



Central Governments in Multi-level Governance Systems Facing the Challenge of Jurisdictions with Rising Emissions¹

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Abstract

Central governments in multi-level governance (MLG) systems seeking to put in place effective climate-change policies face a challenge when emissions in some lower-tier jurisdictions are increasing, pushing total emissions higher. This paper explores the question of how central governments can address that challenge by comparing experiences in the European Union (EU), with declining emissions, and Canada, where emissions are rising. An important factor is the share of total emissions generated by the rising-emission jurisdictions. Central governments can more easily cope with a small share (the EU experience) than a large share (the Canadian experience). Another factor is the political power of the central government relative to that of the rising-emission jurisdictions whose policy it seeks to influence (greater in the EU than Canada). Given that the EU and Canada are both relatively decentralized MLG systems, more research is needed in federated states such as Australia, Germany, or the United States.

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Introduction

Countries of the world have not yet been able to reduce global greenhouse gas (GHG) emissions in part because reductions made by some countries are overwhelmed by increases in others. Between 2005 and 2016, the United States (US) and the European Union (EU) reduced emissions by 13.2 percent and 15.6 percent respectively. That combined reduction, however, was overwhelmed by China and India, which together account for about a third of global emissions and whose emissions rose respectively by 65.2 percent and 58.1 percent, contributing to the overall rise in global emissions of 19.3 percent during that time period (Environment and Climate Change Canada 2020b). Although perhaps less visible, the same phenomenon exists within multi-level governance (MLG) systems. Emissions may be declining in some jurisdictions, but that progress will be threatened if there are increases in others. In Australia, a number of states have seen their emissions go down between 2005 and 2018, but in the state of Western Australia they rose 21.1 percent (Australian Government 2020). Twenty states in the United States have experienced emission declines between 1990 and 2017, but the state with the largest emissions, Texas, has increased emissions by 16.8 percent over that time period (U.S. Energy Information Administration 2020).

This article examines the challenge facing central governments in multi-level governance (MLG) systems due to rising emissions in some of their lower-tier jurisdictions. Here the term ‘central governments’ refers to the EU governing bodies and national governments in federated states. The article offers comparative analysis of two central governments, the supranational European Union (EU) and the federated state of Canada, which have faced this challenge during the time period 1990 to 2018. The case study analysis allows a comparison of climate-policy success with failure: EU emissions in 2018 were 25 percent lower than they had been in 1990, while in Canada they were 21 percent higher. These start and end dates are used because 1990 is the base line for the United Nations Framework Convention on Climate Change (UNFCCC) and for many national policy processes, while 2018 is the most recent year for which data is available. Accordingly, a ‘rising-emission jurisdiction’ (REJ) is one in which emissions were higher in 2018 than in 1990, regardless of how its emissions may have risen or fallen between those dates. In both the EU and Canada, five jurisdictions had emissions greater in 2018 than 1990; of these jurisdictions, the REJs in each with the greatest emissions were Spain and Alberta, which are thus the focus of this article’s examination. Additionally, although it is not technically an REJ since its emissions have fallen since 1990, Poland is examined here because it had emissions higher in 2018 than when it joined the EU in 2004 and because it is a fossil-fuel dependent economy, comparable to Alberta.

The purpose of this article is to explore answers to this research question: *What determines the ability of a central government in an MLG system to cope with the challenge of the REJ phenomenon?* It is assumed here that central governments facing this challenge have three options. First, they can ignore the problem, counting upon greater decreases in declining-emission jurisdictions (DEJ) to make up for the increase in the rising-emission jurisdictions. Second, they can themselves implement a mitigation policy, using their own policy instruments, within the borders of the jurisdictions with rising emissions to the extent permitted by constitutional and legal division of powers. Alternatively, as a third option (or one in combination with the second option), they can use command or diplomacy, or both, to induce the REJs to change course and use *their* policy instruments to move to a track of declining emissions.

The feasibility of the first option depends upon the share of over-all emissions made up by the REJs. If that share is small, it is still possible to have an over-all decrease. If the share is large, this is less likely. The feasibility of the second and third options depends upon the institutional nature of the MLG system, combined with other factors, which determines whether the central government has the constitutional authority and political power necessary to itself regulate or to pressure the REJ to change course. Actions of the EU governing bodies and the Government of Canada are compared in terms of those three options.

The EU-Canada comparison poses the methodological problem of comparing an MLG system made up of sovereign countries with a system made up of subnational jurisdictions. Nevertheless, the comparison is valid for several reasons. First, both Canada and the EU are extremely decentralized MLG systems. Canadian provinces, while not sovereign, often act as the next thing to it, particularly in the case of the two who most often take the bit in their teeth, Quebec and Alberta. Secondly, there is now an established body of EU-Canada comparison literature (for instance, Schreurs (2011) and other works discussed below) which compares EU Member States and Canadian provinces. The following analysis contributes to this literature a new factor that can help explain the EU's success and Canada's failure to achieve their climate targets. This factor is the relative ability of central governments to address the problem of rising emissions in some lower-tier jurisdictions. Thirdly, even in comparisons of two federated states, such as the United States and Canada, there would be differences, such as checks and balances versus Westminster-style centralized government, which would make it less than a perfect comparison. Like all social science comparisons done outside the laboratory, the comparison is not perfect. Here, however, this comparison is valid since it compares two similar entities which have displayed differing abilities to address the rising-emission problem.

