

Author

Joseph Earsom

University of Louvain, Institut de sciences politiques Louvain-Europe

joseph.earsom@uclouvain.be

It's not as simple as copy/paste: the EU's reproduction of the High Ambition Coalition in international climate governance

Very draft version. Please do not cite or circulate without permission.

Key words: European Union / climate diplomacy / coalition building / multilateral negotiations

Abstract:

The success of the High Ambition Coalition (HAC) at COP21 of the United Nations Framework Convention on Climate Change (UNFCCC) in 2015 in pushing for an ambitious 1.5° temperature target and a movement towards decarbonization stands out as a high point in international climate governance. The coalition – the fruit of several years of intense outreach by the European Union (EU) – brought together a wide range of actors across the traditional developed-developing country firewall in the UNFCCC. In the year following COP 21, the EU, along with other coalition partners, sought to remobilise the HAC in pursuit of multilateral agreements on climate within both the International Civil Aviation Organization (ICAO) and the Montreal Protocol. While the HAC appeared to contribute to an agreement being reached on negotiations for Kigali Amendment to the Montreal Protocol (2016) the HAC did not appear to do so at negotiations for the ICAO Carbon Offsetting and Reduction Scheme for International Aviation (2016). Studying these two cases, this paper uses process tracing to answer the research question *How has the EU successfully used the High Ambition Coalition in climate negotiations beyond the UNFCCC and under what conditions?* The paper relies on 22 semi-structured interviews with EU, EU member state, and third state officials involved with the coalition efforts in the negotiations, as well as official EU and coalition documents and press reports. It not only develops a mechanism linking the EU's decision to use the HAC to the HAC ultimately contributing to an agreement being reached but also finds that three conditions are necessary for it to do so.

1. Introduction

The High Ambition Coalition (HAC), which brought together over 100 countries in support of a binding, ambitious agreement at the 21st Conference of the Parties (COP21) of the United Nations Framework Convention on Climate Change (UNFCCC), stands out as a high point in international climate governance. The previously-implausible, yet broad coalition, which European Climate Commissioner Miguel Arias Cañete referred to as “the masterplan of Europe and its allies” (Cañete, 2015), is widely-recognized as having been instrumental in delivering the Paris Agreement.

Following the Paris Agreement, the European Union (EU), along with other coalition partners, namely the Marshall Islands, sought to remobilise the HAC in pursuit of two key international climate agreements in 2016: the Kigali Amendment of the Montreal Protocol on Substances that Deplete the Ozone Layer and the International Civil Aviation Organization’s Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) by building on the framework of the original coalition. In early 2016, the Climate Commissioner spoke of maintaining the momentum of the HAC “in all international fora including the G7 and G20, not least because of the critical negotiations in the International Civil Aviation Organization (ICAO) later this year as well as further talks on the Montreal Protocol, both of which provide a good opportunity to scale up the level of ambition in the pre-2020 period” (Cañete, 2016). Expectations were high for strong HAC involvement in both negotiations (King, 2016; Niang, 2016).

Both cases take place at approximately the same time and within a similar push for climate action following the Paris Agreement and have a similar cause: the EU deciding to use the HAC as part of its climate diplomacy for the negotiations. Yet, they produce diverging outcomes. On the one hand, in the case of the Kigali Amendment, the HAC appeared quite successful in helping to secure an agreement consistent with the Paris Agreement. On the other hand, in the case of ICAO CORSIA, the EU and its allies working through the HAC seemed to have less influence on the final agreement. Indeed, each of these international fora has its own focus, norms, and considerations. Yet, with the EU prioritising diplomatic outreach in both fora (Council of the European Union, 2016b), it is surprising that such a high-level, politically popular coalition, which became a hallmark of EU success at COP21, appeared to produce mixed results outside the UNFCCC in two agreements negotiated within a month of each other and not even a year after the Paris Agreement. They therefore provide an excellent potential for a comparative study to understand how the EU can use the HAC (or other climate coalitions) to facilitate reaching climate agreements in non-UNFCCC negotiations and, equally importantly, the conditions influencing this.

