernmental relations (Tudela and Kölling 2020). Intergovernmental cooperation was only acknowledged in the Spanish legislative framework in 1992. Although the Senate is defined in the Constitution as a chamber of territorial representation (Art. 69), not only does it have only limited legislative power, of its 266 members, 208 are elected by popular vote, and only 58 members are appointed by the regional legislatures. As a consequence, it does not fulfil its ostensible function and does not work as a forum for the participation of the ACs in central government legislation and they have no right of veto over decisions that affect them (Aja 1999). Instead, the first chamber – the Congress of Deputies – has

become the central forum for intergovernmental negotiations especially for Autonomous Communities with strong regional parties (Rodríguez López et al. 2018, 230). Since some of the nationalist parties (particularly from Catalonia and the Basque Country) had enough seats in the Congress of Deputies, they became important actors with considerable bargaining power in cases of minority government (Field 2016). However, these parties are concerned overwhelmingly with regional interests, and their preferences for national-wide climate governance tend to be limited.

Nevertheless, the framework for cooperation and coordination between central and regional governments has developed over the past thirty years and vertical cooperation has improved. Since the beginning of the 1980s, cooperation between the central government and the governments of the ACs has been progressively assumed by sectoral conferences (*Conferencias Sectoriales*). These are multilateral cooperation bodies for specific policy sectors (e.g., the environment) and bring together central government and the ACs (Perez Medina 2020). Each sectoral conference has established a specific framework for cooperation at the administrative level, albeit with a very weak organisational structure. Whether sectoral conferences will be convoked, and which topics will be discussed, is a decision taken either by central government or if one-third of ACs convene a meeting (Colino 2021). Horizontal relations between the ACs have traditionally been weak. However, between 2004 and 2020 there was a significant improvement in these relations, at least in terms of formalised mechanisms (Ramos and Alda 2021).

There is no specific Climate Change Sectoral Conference, and those most closely involved are the Environment Sectoral Conference and the Energy Sectoral Conference and, until certain extent, the ones relating to Local Issues and Infrastructure and Land Management. In 2001, an Advisory Council on Environmental Policy for EU Affairs was created within the Environment Conference and was given responsibility for matters concerning environmental issues in EU affairs. However, the number of agreements reached between the parties as a result of negotiations on draft legislation has been very limited compared to other Sectoral Conferences (Alberton 2020). The agreements reached have mainly concerned the distribution of federal subsidies to the ACs in relation to environmental matters, as well as agreements on the transfer of funds for the management or execution of EU environmental measures, plans, and actions. During the preparation of the National Climate and Energy Plan (2018, 2019) the Sectoral Conference on the Environment met only three times; the conference on Energy met just once (Ramos, Alda, and Cicuéndez 2019); and neither the Conferences on Local Issues nor on the Conference on Infrastructure and Land Management was called at all. Meanwhile, Spain's peak intergovernmental meeting, the Conference of Presidents, bringing together the heads of government, has not discussed climate governance so far (Alberton 2020).

Besides the formal cooperation within the Sectoral Conferences, the Ministry for Ecological Transition and Demographic Challenge maintains informal contacts at the technical level with the ACs and the other public administrations. There are two further administrative bodies at the central level which collaborate on an ad hoc basis with the ACs and local authorities. The Spanish Climate Change Office is in charge of drawing up regulatory proposals for climate policy that are consistent with international and European commitments. The Institute for Energy Diversification and Saving is in charge of the preparation and implementation of climate change measures regarding energy, particularly energy efficiency.

Due to the specific features of the decentralisation process, bilateral cooperation between the central and AC governments has been constant since the creation of the Statutes of Autonomy (Ridaura Martínez 2007). Despite the progress made with regard to the multilateral cooperation mechanisms, bilateral cooperation is still preferred by several ACs. In light of this, the amendments to the Statutes of Autonomy during the last decade have institutionalised the bilateral commissions that are intended to enable permanent collaboration between individual ACs and the Spanish government. Only on rare occasions have the ACs and central government adopted regulations or agreements about environmental matters.