This article begins with a review of the factors currently identified as explanatory for the EU's success at reducing emissions, and Canada's failure to cut country-wide emissions, in order to determine how the REJ phenomenon relates to those factors. The viability of the first option, that is to ignore rising emissions trends in the REJ, is addressed by providing data on the relative shares of total emissions provided by REJs in the EU and Canada. This is followed by examination of how each central government has addressed the other two options – doing what it can to address the issue on its own or entering into diplomacy with the hope of encouraging the REJ to change course. The conclusion offers thoughts on implications of the case study findings for central governments in other MLG systems faced with the REJ challenge.

Current Explanations for the Different Emission Trajectories in the EU and Canada

Various factors are cited in the literature as influencing emission trajectories in the EU and Canada. One set of factors is the physical context. A higher rate of population growth in Canada than the EU has been cited as a factor explaining the difference in emissions (Harrison and Sundstrom 2007; Macdonald 2008; Macdonald et al. 2013). Another factor is geographic location. The EU is located next to Russia, while Canada neighbors the United States. Analysts have noted the different motivations of government arising from those locations: EU leaders in the past have wanted to increase use of renewable energy to decrease reliance on imported Russian gas because of fears Russia could turn off the tap for political reasons (Hayden 2011; Vogler 2011; Macdonald et al. 2013; Macdonald 2014; Schreurs 2011), although that concern seems to have lessened with

German support for a new gas pipeline from Russia. Conversely, Canadian policy makers have been subjected to pressure by business interests wanting to ensure that they would not lose competitive advantage by virtue of Canada adopting more ambitious climate policies than did the US (Macdonald et al. 2013; Macdonald and VanNijnatten 2010; Schreurs 2011).

When climate policy first came on the policy agenda in the 1990s, EU mitigation costs were reduced because circumstances other than climate policy had brought about emission reductions. This was particularly the case in the United Kingdom (UK), as it moved from coal to gas, and Germany, as it modernized the former East German industrial plants (Harrison and Sundstrom 2007; Macdonald et al. 2013; Schreurs 2011). Rabe (2007) says that almost half of the EU reduction between 1990 and 2004 came about for this reason. Nothing similar has occurred in Canada, other than the 2008 economic recession which brought about a reduction in Canadian emissions unrelated to policy (Macdonald 2020).

A second group of explanatory factors has to do with the differing motivations of EU and Canadian policy makers. EU leaders have been much more interested in putting in place effective and coordinated climate policy than have their Canadian counterparts. Schreurs and Tiberghien (2007) point out that leadership in the EU has come from many places, including individual Member States, the European Commission, and the European Parliament. In part, these leadership roles are explained by public opinion and pressure from environmental non-governmental organizations (Schreurs and Tiberghien 2007) but also by a perception on the part of those such as the European Commission that climate policy is a means of strengthening the underlying goal of European integration (Macdonald et al. 2013; Macdonald 2014). In addition, Member States already acting on the issue wanted to see EU policy impose similar costs upon their competitors in the EU (Hayden 2011; Macdonald 2014). Finally, all EU policy makers wanted to see the EU play a lead role on the issue in the global arena, perhaps because it could not compete with US leadership on military issues (Hayden 2011; Macdonald et al. 2013; Macdonald 2014; Schreurs 2011). Such a lead role was only possible if effective policy was being put in place within the EU.

While some have acted, no Canadian provinces have sought to influence national policy equivalent to that of Member States such as Germany (or, as Rabe (2007) notes, of US states such as California). While EU foreign policy sought a lead role on the global stage, with some exceptions, such as the early global leadership of Prime Minister Brian Mulroney, Canadian federal governments have limited themselves to ensuring harmonization with US policy. Federal governments from 1990 to 2005 provided only minimal leadership. The Harper Conservative government, 2006 to 2015, was not at all motivated to address climate issues and essentially developed no policy (Macdonald 2020). Only Justin Trudeau, in power since the fall of 2015, has displayed motivation equivalent to that of EU leaders.

Difference in the roles of the oil and gas industry is also a contributing factor. Schreurs and Tiberghien (2007, 28) point to the fact that Europe-based oil companies such as BP, Shell, and the Austrian oil firm OMV were more supportive of climate action than were transnational oil companies based in the US, such as Exxon Mobile. Dunn (2005) also reports that BP and Shell in the EU were more open to action on the issue than were their US counterparts. Falkner (2008) refers to the same difference between oil firms in the EU and the US, and Ylä-Anttila et al. (2018) identify the role of the fossil-fuel industry as a factor explaining differences in climate policy. This industry in Canada has certainly sought to block effective climate policy, mounting an intense,

although unsuccessful, lobby to stop the Chretien government from ratifying Kyoto in 2002 (Macdonald 2007) and then successfully lobbying for the deregulatory actions of the Harper government in 2012 (Macdonald 2020). Because Canada is an oil and gas exporting entity, while the EU is not, the industry in Canada holds more structural power than it does in the EU, which is a net importer (Schreurs 2011; Harrison and Sundstrom 2010). That structural power is augmented by the fact oil and gas play a larger role in the Canadian economy than in the EU. The particular case of coal, another fossil fuel, is discussed below in relation to Poland.