Considering the EU’s continued leadership ambitions in global climate governance and its subsequent focus on coalitions, it is essential to understand the precise conditions and elements that facilitate successful ambition-based coalitions in these climate negotiations. As the EU was a key factor in the creation of the HAC and, in the period following the adoption of the Paris Agreement, sought to extend its climate leadership outside of the UNFCCC in both ICAO and the Montreal Protocol (Brun, 2016; Oberthür & Dupont, 2021), this paper focuses on the EU’s use of the HAC. At

the same time, it acknowledges the important roles of other HAC members in these negotiations, notably the Marshall Islands.

This paper therefore seeks to answer the research question *How has the EU successfully used the High Ambition Coalition in climate negotiations beyond the UNFCCC and under what conditions?* It proceeds in two steps. First, starting with the successful case of the Kigali Amendment, the paper uses process-tracing to craft a generalisable causal mechanism linking the EU's decision to use the HAC to the final agreement being reached. A successful use of the High Ambition Coalition therefore entails the HAC contributing to the agreement being reached. Second, using the deviant case of the ICAO CORSIA negotiations, where the HAC did not appear to contribute to an outcome being reached, it refines the aforementioned causal mechanism and identifies accompanying contextual conditions necessary for the mechanism to take place.

To do so, the paper relies on 22 semi-structured interviews (see annex) with EU, EU member state, and third state officials involved with the coalition efforts in the negotiations, as well as official EU and coalition documents and press reports. It not only develops a mechanism linking the cause to the outcome but also finds that three conditions are necessary in order for the EU to use the HAC in a way that the contributes to an eventual agreement being reached. This mechanism takes place via EU and HAC leaders engaging with each other on the negotiations, which then adds political pressure to the negotiations, leading to more and more actors mobilising to support the HAC, and wide-ranging support emerging for an agreement. In order for the mechanism to take place, the coalition must have sufficient time to influence the negotiations, EU partners within the coalition need to be relatively implicated in the negotiating forum in question, and there needs to be a general awareness and prioritization of climate change therein.

This paper is organised as follows. Section two provides a review of the existing literature on the EU as an international climate actor and the High Ambition Coalition. Section three introduces the analytical framework for the paper. Section four presents the two case studies. Section five presents the relevant contextual conditions and overall causal mechanism. Finally, section six discusses these findings, and concludes.

2. The EU and climate change coalitions

Like many large-scale multilateral negotiations, international climate negotiations typically are organised around coalitions, or “groups of countries that explicitly coordinate their positions and pool their resources in order to achieve common goals” (Castro & Klöck, 2021, p. 18). Within the UNFCCC, negotiations have traditionally been characterized by a strong divergence in positions between developed and developing countries with respect to responsibility for the climate crisis, mitigation measures, and financing. Negotiation coalitions have therefore emerged on each side of the bifurcation (Groen, 2020).

Although it has not always been successful, the EU has long been recognised as an international actor with leadership ambitions on climate (Wurzel et al., 2017). Up through the early

2000s, the EU had sought to lead by example and pushed for others to commit to binding emissions reductions targets. However, EU leadership hit a low point at COP 15 when the EU was largely sidelined from the negotiations. Following the ‘wake-up-call’ of Copenhagen, the EU subsequently restricted its climate outreach to a more ‘bridge-building’ approach towards not only the larger powers (i.e. the United States and China) but also smaller developing countries that wanted a legally-binding international agreement on emissions reductions (Bäckstrand & Elgström, 2013). The EU, which had sought to “go it alone” at Copenhagen, recognised an opening for collaboration with developing states, notably small island developing states (SIDS), due to increasing divides in the developing negotiation group (G77) between the more industrialised BASICs – Brazil, South Africa, India, and China – and those developing states most vulnerable to climate change (Bäckstrand & Elgström, 2013, p. 1379).