Over the past decades, several advisory or functional bodies have been established in order to facilitate collaboration and information sharing on climate change between the levels of government. However, their functions are not clearly defined, and their composition does not allow effective policymaking (Presicce 2020). Consequently, the effectiveness of these organisations has been low. The ACs take part in the National Council of Climate which was created in 1998 and involves the different ministries of the central administration (twenty-four members); the ACs (one representative for each of seventeen ACs); the municipalities and provinces (three members); and research institutions and social actors (twenty members). The Council prepares proposals and recommendations on climate change policies alongside the reports which are legally required in specific cases. They also participate in the Coordination Commission of Climate Change Policies, which ensures the coordination of climate change and adaptation strategies, and the goals on the prevention and reduction of GHG emission within the central administration, ACs, and local authorities, as well as with the National Council of Climate.

Recently, a further framework for cooperation has been aimed by Law 7/2021 on Climate Change and Energy Transition which has created an ostensibly new governance system. Article 37 creates the Committee of Experts on Climate Change and Energy transition, an advisory body that will prepare an annual report to be submitted and discussed in the Parliament and whose membership and working rules are still pending. Meanwhile, under the ambitious title of Inter-Administrative Cooperation on Climate Change and Energy, article 38 requires

that ACs provides yearly information on their Climate and Energy Plans to the Coordination Commission of Climate Change Policy. Even though these articles are qualified as ‘governance tools’, there is little evidence that they represent a significant improvement in multilevel coordination and governance. The Committee of Experts relates more to civil society participation and knowledge diffusion than to governance and inter-territorial relations; regarding the information to be provided by the ACs on their climate planning, it does not include the early phases of elaboration but the post-approval ones, when they can be found in the official journal and websites.

In general, the coordination and intergovernmental relation in Spain, and also for climate policies, are addressed traditionally through collective bodies where ACs are represented – such as the Coordination Commission of Climate Change or the Sectoral Conferences. These provide little scope for real input into policymaking.

### ***13.3.3 Fiscal Federalism and Climate Governance***

As a share of GDP, in 2014 Spain had the 14th-lowest environment-related tax revenue among the OECD countries. Environment-related tax revenues amounted to 1.8 per cent of GDP, compared with an average of 2.0 per cent among OECD countries. Recently, the central government has introduced several new environmental taxes, but the ACs had started introducing environmental taxes a decade ago.

The system of revenue assignment between the levels of government in Spain is rather complex because of the marked asymmetry between the financing regime of the two ‘charter’ (*Foral*) regime ACs and the fifteen Common Regime ACs, and because of the complex variety of sources from which Common Regime ACs draw their revenues (López-Laborda et al. 2023).<sup>8</sup> The Common Regime is based on three pillars: (i) inter-governmental transfers and unconditional equalisation grants; (ii) shared taxes; and (iii) own-source tax revenues (Leon 2015). Own-source taxes at the level of the ACs include environmental taxes such as those on large commercial establishments situated on the outskirts of cities. Four main regional categories of the ACs’ energy/environmental taxes can be distinguished: atmospheric emissions, installations and activities that affect the environment, wind energy taxes, and taxes on wastewater. However, these taxes are usually focused on facilities and technologies (infrastructure) and not on damage and consumption, so their capacity to achieve change in environmental behaviour is very limited (Gago et al. 2019, 6). Although revenues from environmental taxes are still very low, the environmental tax regulation allowed ACs to adapt their policies to the peculiarities of their different territories (Lago-Peñas 2019).

### **13.4 Federal Governance and Climate Change**

Although decentralisation in Spain has been quite successful, experts have for years now been calling for a revision of the Constitution in order to adapt the text to the current reality of the territorial model and to establish a federal framework granting unity and diversity and an equilibrium between shared rule and self-rule. The shortcomings of the model can also be evidenced for climate policy. Although the ACs and local governments have ample room for policy experimentalism and for adapting their climate change strategies to the peculiarities of their different territories, there are no formal channels of influence for AC or local actors on policy formulation at the federal level, and processes of climate policy diffusion between governments can only be observed at the horizontal level.

#### ***13.4.1 The Central Government***

Most recent plans and strategies adopted by the central government have followed the timing and path set by the EU. In this regard, the central government could learn from other Member States' successes and failures in designing and implementing policies. The EU multilevel governance provided opportunities for policy learning by enabling policymakers to meet, communicate, cooperate, and exchange ideas with one another through various forums and institutions. Especially since 2000, national strategies and policies have been adopted in Spain mainly driven by commitments at European and international level and, particularly, by specific obligations stated by the European Directives on emissions, renewable energy, and energy efficiency – for example the approval of Law 1/2005 on permits for emissions trading and the national plan for the allocation of greenhouse gas emission (2005–7) followed the EU Directive 2003/87/EC, and the National Action Plan on Renewable Energies (2011–20) adopted in 2009, followed the EU Directive 2009/28/EC. In 2021, after a decade of negotiations, Spain finally adopted its first Climate Change and Energy Transition Law. Although the law is more ambitious in certain areas than similar laws in other EU countries, the law has been requested by the EU for a long time.