Another factor is differences in electoral systems. Proportional representation has allowed Green Parties in Europe to directly participate in governing in EU Member States and the European Parliament, while the first-past-the-post system in Canada has ensured they are shut out. Fiorino (2011) has found that proportional representation correlates with more effective environmental policy; Harrison and Sundstrom (2007; 2010) make the same argument. Some authors have claimed that Canadian federalism is a system less likely to generate effective climate policy than is EU multi-level governance (Schreurs and Tiberghien 2007; Harrison and Sundstrom 2007; Schreurs 2011). Others have pointed to the fact that the EU policy has been developed on the basis of an explicit process of negotiating burden sharing agreements, while Canadian policy has not (Schreurs and Tiberghien 2007; Schreurs 2011; Macdonald et al. 2013; Macdonald 2014). Schreurs and Tiberghien (2007) suggest this has meant that compared to Canada, the EU has been able to more readily negotiate with veto actors by providing them financial compensation.

Differences in physical circumstances, motivations of governments, roles of the fossil-fuel industry, and electoral systems are all valid explanations, each helping to solve the puzzle of the very different EU and Canadian emission trajectories. Each of them is also a contributing factor in the REJ phenomenon. Poland and Alberta act as they do largely because physical circumstances blessed them with fossil fuel resources, leading them to act in alliance with their fossil-fuel industries, resisting pressure from their central governments. *Degree* of motivation helps explain the political power of central governments relative to that of REJ governments because the more motivated the central government is, the more it will devote time and resources to winning in the conflict with the REJ government. That motivation is also influenced by the electoral system. Proportional representation electoral systems are conducive to compromise and policy continuity; such systems exist in the EU Parliament and most EU Member States, except France and former EU member the United Kingdom. In addition, the principle of power sharing is embedded in EU governance, resulting in negotiated, compromise decisions. In contrast, a first-past-the-post electoral system in Canada produces swings in ideology of the governing party – the enormous difference between ‘do-nothing’ Harper and ‘activist’ Trudeau is not to be found in successive EU governing bodies.

The REJ phenomenon, accordingly, does not contradict or require changes in explanations currently existing in the literature; instead, it complements them. The REJ phenomenon is a useful addition to that literature because it shows how central governments are challenged by lower-tier jurisdictions intent on economic activity which causes their emissions to rise, even while the MLG system as a whole is committed to a decrease. The following pages explore that challenge and the responses of central governments.

Rising and Declining Jurisdictions' Relative Shares

The comparison made here shows that whether or not a central government can simply ignore the REJ problem depends upon three things: first, relative shares of total emissions generated by REJs and DEJs; second, magnitude of the REJ share increase between 1990 and 2018; and third, the extent to which REJ emissions increased between 1990 and 2018.

In the EU, emissions in five Member States (Austria, Cyprus, Ireland, Portugal, and Spain) were higher in 2018 than 1990, and so these are classified as rising-emission jurisdictions (REJs). Five Canadian provinces also fall into the REJ category (Alberta, British Columbia, Manitoba, Newfoundland and Labrador, and Saskatchewan). Table 1 below shows that the REJ share of EU total emissions in 1990 (9 percent) was much smaller than the REJ share in Canada that year (49 percent). Secondly, the REJ share in the EU only increased from 9 percent to 13 percent in 2018. In Canada, the share increased from 49 percent to 62 percent. Finally, EU REJ emissions increased by 13 percent during that time period, while Canadian REJ emissions increased by 51 percent.

For all three indicators, REJ emissions in the EU posed a less serious challenge than they did in Canada. Despite REJ emissions increases, total EU emissions declined because of decreases in other Member States. In Canada, by contrast, decreases in some provinces were overwhelmed by the REJ increases.

Table 1. Canada and EU REJ and DEJ shares and change rate, 1990 and 2018, Mt

	1990 emissions, Mt	2018 emissions, Mt	Change rate (1990-2018)
Canada	603	729	21%
REJ emissions	297	448	51%
DEJ emissions	304	280	-7%
REJ share of total	49%	62%	
European Union	5652	4227	-25%
REJ emissions	487	550	13%
DEJ emissions	5164	3676	-29%
REJ share of total	9%	13%	

Sources: Environment and Climate Change Canada 2020a; European Energy Agency 2020

This is not to suggest that the EU governing bodies have ignored the REJ problem. They have been very active in implementing policies such as the 2005 Emissions Trading System and the 2008 and 2014 energy and climate packages which were intended to reduce all emissions, including those of the REJs. However, the REJs' small share of total 1990 emissions, the relatively minor increase in that share up to 2018, and the relatively small increase in total REJ emissions have aided in that task. The reverse has been true in the Canadian case. Thoughts on the importance of REJ share, relative to other aspects of the REJ challenge are offered in the conclusion. The following discussion focuses on the relative political power of central governments and that of the REJs in Canada and the EU.

Political Power of Central Governments vis-à-vis Member States/Provinces

The second factor which influences the REJ dynamic is relative political power. This power balance influences the viability of the central government options of itself regulating within REJ borders or attempting to influence REJ policy. While political power is a challenging, contested subject (Clegg and Haugaard 2009), this paper examines only explicit forms of power, what Fuchs (2007, 56) refers to as “direct observable relationships of power between actors.” Arts and Tatenhov (2004, 343) conceptualize power as “the ability of actors to mobilize resources in order to achieve certain outcomes in social relations,” and Marquardt (2017) applies this to the power relations in climate MLG systems. Three factors influencing the relative ability of central governments to mobilize resources in the EU and Canada are considered: financial resources; the distribution of authority between levels of government; and the motivation of governments in terms of their willingness to use power. For the first, examination is made of all the REJs in the EU and Canada. For the second and third, the REJ in each with the greatest emissions – Spain and Alberta – provide examples. Poland is also discussed which, despite the best efforts of the EU governing bodies, has not reduced its emissions since it joined the EU in 2004.