This coalition-building strategy manifested itself in two main ways. First, the Cartagena Dialogue, formed by the UK, Australia, and Colombia in 2010, became a hub for exchange and discussions between ambitious developed states, including the EU, progressive Latin American and Caribbean countries, SIDS, and least developed countries (Oberthür & Groen, 2018). The Cartagena Dialogue thus served as an early, yet important means of overcoming the divide between developing and developed countries in UNFCCC climate negotiations in order to arrive at a new binding international agreement (Groen, 2020). Second, beginning with the COP 17 in Durban in 2011, at the initiative of then-Commissioner Connie Hedegaard, the EU began convening higher-level ministerial meetings with other ambitious parties. These “progressive ministerials” provided a venue for like-minded states to strategize on how to reach an ambitious, binding climate agreement (Brun, 2016).

With coalition building at the heart of EU climate diplomacy in the run-up to COP21, the EU strongly relied on both arrangements to create momentum for an ambitious climate agreement, including what would eventually become the High Ambition Coalition (Oberthür & Groen, 2018). Commissioner Arias Cañete and the Norwegian climate minister convened a high-level ‘progressive’ ministerial in May 2015 on the side-lines of the Petersberg Dialogue. They invited Tony de Brum, the charismatic Foreign Minister of the Marshall Islands, to chair the meeting (Brun, 2016; Parker et al., 2017). From that point on, de Brum took a leading role in the group, which continued to meet regularly throughout the year in order to find solutions to politically-charged issues in the negotiations and to align positions.

In parallel, the EU provided robust diplomatic support to de Brum, who in the leadup to COP 21 “expanded the core group of progressive countries in the CD and elevated it to political level in the shape of the High Ambition Coalition (HAC)” (Betts, 2021, p. 26). The HAC expanded during the actual COP 21 negotiations and eventually represented over 100 countries, including the United States, and pushed three key objectives in the Paris negotiations: (1) a legally binding agreement, (2) a unified review mechanism for tracking and assessing parties’ reduction commitments, and (3) a temperature target of 1,5 degrees Celsius (Klöck et al., 2021). The HAC is widely considered in

the literature to have been a key success factor in not only increasing the overall ambition of the Paris Agreement but also providing political support for an agreement (Brun, 2016; Groen, 2020; Obergassel et al., 2016; Parker et al., 2017). The literature also acknowledges the key role of the EU in forming the High Ambition Coalition and facilitating the work of Tony de Brum (Dupont, Oberthür, & Biedenkopf, 2018; Oberthür & Groen, 2018; Parker et al., 2017).

In reviewing the literature, several factors stand out that would appear to have facilitated its success. First, the HAC began meeting well in advance of the negotiations, building off of years of relationships and meetings chaired by the EU (Parker et al., 2017). Members, including chair Tony de Brum, thus had ample time and manoeuvrability to coordinate and recruit other members. Second, the HAC benefited from a “moral superpower” in its co-convenor, the Marshall Islands (Brun, 2016). Not only was de Brum a charismatic speaker, but he represented a small island country whose very survival is intrinsically threatened by climate change, which provided a strong image and moral imperative for action, in contrast to the EU’s previous ‘lead-by-example’ strategy. Third, the HAC was seen as a solution for overcoming the difficulties of the negotiations at COP 21. With tensions running high in the negotiations, the HAC added a political level of attention and created of cross-cutting coalition that went against the traditional developing-developed divide, thereby increasing pressure of an agreement (Castro & Klöck, 2021).

While the HAC emerged within a very unique context at COP 21 in 2015, its wide, high-level membership and compelling arguments could seemingly be remobilised to support other climate negotiations. Yet, the literature is relatively unclear on how exportable a HAC coalition would be outside of the UNFCCC and the unique context of the Paris Agreement. This is particularly interesting given the literature’s acknowledgement increasingly strategic nature of EU climate diplomacy and efforts to extend its climate leadership into other fora like ICAO and the Montreal Protocol following the Paris Agreement (Oberthür & Dupont, 2021; Schunz, 2019). One notable exception is Morata Liebert (2019) who briefly discusses the poor coalition building dynamic at the ICAO CORSIA negotiations due to the under-representation of island states and the transportation-heavy nature of the negotiators who may have been unfamiliar with the HAC or climate negotiations in general. Nonetheless, we lack insight into the specific conditions that could facilitate replicating the coalition. In that sense, it remains to be seen to what extent the HAC’s powerful influence on climate negotiations extends outside of the Paris Agreement, and how the EU could utilise it.