#### ***13.4.2 The Autonomous Communities (ACs)***

The involvement of ACs in the setting up and implementation of national strategies, plans, or laws on climate change has been minimal, but the ACs did not demand more participation and focused individually on designing and implementing their own regional climate change strategies.

The first NPACC adapted in 2006 was discussed at the Environment Sectoral Conference but the ACs were left aside in the decision-making process, since there

are no legal or institutional provisions for them to play any role at all. Moreover, during the preparation of the ENCP, there were no specific meetings organised for the Sectoral Conferences on Environment and on Energy.

There has been further coordination through informal working groups of which we do not know their composition or their rules of operation. In this regard, the current NPACC 2021–30 foresees the participation of the ACs on the implementation phase in several coordination and advisory forums. Most of these working groups reinforce the inter-institutional coordination, both in its intersectoral dimension and its territorial dimension (with special attention paid to the connection between the Central Administration, ACs, and local administrations). For example, the Impact and Adaptation Working Group brings together departments of the Central Administration and the ACs with the general objective of coordinating and integrating the different strategies and adaptation plans. The current NPACC states that its aim is to provide for a high degree of transparency of these bodies by laying down their functioning rules.

But ACs introduced proactively their own policies. Some ACs were actively involved in climate change governance long before the central government (Table 13.2). The ACs of Andalusia and the Basque Country had already adopted climate/environmental strategies in 2002 and Galicia in 2005 long before the first National Plan for Adaptation was adopted in 2006. Five ACs adopted strategies against Climate Change in 2008 and four ACs adapted their strategies in 2009. In this regard, ACs' governments could learn from one another's successes and failures in designing and implementing policies. Over time, ACs with a longer tradition of action on environmental issues developed expertise and infrastructure to implement climate change strategies. These ACs were also better prepared to develop policies related to climate and energy.

Over the past decade all ACs have adopted strategic frameworks, action plans, and/or programmes both on mitigation and on adaptation to climate change (Table 13.2). This trend can be explained by competition in the adaptation of climate policies between the levels of government. However, such competition did not only relate to the aim of adapting the best strategies, but also to the possibility of getting EU funding for regional projects. This may also explain the similarities among the ACs' strategies. Objectives, structures, and scopes of the frameworks have been emulated among ACs. For example, most strategies have common objectives regarding the reduction of GHG emission, but also different targets reflecting local realities such as geographical, economic, and environmental characteristics (Table 13.2). In addition to most strategies having a similar structure, there are also similarities with the structure of the national plans. The majority of ACs adopted plans instead of climate change laws in order to avoid constitutional conflict with central government. Regarding the institutional

Table 13.2 *Main climate change plans and objectives by AC*

|                  | Strategies adopted before 2020  | Strategies adopted after 2020  | Climate objectives, e.g. reduction of GHG                    |
|------------------|---|--|--|
| Andalusia        | Andalusian Climate Change Strategy 2002<br>Andalusian Climate Action Plan 2007–12   | Andalusian Climate Action Plan (2020)  | ETS <sup>9</sup> : –18% to 2005                              |
| Basque Country   | Basque environmental strategy for Sustainable Development 2002–20<br>Basque Plan Against Climate Change 2008–12   | Basque Country Climate Change Strategy 2050 (2015)   | 2030: –40 to 2005<br>2050: –80% to 2005                      |
| Galicia          | Galician Climate Change Strategy 2005   | Galician Strategy on Climate Change and Energy 2050<br>Energy and Climate Integrated Regional Plan 2019–23 |  |
| Murcia           | Regional Strategy against Climate Change 2008–12  | Mitigation and Adaptation Strategy for Climate Change (2019)   | 2030: 26% to 1990 ETS<br>40% to 1990 total.                  |
| Rioja            | Regional Strategy against Climate Change 2008–12  |  | 2012: no more 37% to 1990                                    |
| Navarra          | Strategy and Action Plan against Climate Change 2008–12<br>Navarra Strategy of Climate Change 2010–20   |  | 2020: –20 to 2005<br>2030: –45 to 2005<br>2050: –80% to 2005 |
| C. Valencia      | Valencian Strategy on Climate Change 2008–12<br>Valencian Strategy on Climate Change 2013–20  | Valencian Strategy on Climate Change and Energy 2030   |  |
| Balearic Islands | Action Plan to fight against Climate Change 2008–12<br>Balearic Strategy on Climate Change 2013–20<br>Mitigation Action Plan against Climate Change 2013–20 |  | 2030: 40% to 1990<br>2050: 90% to 1990                       |
| Aragon           | Aragonese Climate Change and Clean Energy Strategy 2009–18  | Aragonese Climate Change Strategy. Horizon 2030  | –40% related to 1990<br>–26% ETS to 2005                     |