Financial Resources of REJs

Governmental resources include intangibles, such as perceived legitimacy, but a fundamental indicator of relative political power is the size of annual revenues. Bakvis, Baier, and Brown (2009, 51) note that larger, richer Canadian provinces are better able to resist the federal government than are smaller provinces. Fioramonti (2017) notes that at the international level power is related to size of the economy. Government revenues are one of the sources of political power in climate MLG systems (Marquardt 2017). While power reaches far beyond the availability and accumulation of resources, financial and professional resources are capacities that enable governments to make use of constitutional, institutional, and political resources (Marquardt 2017). It is true that lower-tier governments within MLG systems can at times play a veto role. By and large, however, governments with more revenue have greater policy capacity. They can do more to hire staff to understand the science, analyze policy options, and prepare technical arguments than can those with fewer financial resources. Accordingly, as an indicator of this source of power we focus upon the portion of total EU and Canadian gross domestic product (GDP) held by each of the rising-emission jurisdictions.

The following two tables show the share of total GDP contributed by the REJs in the EU and Canada in 1990 and 2018 (Table 2 and Table 3).

Table 2. Share of GDP held by EU Member States with Rising Emissions, 1990 and 2018, %

Country	GDP 1990 (% total)	GDP 2018 (% total)
Austria	2%	2%
Cyprus	0.1%	0.1%
Ireland	1%	2%
Portugal	1%	1%
Spain	7%	8%
Total REJ Share	11%	13%

Source: World Bank Group 2020

Table 3. Share of GDP held by Canadian Provinces with Rising Emissions, 1990 and 2018, %

Province	GDP 1990 (% total)	GDP 2018 (% total)
Alberta	11%	16%
British Columbia	12%	13%
Manitoba	4%	3%
Newfoundland and Labrador	1%	1%
Saskatchewan	3%	4%
Total REJ Share	30%	37%

Sources: Royal Bank of Canada 2020; Statistics Canada 2009

As can be seen, in the EU, REJs accounted for 11 percent of total GDP in 1990 and that figure had increased to 13 percent in 2018. By contrast, REJs accounted for 30 percent of Canadian GDP in 1990 and that share then rose to 37 percent in 2018. The share of total GDP attributed to REJs in Europe was smaller and increased less than was the case in Canada. Since GDP and related government revenues are one source of the political power of governments, these figures suggest that the Canadian REJs were more politically powerful relative to the Government of Canada than were the European REJs relative to the EU governing bodies. It may be that the Canadian REJs were better able to counter central government regulation within their borders or central government efforts to induce them to change their policy than were their EU counterparts. Table 4 shows the same difference exists between Spain and Alberta: Spain's share of total GDP was less in 1990 than that of Alberta, and it subsequently increased less.

Table 4. Spain and Alberta shares of total GDP

	GDP 1990 (% total)	GDP 2018 (% total)
Spain	7%	8%
Alberta	11%	16%

Sources: Royal Bank of Canada 2020; Statistics Canada 2009; World Bank Group 2020

This suggests that the political power of the EU governing bodies wishing to regulate within REJ borders or induce REJ policy change was greater than was the case for the Government of Canada. This statement is made with caution because financial resources are not the only indicator of power. Two other factors influencing relative political power of central governments and REJs are discussed next.

Institutional Context

Comparison is now made of two aspects of the institutional context which influence the relative political power of central governments and REJs. The first is the system-wide degree of centralization, that is, the authority given to the central government to direct the affairs of lower-tier jurisdictions. Is the central government clearly dominant or simply first among equals? The second is specific to energy and climate change policy and has to do with the competence of the central government in that policy field. If a central government does not have energy and climate competence, its power in the climate policy field is seriously constrained relative to that of lower-tier governments (see Weibust 2009, 1-3 for discussion of these two aspects of centralization within MLG systems). The question of competence, however, is more complicated than simply whether the central government has it or does not. Particularly in the Canadian case, the question of whether the federal government wishes to actually *use* that constitutional authority is also central.

Degree of system-wide centralization

Although operating over very different time periods, the institutional structures of the EU and Canada in terms of centralization of authority have moved in opposite directions. Two examples are discussed: first, central government power to direct activity of a lower-tier jurisdiction; and second, intergovernmental decision-making.

Compared to Canada, the EU has more power to direct lower-tier policy activity. When the first EU treaty was signed in 1951, there was no authority existing at a level above that of the sovereign-state signatories. Since then, by a process of negotiating further treaties, such as those of Rome (1957), Brussels (1965), Maastricht (1992), and Lisbon (2007), a set of EU governing bodies with powers in some ways akin to those of a national government (and in some ways not) have come into being. In a formal, legal sense, resulting from rulings of the European Court of Justice, EU law takes precedence over that of Member States (Jordan et al. 2010). When authorized by the EU treaties, EU governing bodies can pass binding laws (regulations or directives), which are either directly applicable to the citizens or compel the Member States to take policy action. This power is enforceable by means of the European Court of Justice.