3. Analytical framework

This section outlines the paper’s analytical approach to unpack the mechanism leading to a successful use of the HAC and the relevant contextual conditions. It begins first by introducing process tracing, the method used to facilitate the answering of the research question. It then draws on relevant theories to conceptualise the EU’s use of the HAC outside the UNFCCC and potential contextual factors that could affect its use.

3.1 Theory-building and theory-revision process tracing

In order to understand how the EU successfully used the HAC within non-UNFCCC negotiations, this paper makes use of the theory-building variant of process tracing and its sub-variant, theory-revision. Process tracing is an in-depth, case-based research method that consists of building a causal mechanism to explain how a given cause is linked to an outcome (Beach & Pedersen, 2019). Theory-building process tracing begins with an empirical narrative about a selected case and then builds a hypothetical causal mechanism linking the cause and outcome. Theory-revision is a secondary tool to theory-building process tracing that looks for “omitted contextual and/or causal conditions that must be present for the outcome to occur” (Beach & Pedersen, 2019, p. 274). To do so, it relies on the selection of ‘deviant’ cases in which a cause is present but the outcome is absent.

As this paper is interested in unpacking how the EU used the HAC to facilitate non-UNFCCC negotiations, it begins with a ‘positive’ case in which the EU decided to use the HAC as part of its negotiation strategy (cause) and in which an agreement was eventually reached, thanks in part to the involvement of the HAC (outcome). From this, it develops a hypothesized causal mechanism linking the two. In a second step, the paper examines the deviant case of ICAO CORSIA: a case in which the EU decided to use the HAC in the negotiations (cause), but an agreement was reached largely without a contribution from the HAC (unexpected outcome). The deviant case therefore facilitates identifying previously-omitted contextual conditions that must be present in order for the outcome to transpire. The two-step approach therefore allows for exporting a better tested and potentially more generalisable causal mechanism.

3.2 Conceptualising the causal mechanism

While theory-building and subsequent theory-revision are strongly reliant on the empirics of the cases, they are not purely inductive methods. Therefore, it is important to reflect on how existing theories and empirical research can facilitate unpacking the mechanism, its cause, and relevant contextual conditions. Before proceeding to the empirics, this paper first reflects on and conceptualises the potential cause of the causal mechanism, as well as potential contextual factors that would affect the mechanism taking place (Beach & Pedersen, 2019).

3.2.1 *The cause and its potential to trigger the mechanism*

In order to begin to develop a causal mechanism linking the established cause *the EU’s decision to use the HAC in a non-UNFCCC negotiation* to the outcome *the HAC contributes to an agreement being reached*, I first conceptualise how the cause could trigger the mechanism leading to the outcome (Beach & Pedersen, 2019). The literature shows that the EU was a key player in forming and supporting the HAC, even if it eventually ceded the spotlight to Tony de Brum and the Marshall Islands. Thus, the EU’s involvement in the HAC, particularly when considering its diplomatic resources and leadership ambitions (Oberthür & Dupont, 2021), would likely be indispensable for its

success. In deciding to use the HAC, it would mobilise and provide support to the HAC, which would then work to drive ambition in the negotiations.

3.2.2 Potential contextual conditions

At the same time, it is also worth reflecting on the necessary conditions for this mechanism to take place at all. While we have not yet hypothesized the causal mechanism, by reflecting on what precisely the EU's use of the HAC outside of the UNFCCC would look like, several theoretical insights stand out.