Table 13.2 (cont.)

|                    | Strategies adopted before 2020  | Strategies adopted after 2020                            | Climate objectives, e.g. reduction of GHG                              |
|--------------------|---|--|--|
| Asturias           | Plan to Monitor greenhouse gas emissions (2009)   |  |  |
| Extremadura        | Climate Change Strategy for Extremadura 2009–12<br>Extremadura Climate Change Strategy 2013–20          |  |  |
| Castilla y León    | Regional Strategy of Sustainable Development 2009–14<br>Regional Strategy on Climate Change 2009–12–20. |  |  |
| Castilla-La Mancha | Climate Change Regional Strategy. Mitigation and Adaptation 2010–12–20                                  | Strategy of Climate Change. Horizon 2020 and 2030 (2019) | 2020: 10%ETS. 21% the rest= –15%<br>2030: –20% ETS                     |
| Madrid             | Air Quality and Climate Change Strategy 2013–20. Blu+ Plan  |  | 2020: –20% to 2010   |
| Catalonia          | Catalonian Climate Change Adaptation Strategy 2013–20   | Catalonian Climate Change Adaptation Strategy 2021–30    | 2030: –40% to 1990<br>2040: –65% to 1990<br>2050: –100% to 1990        |
| Canary Islands     | Canarian Strategy on Plastic Containers 2014–20   | Canarian strategy against Climate Change (2020)          | 2010: 36.7% to 1990, –3.3 to 2005<br>2015: 22% to 1990; –13.7% to 2005 |
| Cantabria          |   | Climate Change Action Strategy of Cantabria 2018–30      | 2020: –10% to 2005 ETS<br>2030: –26% to 2005 ETS<br>2050: –80%         |

*Source:* Own elaboration based on Autonomous Communities official webs and Official Journals.

framework there is further evidence of emulation. Most ACs created similar specific regional agencies with the objective of coordinating energy and/or climate issues. The ACs also created inter-departmental bodies, or agencies, to coordinate actions relating to climate change within their own territory. Moreover, in line with efforts at the national level, the ACs built up consultative participation bodies that bring together different social, economic, and environmental organisations and scientific institutions.

There has also been a certain divergence between the climate objectives by ACs (Table 13.2) which can, to a certain extent, be explained by elements of partisanship. The presence of co-partisans in central government (vertical partisan congruence) may produce objections to the introduction of innovative climate objectives and/or strategies. Moreover, party ideology is a further factor in explaining the divergence, especially regarding the introduction of environmental taxes. There is a higher probability of environmental taxes being introduced by left-wing governments. In ACs where the conservative Popular Party has traditionally governed (Castilla y León, Galicia, Madrid) less ambitious targets have been set. However, most AC governments are coalitions of different parties which reduces the partisan effect on climate governance.

Only three ACs – Catalonia, the Balearic Islands, and Andalusia – have reinforced their legal framework by enacting their own climate change laws. These laws were enacted even before the central level adopted the general law on climate change in 2021 (Cocciolo 2020). Although these regional laws display different approaches to climate strategy, all of them have created similar administrative bodies for coordination purposes within the public administration and for communication with civil society and committees of experts. In this regard, an ‘emulation’ process can be identified among the ACs. Furthermore, the constitutional court judgment on the Catalan law of Climate Change determined discussion in the rest of ACs. In this regard, the ACs of Andalusia and the Balearic Islands could learn from Catalonia’s failures in designing and preparing climate change law, while other ACs didn’t start with the legislative process. Catalonia adopted the first *Law of Climate Change*. The law was challenged in the Constitutional Court which deactivated important parts of the law, since the law not only addressed environmental protection but also the energy and economic sectors – the exclusive powers of the central government.