The Government of Canada does not have comparable authority to direct a province to implement certain policy measures. While Canada was designed by Sir John A. Macdonald as a highly centralized system, based upon extensive federal power, it has evolved into one of the most decentralized federal systems in existence. The original basis for federal power was two-fold. The first was the power to disallow provincial legislation, any law passed by a province can be ruled out of existence by Ottawa. Secondly, the federal government can decree that any particular matter has become a subject of federal, rather than provincial, jurisdiction. For a variety of reasons, those two powers are completely out of sync with current federal-provincial relations and have not been used for over 50 years (Webber 2015). Unlike the EU, the Government of Canada cannot require a province to implement a given policy.

Differences in intergovernmental decision-making systems mean that the EU has the power to make decisions which are binding for member states. The Canadian federal government does not

have that power. EU multi-level governance initially used consensus-based decision-making mechanisms, but has drifted towards a qualified majority system for most, albeit not all, decisions. In contrast, governments engaged in Canadian intergovernmental relations employ only consensus-based decision-making.

The Council of the European Union (ministers in the different policy domains) has moved from reliance on consensus to use of qualified majority voting, now done by means of a 'double majority' (the Council decision must be supported by 55 percent of Member States, representing 65 percent of EU population). That said, the EU still uses consensual decision-making for its combined energy and climate decision-making. The 2008 and 2014 climate and energy packages were adopted by consensus rather than qualified majority voting (Macdonald et al. 2013; Skjærseth 2018).

Canada has not moved at all in the direction of qualified majority voting. Canadian federal and provincial governments decide by majority voting. When these governments engage in intergovernmental relations to develop coordinated national programs, however, they use only consensus. Intergovernmental environment and climate policy decision-making process is supported by a secretariat, the Canadian Council of Ministers of the Environment (CCME), which has no governing powers. Decision-making by federal and provincial governments at CCME meetings is always consensual. Furthermore, provinces have the right to opt out of any given process or decision, increasing the power of those wishing to play a veto role (Macdonald 2020). Weibust (2009, 187) makes this comparison:

EU member states are often able to negotiate concessions within a directive, but once a directive is passed, they cannot opt out of the directive. Nor can they opt out of enforcement provisions. In contrast, none of the standards agreed to by the CCME are binding upon provincial governments, even though they have all been negotiated by those governments, on a consensual basis.

In the EU, the Council can decide with a qualified majority of Member States in most policy areas, which means that Member States can be overruled and still have to comply with EU law. In some policy areas (such as tax harmonization and police cooperation) Member States can veto legislative proposals. In Canada, in the case of a veto-role province whose participation is essential to the success of the program, the federal government and other provinces will do what they can to keep that province as a participant. For that, any intergovernmental agreement reached is likely to be the lowest-common-denominator, due to the influence of the veto province.

In summary, the EU MLG system has a greater degree of system-wide centralization than has the Canadian. EU governing bodies can direct Member States to take policy activity and can make decisions by Qualified Majority Voting. The Government of Canada cannot direct provincial policy action and Canadian intergovernmental relations uses only consensual decision-making.

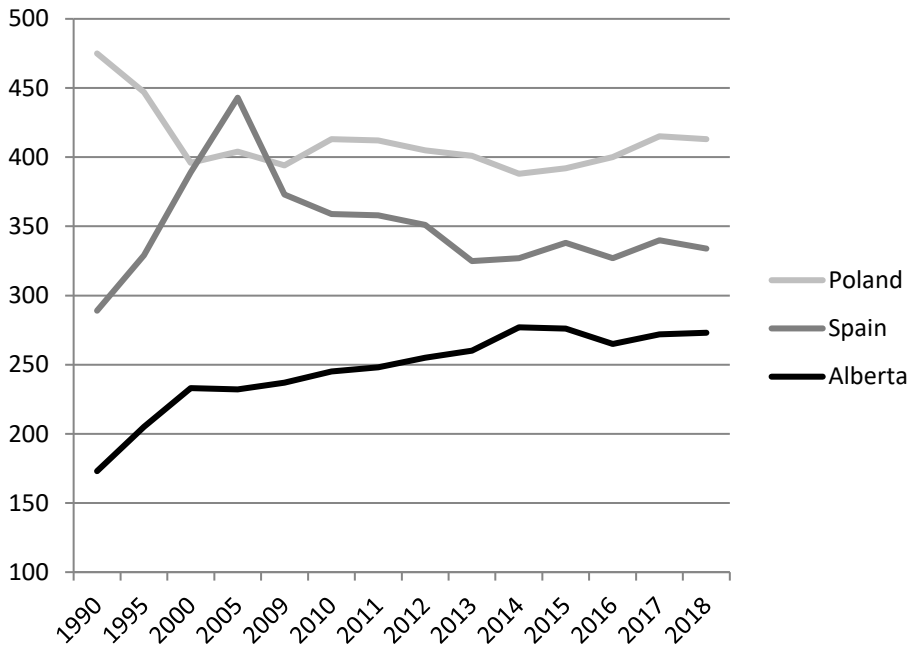
Energy and climate competence (jurisdiction) and use of that competence

The EU began to govern in the policy field of environment, as an area of shared competence with Member States, in the 1970s. Competence in that area was formally recognized in the 1987 *Single European Act* and the 1992 *Maastricht Treaty*. Climate has been considered part of that environment mandate, but energy has not. The EU began to govern in the policy field of climate in the 1990s and gained formal shared competence in the policy field of energy with the 2009 *Lisbon Treaty*. Nevertheless, Member States have insisted that they are the ones to decide the energy mix in their economies. The October 2014 energy and climate package adopted by the Council included an explicit statement that Member States had the right to decide their own energy mix (Skjærseth 2018).