In seeking to extend or re-create the HAC coalition from the UNFCCC into climate negotiations taking place in separate fora, the EU and its partners are seeking to use the credibility and influence they gained in one forum (here, the UNFCCC) in order to shape the negotiations in other fora (here, ICAO and the Montreal Protocol). In that sense, it is more akin to cross-forum strategic action (Alter & Meunier, 2009) than an isolated resurfacing of a coalition. Hence, the work on cross-fora strategic action inside regime complexes could be useful to unpack the conditions that would likely affect the use of the HAC outside the UNFCCC. Importantly, international fora, even those dealing with similar issues, each have their own memberships, mandates, and norms. As such, each forum will not present the same opportunities for cross-forum action (Kellow, 2012). This could present limits to the EU's ability to use the HAC in ICAO and the Montreal Protocol.

Three potential considerations stand out. First, the membership of non-UNFCCC fora could present issues. While the Marshall Islands is an acknowledged player in the UNFCCC and exploited that position to make compelling arguments about the dangers it faced to climate change, it has a very limited presence in ICAO, which could affect its ability to be seen as credible. The absence of strong leadership in the HAC could affect its cohesiveness and how it is perceived by other actors (Dupont, 1996).

Second, the mandates and norms of the two non-UNFCCC fora could affect how open parties would be to the HAC's calls for increased climate action. For instance, as ICAO is an aviation-centric organization, it is largely populated by transport officials (Martinez Romera, 2017). These officials might not have the same understanding or urgency to the climate negotiations as those in the UNFCCC. Should they not see climate as an important consideration, it is unlikely a movement for an ambitious outcome would gain traction.

Third, and relatedly, the difference in mandates and norms across fora could affect the EU's own internal buy-in to using the HAC. As is the case for many policy areas inside the EU (Furness & Gänzle, 2017), the EU's delegation to international fora are largely divided by relevant policy area. Even in negotiations on complex issue areas, these officials primarily view negotiations from their own policy expertise and priority (Morin & Orsini, 2014). This could affect the extent that the EU negotiators in these fora see HAC as relevant endeavour and utilise it.

While it remains to be seen to what extent these conditions are relevant in affecting the causal mechanism, they nonetheless provide theory-grounded indications of what to look for when developing and revising the causal mechanism.

4. Empirics

This section presents the empirics of the two case studies. For the positive case of the negotiations leading to the Kigali Amendment, it provides a narrative of the EU's use of the HAC, grouped by potential elements of the causal mechanism. For the deviant case of the negotiations leading to ICAO CORSIA, it again provides a narrative, grouped by potential elements of the causal mechanism.

4.1 Negotiations leading to the Kigali Amendment to the Montreal Protocol

Overview of negotiations:

The negotiations leading to the Kigali Amendment revolved around the phasing-out of hydrofluorocarbons (HFCs), potent chemicals often used as cooling agents which were widely adopted as replacements to harmful, ozone-depleting substances. While HFCs themselves are not ozone-depleting, they have a global warming potential thousands of times higher than carbon dioxide (Roberts, 2017). Negotiations on such an amendment had been ongoing since 2009, with a breakthrough occurring at the Meeting of the Parties (MOP) 27 in November 2015. The so-called “Dubai Pathway” established a broad roadmap for agreeing to an amendment that would eventually phase out HFCs. In the leadup to MOP 28, negotiations continued at Open-Ended Working Groups 37 (April 2016) and 38 (July 2016) in which negotiators considered the feasibility of HFC reductions, available alternatives, and the four different amendment proposals already on the table. An extraordinary Meeting of the Parties (exMOP) was convened immediately following OEWG 38 in July 2016, in which ministers met to discuss political solutions for an amendment. An agreement was ultimately reached at MOP 28 in Kigali in October 2016.

Cause: the EU decides to use the HAC for the negotiations

As mentioned in the introduction, in early 2016, Commissioner Arias Cañete affirmed the EU's willingness to use the HAC in support of the HFC amendment negotiations (Cañete, 2016). This willingness to use the HAC is reflected not only in this statement but also in EU involvement in earlier meetings of the HAC in 2016 that established the HFC negotiations as one of the coalition's priorities for the year (King, 2016). Moreover, an EU briefing document from early October 2016 identified the HAC as an important outreach venue (Council of the European Union, 2016a).