By contrast, the *Law of Measures Facing Climate Change and the Energy Transition* adopted by the AC of Andalusia excluded from its scope the restrictions of emissions which are within the responsibilities of the central government. Finally, *Law 10/2019 of Climate Change and Energy Transition* adopted by the AC Balearic Islands includes also lessons learnt from the Catalan experience in setting up a framework for energy transition in such way that it does not affect the

competences of the central government. In this regard the law was discussed *ex ante* in a bilateral commission between representatives of the central government and the AC in order to prevent a conflict before the Constitutional Court. Currently six others (Aragon, Asturias, the Canary Islands, Valencia, La Rioja, Navarre, and the Basque Country) are in the process of adapting their own climate change laws.

In short, we can state that, with or without specific regional legal frameworks on climate change, all ACs have adopted climate policies through general and specific strategies, plans, and programmes. The ACs' strategies can go beyond the national climate objectives if they are not interfering with the central government competence on 'energy' or on 'general economic planning', which prevents, for example, that the ACs increase the economic sectors which are submitted to the emission trading system.

### *13.4.3 The Local Level*

The participation of local governments in climate policies can be distinguished in three different stages. First: limited participation of local entities in the decision-making process for climate decision and planning being carried out at state and AC level, mainly during the setting up of the state and ACs' climate strategies. Second: sectoral policies and programmes that account for climate objectives are implemented at the local level, where, for example, urban regeneration programmes, housing policies, or waste management are within its competences. Third: the local level implements specific climate policies based on international agreements if they decide to join voluntarily. The Covenant of Mayors for Climate and Energy is an international agreement that provides common tools and methodological standards – as climate and energy planning templates – for local entities. Even the Covenant is based on a voluntary accession, and it has had high success among the Spanish municipal and provincial authorities.

In 2019, 29 per cent of the municipal and provincial governments in Spain (which account for around 62 per cent of the population) had concrete climate change adaptation plans. However, most large Spanish cities have adopted their own plans and strategies on environmental and climate issues. Some local entities have conducted specific local-scale vulnerability and impact analyses or developed adaptation plans, although the latter are still in the minority (FEMP 2019).

The Spanish Network of Cities for Climate is a thematic network created in 2009 by the Spanish Federation of Municipalities and Provinces and the Spanish Ministry for Ecological Transition for joint action on climate. As of 2019, the network included 316 Spanish local entities. According to Alda and Ramos (2018), local authorities also participate in the main transnational networks of local governments on climate and energy policies, both at European and global levels

Table 13.3 Spanish non-state governments in transnational networks

| Network  | Number of Spanish participants | Types of entities  |
|--|--------------------------------|--|
| <b>Local Governments for Sustainability (ICLEI)</b>    | 10                             | Municipalities (4); Provincial Councils (1); Municipal Association ( <i>Mancomunidades</i> ), Metropolitan Areas (5) |
| <b>Carbon Climate Registry</b>                         | 21                             | Municipalities (20), Provincial Councils (1)   |
| <b>Energy Cities</b>                                   | 5                              | Municipalities (4); Energy agency (1)  |
| <b>Climate Alliance</b>                                | 1                              | Provincial Council   |
| <b>Climate Group C40</b>                               | 6                              | Autonomous Communities   |
| <b>Covenant of Mayors*</b>                             | 2.151                          | Municipalities   |
| <b>Urban Development Network<sup>10</sup></b>          | 72                             | Municipalities, Provinces and Local Associations   |
| <b>Non-State Actor Zone for Climate Action (NAZCA)</b> | 365                            | Municipalities (359) Autonomous Communities (6)  |
| <b>Global Covenant of Mayors</b>                       | 2.151                          | –  |

Source: Alda and Ramos (2018).

(Table 13.3). These networks are examples of the dissemination of best practice in climate policy at the local level. For example, based on the Covenant of Mayors, several municipalities adopted harmonised Energy and Climate Change Plans. Some provinces joined the Covenant of Mayors as ‘coordinators’, also developing provincial climate policy on the basis of the setting up of the local plans. For example, the Province of Tarragona published public tenders for the adoption and implementation of Local Energy and Climate Plans. As a result, from 2013 to 2021, 184 out of 188 municipalities endorsed the Covenant of Mayors, and from 2015 to 2021, 144 municipalities adopted a Local Energy Plan. Similar to the AC level, the adaption of Local Energy and Climate Plans did not only relate to the aim of adapting the best strategies, but also to the possibility of getting funding for local projects. This may also explain the similarities among the municipal strategies.