With respect to Canada, in the late 1960s, both Ottawa and the provinces enacted environmental legislation. After provincial court challenges, the Supreme Court found that Ottawa held jurisdiction in the policy field of environment as a matter of shared responsibility with the provinces. Since the late 1980s, it was generally assumed that federal competence also included authority to regulate GHG emissions, but recently a number of provinces have challenged the constitutional legitimacy of the federal carbon tax (Winfield and Macdonald 2020). On March 25, 2021, the Supreme Court of Canada found the federal government's carbon tax law to be constitutional.

Central governments in Canada and the EU differ in their willingness to move into their own jurisdictional space. A central government may hold competence but decide it will not use it. In cases of divided competences, the lower-tier governments are thus left as the only ones governing in that policy field. In Canada, Harrison (1996) found that from the early 1970s to the date of publication, Ottawa tended to only implement environmental policy at times of strong public concern when associated electoral rewards were available. From 2006 to 2015, the Stephen Harper government for the most part did not use the powers available to it to implement climate policy. The EU governing bodies, by contrast, have always been eager to govern in the areas of energy and climate. We return to this subject below when we discuss the differing motivation of the central governments in the EU and Canada.

To compare the ways in which the EU and Canada central governments have used their competence, examples are drawn from their attempts to influence the emissions of Spain, Poland, and Alberta. The three emissions trajectories are shown in Figure 1 below.

Figure 1. Spain, Poland and Alberta's GHG emissions trajectories, 1990 – 2018, Mt

Sources: European Energy Agency 2020; Environment and Climate Change Canada 2020a; Climate Change Connection n.d.

There are two options for use of competence, either regulating within REJ borders or inducing REJ policy change. The EU governing bodies have relied almost exclusively upon the second of these options, that is, on directives. Their experiences in applying directives to Spain and Poland, however, have been very different.

In 1986, Spain joined the EU as a newly industrialized country with a focus on building industrial and institutional capacities. In the 1990s, Spain opposed a proposed EU carbon tax (Padilla and Roca 2004) and demanded that, should the tax be adopted, Spain be exempted. In 2004, however, the Socialist government committed to implementing the EU emissions trading system (ETS) directive (Skjærseth and Wettestad 2008), and the new Minister of the Environment proclaimed an urgent need for action on climate change including through the ETS; framing these issues as “a mere matter of compliance with Europe” allowed the Minister to overcome opposition (Costa 2006). In 2008 and 2014, the EU’s focus on emissions reduction and burden sharing mechanisms during the setting of climate targets for 2020 and 2030 motivated Spain to strengthen its climate policy (Gobierno de Espana 2017). Spain’s emissions have increased since 1990 but it has moved from an opposing to a supportive stance and is now making an effort to fully participate in the EU climate effort.

The Spanish example shows two things. First, domestic politics within the REJ is an important factor determining the political power of the central government. An important factor here was climate leadership of the Socialist government and Prime Minister Zapatero (Skjærseth and Wettestad 2008; Costa 2006). Secondly, this example seems to indicate that an REJ whose government is not structurally dependent upon fossil-fuel industries may be more willing to accept the need for climate action.

In contrast with Spain, Poland, heavily reliant on coal, has perhaps been the Member State most critical and pro-active in weakening EU climate policies. Poland led an opposition group to weaken climate policies such as the Energy and Climate Package adopted in 2008 (Szczerbiak 2012) and the 2030 climate package adopted in 2014 (Bocquillon and Maltby 2017). Each time the EU was able to secure Poland and other opposing Member States' support by making "significant concessions and financial compensation measures" (Carey 2015, 11; see also Bocquillon and Maltby 2017). The EU took Poland to the European Court of Justice in March 2013 over its failure to implement the renewable energy directive, requiring it to achieve 15 percent of its energy from renewable sources by 2020; Poland eventually implemented the directive in 2015, five years behind deadline (Skjærseth 2018). In December 2019, Poland could not commit to implementing the 2050 EU climate-neutrality target (Erbach 2020; The European Council 2019), although it had not vetoed that target. The EU has managed to avoid a veto by Poland and convinced that country to expand renewable energy generation. Nevertheless, the EU has not brought about a reduction of Poland's emissions from their level in 2004, when the country first joined the EU.

In Canada, the central government used only persuasion to influence provincial policy as it worked to develop national climate policy from 1990 to 2003. Briefly after that the Martin government (2003-2005) developed plans to itself regulate within provincial borders, but then lost power. As noted, essentially no action was taken by the Harper government. The Justin Trudeau government has used its carbon tax both as a way of regulating within provincial borders and of influencing provincial policy by threatening to regulate if the province does not itself regulate (Winfield and Macdonald 2020).

In 1990, the Alberta government led by Premier Ralph Klein saw Prime Minister Brian Mulroney's effort to develop Canadian national climate-change policy as a threat to its oil-dependent economy (Macdonald 2020; for discussion of Alberta as a "petro-state" see Carter 2020). In 2002, in alliance with the oil industry, Alberta lobbied fiercely, but unsuccessfully, against Prime Minister Chretien's decision to ratify the Kyoto Protocol (Doern and Conway 1994).