The EU's use of the HAC at both the OEWG 38/ExMOP and MOP 28 largely appeared to be driven by the political level and the UNFCCC climate negotiators that had been supporting the negotiations, as opposed to those EU and EU member state negotiators focused exclusively on the

Montreal Protocol (interview 1c, 1a, 5a). However, these negotiators appeared willing to use the HAC whenever possible. As an EU member state official noted, "...it was so logical, actually. Whenever I heard it was there, I always dropped a line to my colleagues, but I'm quite sure the others did the same" (interview 1a). Hence, there appeared to be a consensus on using the HAC within the EU.

Key HAC members convene at the negotiations and related meetings

While the HAC had already met several times in early 2016, it convened on the side-lines of the Montreal Protocol's OEWG/ExMOP Meeting in Vienna in July 2016 (DG CLIMA, 2016; King, 2016). Notably, Commissioner Arias Cañete, US Secretary of State John Kerry, and Canadian Environment Minister Catherine McKenna attended. The HAC continued to meet and coordinate, in the leadup to MOP 28, with important lobbying efforts at the UN General Assembly Week in September (Council of the European Union, 2016a) and the final negotiations themselves in Kigali in October (interviews 1a, 5a, 8a, 9a).

The HAC adds political pressure to the negotiations

As the HAC primarily consisted of higher-level representatives or ministers meeting on the side-lines of the negotiations at OEWG 38 and MOP 28, it served a political purpose of lobbying and raising awareness of the HAC's objectives among its members (interview 1a, 8a). By working at the political level, the HAC "lobbied to unlock any possible barriers in the Paris Agreement [...] to help translate those messages to the Montreal Protocol" (interview 1a). It served as a means of reminding countries that, as HAC members, they were already supporting ambition in the UNFCCC (interview 8a).

Since the HAC was mainly a political endeavour, it did not formally propose more concrete proposals or technical suggestions for the negotiations (interviews 5a, 8a). In fact, an EU member state official felt that the HAC was at some points counter-productive, as "they would kind of suggest solutions which from the negotiation point of view didn't make so much sense [...] And if you're in the negotiation and you're just like, "That's not how it works"" (interview 5a). In that sense, the HAC should be considered as primarily a political awareness-raising endeavour and not a detailed, well-coordinated negotiating coalition.

More and more actors mobilise to support the negotiations

By meeting at a higher level and reminding HAC coalition members of their commitments as members of the coalition, the HAC mobilised support for reaching an agreement in two main ways. First, thanks to its diverse membership base of developing and developed countries, the HAC mobilised states that would not normally be active in the negotiations, both at OEWG 38 and the MOP 28, particularly SIDS and African states (2a, 5a, 8a). These countries began speaking up in the negotiations in ways they had not previously. As an EU member state official stated, "It was

important to make sure that other, you know the SIDS and like Colombia and all these countries, it was important for us...the African group would mobilize themselves and be vocal in the negotiation, so that we don't always hear just the ones who are blocking" (interview 5a). Second, according to a non-EU official, the HAC meetings ensured that countries' "high-level representative, whether it was a minister, but not always a minister sometimes a little bit lower than that, were aware and were advocating the issue" (interview 8a). Thus, it mobilised a wide network of supporters that might not have otherwise been pushed to act in the negotiations.

Wide-ranging support develops for an agreement

This mobilization contrasted with a phenomenon in the Montreal Protocol where negotiations on HFCs had in the past been blocked by a core group of states that were unwilling to have such action be considered within the Montreal Protocol (interviews 2a, 5a, 8a; Council of the European Union, 2016a). While there was growing ambition among developing countries for action, China, India, Iran, and the Gulf countries were advocating for a later deadline to phase out HFCs, which threatened the overall ambition of the potential amendment (Council of the European Union, 2016a). In that sense, the mobilization counteracted these 'blockers' by "showing that some countries were willing to have a very strong commitment from all the countries. Uh, but sometimes those, uh, those kinds of small countries are a bit considered like peanuts from others" (interview 2a). Together, the wide-ranging coalition reinforced that there was in fact broad support for an agreement (interview 2a).