Finally, the recent Law 7/2021 on Climate Change and Energy Transition requires urban mobility plans for municipalities above 50,000 inhabitants (article 14). Furthermore, in an indirect way it requires some other local policies aligned with Climate Change Strategies as the urban planning (article 21), fair transition (article 28), or public procurement (article 31).

### 13.5 Conclusions

Climate change governance in Spain is framed between international commitments and EU legislation and encompasses several levels of government and stakeholders. There are many strategies and climate policies at all territorial levels adopted over the past decade. But there are no formal channels of influence for AC or local actors on policy formulation at the federal level, which limits climate policy diffusion at the vertical dimension. Climate change governance encompasses various responsibilities, some of which are the exclusive responsibility of central government, while others are shared between the two levels of government. In addition, climate change governance is determined by EU objectives and policies. But it is only the central government that negotiates the targets set at the EU level and designs and presents the agenda for national climate change governance. The ACs are not involved in this decision-making process but have to implement and fulfil the targets. As we show coordination is not always necessary, and ACs could adopt their climate change plans and targets; however, coordinated action at the vertical and horizontal dimension could lead to a more effective approach.

In this respect, one can also see a certain retarding effect on Spanish climate change policy, as the ACs could not push for a national climate change law that included their preferences. The complexity and transverse character of climate change government requires a reinforced system of coordination and cooperation, but, although there are several coordination bodies, there are no intergovernmental institutions for coordination, decision-making and implementation of the climate change policies in Spain. The constitutional framework was, and is, a source of conflict too. The unclear division of powers not only create controversies when EU climate change measures have to be implemented in Spain, but regulatory overlaps in environmental protection and energy policy are long-standing sources of tension between the central and AC governments and have been challenges to effective climate action over the past decades.

However, the ACs and local governments have ample room for policy experimentalism. Climate change policy initiatives adopted by the ACs and local level entities at the beginning of the 2000s generated opportunities for policy entrepreneurship, and a chance for the ACs and local authorities to disrupt the status quo. The initiatives of the ACs and local governments have also allowed them to adapt their policies to the peculiarities of their different territories, although performance has been quite uneven and there are not official regional reports on implementation and its results. In this regard the Spanish State of Autonomies has provided a favourable context for dynamic horizontal processes of climate policy diffusion.

### Notes

- 1 Kgs./PPP -purchasing power parity of GDP.
- 2 Numbers in Kilo tonnes CO<sub>2</sub>-eq.
- 3 Land use, land-use change, and forestry.
- 4 *Regulation (EU) 2018/1999 of the European Parliament and of the Council of 11 December 2018 on the Governance of the Energy Union and Climate Action, amending Regulations (EC) No 663/2009 and (EC) No 715/2009 of the European Parliament and of the Council, Directives 94/22/EC, 98/70/EC, 2009/31/EC, 2009/73/EC, 2010/31/EU, 2012/27/EU and 2013/30/EU of the European Parliament and of the Council, Council Directives 2009/119/EC and (EU) 2015/652 and repealing Regulation (EU) No 525/2013 of the European Parliament and of the Council.* 2018. OJ L 328, 21.12.2018: 1–77. <http://data.europa.eu/eli/reg/2018/1999/oj>.
- 5 (1) The Statute of Cataluña, included in article 46, the powers over ‘prevention and control of activities that alter the atmospheric and climatic regime’.  
(2) The Statute of Andalucía, included in article 57.3, the powers over ‘regulation of the authorisation and monitoring regime for greenhouse gas emissions’.  
(3) The Statutes of Canary Island and Extremadura, included in articles 153.1.ñ and 9.1.33 respectively, the mention of ‘climate change’ as part of the environmental powers.
- 6 Between 2006 and 2011, eight out seventeen Statutes of Autonomy were reformed in a significant way adding new regional competences.
- 7 Articles 71.22 and 70.1.35 respectively.
- 8 Within the *Foral* ACs, the provinces of the Basque Country and the AC Navarra have the power to establish and regulate their tax systems, including the ability to collect, manage, and inspect all taxes with the exception of import duties and value added tax.
- 9 ETS: Emissions Trading Scheme.
- 10 Average number of participants in one of the network’s activities, held in 2016. The information is merely indicative.

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