At the same time, the Alberta government adopted a much less ambitious target to reduce Alberta's emissions than the Canadian Kyoto target, without invoking any public protest from Ottawa. During the Harper era, 2006 to 2015, Ottawa made no attempt to reduce Alberta emissions. In 2015, Alberta introduced a carbon tax and put an absolute cap of 100 megatonnes on oil sands emissions, but it has never put a cap on total provincial emissions. In that same year, Alberta Premier Rachel Notley stipulated that Alberta would only participate in the national climate plan being developed by Ottawa and the provinces if the Trudeau government approved a new pipeline (which it did and then subsequently purchased the Trans Mountain Expansion pipeline in order to ensure that it was built). The Kenney government in 2019 cancelled the carbon tax (which was then replaced by a federal tax; the tax was not extended to industrial emissions because Alberta agreed to itself regulate them, meeting the federal design requirements (Winfield and Macdonald 2020)). In December 2020, the Trudeau government introduced new legislation and a new climate plan which may eventually affect Alberta emissions. Other than that, however, since 1990, the Government of Canada has had almost no influence upon Alberta climate policy, other than some shared cost programs and Alberta's agreement to design its industrial tax to fit Ottawa requirements. In fact, Ottawa has *aided* Alberta emission growth by providing new pipeline capacity.

What are the summary results of this comparison of the two institutional contexts? The EU governance system gives its governing bodies greater power to direct Member State policy than is found in Canada. The EU has always been willing to use that authority, while the Government of Canada has not. This greater political power has allowed the EU to more successfully address its REJ challenge than has Ottawa.

Degree of Motivation of Central Governments

The degree of motivation of governments can also be referred to as the ‘degree of interest’ – *how much* a government wants a particular policy outcome. The question of motivation is central to the political power of central governments in MLG systems because degree of interest determines the resources that a government is willing to bring to bear as it finds itself in conflict with other governments in the system. Resources, of course, are one of the main factors determining political power. The focus here is upon the degree of interest of the central government, which determines its willingness to apply resources in order to influence REJ governments’ policies.

The assumption here is that governmental degree of interest is influenced in particular by three factors. The first is the issue of differing motivations associated with concentrated costs versus diffused benefits. Mancur Olson (1965) notes that those bearing concentrated costs are more motivated to influence the relevant policy decision than those receiving the associated widely distributed benefits. James Q. Wilson (1980) has also used distribution of cost and benefit and associated motivation as the basis for a theoretical approach to policy analysis. For this analysis, the central government can be seen as receiving the benefit, in terms of accomplishing its policy objective of over-all emission reduction, and the REJ government as receiving the cost. For an REJ whose economy is dependent upon fossil fuels, such as Poland (Skjærseth 2018) or Alberta (Carter 2020), the cost may be seen to be high, leading the REJ to be more motivated than the central government. The second relevant factor is the ideology of the governing party respecting the policy issue. A centrist government with no strong ideological leanings will likely be less motivated than one situated on its ideological left or right. Climate change is now an ideologically polarized issue (Rabe 2018) and so ideology of the governing party decides both whether a government will or will not act at all and, if the latter, how strongly motivated it will be. The third factor is the one discussed in the literature review above, in which EU governing bodies have been motivated to act on the climate issue because they believe doing so will help them achieve other objectives, such as global leadership or Europeanization (Schreurs 2011).

It seems likely that there has been no great difference between the EU and Canada respecting the concentrated cost/diffused benefit issue. For both, the majority of their lower-tier jurisdictions do not have to deal with strong resistance to climate policies coming from carbon-intensive fossil fuel extraction industries. There have also been in each some, such as Poland and Alberta, who have been motivated to resist central government pressure. In sum, it is impossible to point to a major difference between the EU and Canada in terms of the concentrated costs and diffused benefits.

With respect to ideology of the governing party, however, there *is* a major difference between the EU and Canada. As discussed previously, most EU Member States and the EU Parliament use proportional representation electoral systems, which are conducive to consensus-building and political stability. The EU does not have a ‘governing party’ that changes with elections. This lends

itself to a policy consistency which is aided by the European Commission's agenda setting role. In Canada, on the other hand, the first-past-the-post system can be associated with abrupt changes in orientation and policy, since an election can bring a change in the governing party. For the climate issue, this has meant that Canada experienced nine years of the Stephen Harper government, between 2006 and 2015, during which time almost no action was taken by Ottawa on climate change (Macdonald 2020). The Harper government had almost no motivation to address the REJ challenge posed by the western oil and gas provinces of Alberta and Saskatchewan, due to both conservative ideology and the fact of its electoral base being situated in the west. The result is that, unlike the EU, Canada, for almost a third of the time it has been making climate policy, has been governed by a central government with a very low degree of interest in the issue.

There is also a major difference with respect to the third factor influencing degree of interest. As set out in the second section above, the EU governing bodies have been motivated to act on the climate issue by their concern for a number of other policies, including energy security, a desire to show global leadership, and the belief that climate action would aid European integration. The motivation of the Government of Canada has been almost the polar opposite. Canada has never suffered from energy insecurity. While Prime Minister Mulroney, who worked with UN agencies to convene the 1988 Toronto conference which put the climate issue on the international agenda, did display global leadership, successor governments prior to Justin Trudeau's election in 2015 showed no desire for global climate leadership. Instead, they kept their eye firmly on the objective of ensuring, for competitiveness reasons, that Canadian and American climate policies were aligned. Thirdly, far from aiding national unity, climate policy, given the degree to which Alberta and Saskatchewan feel threatened by national policy making, has a high potential to aggravate regional tensions. Not surprisingly, Ottawa has always compromised and weakened its climate policy for exactly that reason (Macdonald 2020).