Outcome: The HAC contributes to an ambitious agreement being reached

The HAC's wide mobilization, combined with its political messaging, helped reinforce the urgency and necessity of adopting an HFC amendment with an ambitious phase-out timeframe, which was eventually adopted at MOP 28 (interviews 8a, 9a). While it is difficult to quantify the precise impact the HAC had on it, three pieces of evidence suggest it contributed to reaching the eventual agreement. First, when asked about the overall role of the HAC in the negotiations, five interview respondents, including a non-EU negotiator and an Ozone secretariat official, acknowledged that it broadly contributed to creating momentum for the agreement (interview 1a, 2a, 5a, 8a, 9a). Second, the HAC appears to have inspired the creation of a significant financing mechanism to support developing countries' phasing out of HFCs (Puerto, 2016). This financing mechanism was also acknowledged by interview respondents as being an important consideration in convincing developing countries to eventually agree to the amendment (interviews 2a, 9a). Finally, in a press release at MOP 28, the Marshall Islands stressed that the agreement "may not be entirely what the islands wanted, but it is a good deal and the High Ambition Coalition fought hard to secure it" (High Ambition Coalition, 2016b). Taken together, these pieces of evidence suggest it certainly contributed to the ultimate outcome. Table 1 shows a preliminary causal mechanism for the case.

CAUSE	-> Causal Mechanism ->				OUTCOME
	Step 1	Step 2	Step 3	Step 4	
EU decides to use HAC in Montreal Protocol Negotiations (Early 2016)	Key HAC members convene at the negotiations and related meetings	HAC adds political pressure to the negotiations	More and more actors mobilise to support HAC push for HFC amendment	Wide-ranging support emerges for an agreement	HAC contributes to an agreement being reached (October 2016)

Table 1: Causal mechanism for negotiations leading to Kigali Amendment

4.2 ICAO CORSIA

Overview of negotiations

Negotiations on an agreement to introduce a market-based measure (MBM) for greenhouse gas (GHG) emissions from aviation intensified in ICAO following the EU's 2008 attempt to introduce its Emission Trading System (ETS) on flights entering or leaving the EU (Birchfield, 2015). At ICAO Assembly 38 in 2013, member states agreed that they would finalise the format of the MBM by Assembly 39 in 2016. The negotiations on the MBM focused on determining the format of the MBM, the associated level of ambition, and potential implementation methods (Martinez Romera, 2017). They again intensified in early 2016 when an appointed advisory group presented a draft negotiating text to the ICAO Council (International Civil Aviation Organization, 2016b). The ICAO Council, a 36-member body responsible for directing the organization's work in between ICAO's triannual all-member Assemblies, then established a High-Level Working Group to continue negotiations in Spring 2016. Following this, negotiations advanced informally and within the ICAO Council. The ICAO Council eventually developed a revised draft text, which was endorsed by all its members in August 2016, and was subsequently presented for approval to the full Assembly in September 2016 (International Civil Aviation Organization, 2016c).

Cause: the EU decides to use the HAC for the negotiations

As with the first case, the EU's willingness to use the HAC for the ICAO negotiations was expressed by Commissioner Arias Cañete in early 2016. Furthermore, the EU also participated in earlier meetings of the HAC at the signing of the Paris Agreement (April 2016) and the Petersberg Dialogue (May 2016) which established the ICAO negotiation as one of the coalition's objectives for 2016 (King, 2016). Notably, a communication from the European Commission and the rotating Presidency of the Council of the EU had noted in June 2016 a consensus among EU member states that "The EU needs not only to show ambition but also to build bridges to third countries to successfully conclude an agreement" (Council of the European Union, 2016c, p. 3).

Interestingly, according to interview respondents, unlike in the case of Kigali Amendment negotiations, in which the EU closely collaborated with its HAC partners, the HAC's outreach for the

negotiations appeared to be largely orchestrated by the EU (interviews 1b, 3b, 4b, 6b, 11b). In that sense, there did not appear to be the same consultations as in the Kigali Case. Again, as was the case for the Kigali negotiations, the EU's use of the HAC was largely driven by the presence of a UNFCCC negotiators who went to Montreal to support the negotiations (interviews 1b, 3b, 7b, 12b). However, the EU and EU member state negotiators, who mostly came from transport backgrounds viewed it as a relevant endeavour. As one EU official remarked, "the fact that this High Ambition Coalition existed, I mean it's almost natural that you would like to bring them in and to build a bit on that." (interview 7b).