With respect to central government degree of interest and associated political power relative to that of REJs, two conclusions are important. First, EU governing bodies have *consistently* displayed a high degree of interest in implementing effective climate policy, unlike Canada with its nine-year hiatus. Secondly, EU governing bodies have been *more interested* in putting in place effective climate policy than have Liberal Canadian governments. Both have had the effect of giving EU governing bodies more political power relative to that of their REJs than that held by the Government of Canada.

Conclusion

As stated at the outset, the purpose of this analysis has been to explore *what determines the ability of a central government in an MLG system to cope with the challenge of the rising emissions jurisdictions (REJ) phenomenon?* This analysis suggests that a central government has three options: to ignore the problem, confident that decreases elsewhere will allow a total decrease (at least at the early stages before deeper emissions cuts are required); itself regulate within the borders of the REJ; or induce the REJ to change its policy. At least for the two cases examined, Canada and the EU, an important element determining viability of the first option is the relative size of REJ emissions. As indicated, the REJ share of total EU emissions was smaller than that of Canada's in 1990; the share then increased less than it did in Canada by 2018; and total REJ emissions increased less than in Canada. The EU REJ portion of 13 percent in 2018, with only a

modest increase since 1990, did not have decisive influence – EU total emissions were still able to decline. Even if Poland is added to the current EU REJs, that share only goes to 23 percent. The Canadian 62 percent share in 2018, after a significant rise since 1990, did have such influence.

This raises the question of *when do the REJ share, and changes in that share, begin to decisively influence total emissions?* Presumably somewhere between the EU and Canada cases is located the ‘critical threshold’ – the magnitude of REJ share, likely specific to each MLG system, which means an MLG system can no longer ignore the REJ factor and still experience an over-all reduction. While space does not allow exploration in this article, the concept of a critical threshold is potentially useful as an analytic concept and a methodological tool. Further research may shed light on this topic.

The EU and Canada cases show that as a central government moves to itself regulate or induce the REJ to change, relative political power is also important. The EU REJs had less relative financial resources than their Canadian counterparts – the total share of EU GDP held by the five REJs was less in 1990 and increased by less than was the case in Canada. To the extent financial resources are the source of the political power of a government within an MLG system, the EU REJs held less political power than did their Canadian counterparts. Beyond that, the institutional context tended to give EU REJs less power relative to their central government than was the case in Canada. The EU governing bodies have authority to issue directives requiring policy action by Member States and can take non-compliant Member States to the European Court of Justice. The Government of Canada has no such authority. Once subject to a directive, EU Member States cannot opt out of the program. Canadian provinces do have an opt-out right, often while still obtaining associated federal monies and without paying an electoral price since standing up to Ottawa is almost always good politics.

The EU governing bodies also hold more political power relative to their REJs than does Ottawa because they are more motivated. EU policy makers have been motivated to put in place effective climate policy as part of their interest in world leadership on the issue, their desire to reduce energy imports, and because it was seen as contributing to their goal of Europeanization. Given the contribution of oil and gas exports to Canadian jobs and economic growth, Ottawa has always worked for national climate policy which does not kill the Alberta goose laying those golden eggs and has always been shy about invoking threats to national unity. The Government of Alberta has always been motivated to maximize economic benefit from oil and gas exports, with an associated rise in emissions, and so almost always has been more motivated to maintain the status quo than Ottawa to change it. The government of Spain, by contrast, has seen the benefits of partaking in a joint EU effort to reduce emissions, including the benefits of burden sharing which seems to help build trust in the fairness of the EU’s climate regime.

In sum, REJ share and relative political power have been directly relevant to the ability of the central governments of the EU and Canada to address the REJ challenge. What can central governments in other MLG systems learn from that case comparison? Some of the relevant factors, such as location of fossil fuel resources (which helps explain rising emissions in Poland and Alberta) or institutional context, cannot be changed. Degree of government motivation and consistency of that motivation, however, are in the control of the central government. They should learn from the EU example.

Although the EU has avoided Poland's veto and encouraged its transition to cleaner energy, it has failed to convince Poland to renege on fossil fuel dependence, which provides yet another lesson. The EU governing bodies hold more political power relative to that REJ than does the Government of Canada relative to Alberta and have put in considerable effort, involving both carrots and the stick of court action, to convince Poland to change policy, and yet the result is exactly the same as that in Canada. Neither central government, confronted with a lower-tier government strongly motivated by the nature of its fossil-fuel economy, has been successful in bringing about a decrease in the lower-tier jurisdiction's emissions.

EU failure to reduce Polish emissions shows the importance of the first factor examined, the physical fact of REJ share of total emissions, relative to political power. That factor gave the EU success in reducing its over-all emissions, despite the inability of the EU governing bodies to bring about emission reductions in its most determined opponent, Poland, and in its other REJ Member States. Secondly, it underlines the magnitude of the challenge facing central governments and hence the importance of the subject examined here, the role of REJs in MLG systems. Central government success in addressing the challenge, even with the tools available to the EU governing bodies, is not assured. Given the magnitude of the challenge, is it reasonable to assume that the US federal government will one day bring about a reduction in Texas emissions, or the Australian government a reduction in Western Australia's emissions? More research is needed in other federal countries to provide a fuller understanding of the REJ phenomenon, particularly given the fact that the EU and Canada, two relatively decentralized MLG systems, are likely not fully representative of all such systems.

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