The HAC adds political pressure to the negotiations

Unlike in the case of the Kigali Amendment negotiations, high-level HAC representatives did not meet on the sidelines of earlier ICAO negotiation meetings or other relevant meetings. Instead, HAC-related outreach appeared concentrated along two main axes (Morata Liebert, 2019). First, on 16 September 2016, approximately two weeks before the Assembly in Montreal, European Commissioners Vitoello and Miguel Arias Cañete issued a statement, which was backed by the Governments of the Marshall Islands and Mexico (Niang, 2016), declaring "It is time for us to make history again!" and calling on all ICAO member states to join a previously agreed-upon pilot phase for emission offsetting in aviation (High Ambition Coalition, 2016a). Second, at Assembly 39, the European Commission's lead climate negotiator convened meetings with ICAO negotiators from small island states and other HAC partners (interview 1b, 3b, 7b, 12b; European Parliament, 2017).

More and more states mobilize to support pilot phase

Thanks to the combination of political awareness-raising and the convening of HAC meetings with ICAO negotiators, the EU was able to drum up more states to push for maximum participation in the CORSIA pilot phase. An EU negotiator summarised the efficacy of the HAC meetings as "It was almost like an ambush in a sense that...I remember the first HAC meeting that we convened in Montreal where we had huge participation, mostly because people had no idea what the HAC was and were surprised to find out they were considered to be members of it. We very successfully said, 'The High Ambition Coalition is X and Y, and you are a part of it. Naturally, you should be supporting an early start of CORSIA with full participation'" (interview 12b).

Now mobilised, these states pushed other states to sign up for the pilot phase. Notably, during the actual Assembly in which the CORSIA agreement was to be adopted, the Marshall Islands and other SIDS, as well as several African states particularly vulnerable to climate change, made interventions stressing the need to act on aviation emissions, as their countries' very livelihoods were at stake (interviews 1b, 7b, 11b; ICAO, 2016a), saying "We have to address the question, because otherwise we will be drowned in 50 years" (interview 7b).

A bit more support develops for the pilot phase of the already agreed-upon CORSIA

The HAC seems to have contributed to ensuring that a sufficient number of states would sign up for the voluntary, pilot phase of CORSIA and thereby helped assuage fears that not enough states would sign up for the phase to be successful (interviews 7b, 11b). An EU official summarised the effect of the HAC as “It motivated certainly a couple of states to sign up and to speak up during the Assembly, which made it then more difficult for others who might have shied away from expressing themselves positively. It gained a couple of votes as well, in favour of the initiative” (interview 7b). With each state having one vote in ICAO, the involvement of the small island developing states and other vulnerable countries contributed to the overall participation in the voluntary phase (interview 11b).

Outcome: HAC does not contribute to an agreement being reached

Although the HAC did appear to contribute to improving participation in the pilot phase of CORSIA, it is important to stress that this does not equate to the same outcome as in the Kigali case. In the Kigali case, the HAC helped contribute to the urgency and necessity of an agreement with an ambitious timeline for phasing out HFCs. In this case, with the ICAO Council having already introduced the draft resolution and associated phases, CORSIA was a “done deal by that time [of Assembly 39]” (interview 6b). As the Council includes the principal key players in international aviation, including China, the United States, France, and the United Kingdom, it is the nexus of ICAO decision-making power (Hayer, 2016). An agreement there logically paved the way for adoption at the Assembly, although several modifications to the text were eventually undertaken (International Civil Aviation Organization, 2016a).

Hence, the HAC did not influence mobilization for adoption of the agreement as such, as there already appeared to be sufficient support for an agreement with a phased implementation approach (ICAO, 2016a; Valero, 2016; interviews 1b, 6b). Rather, it attempted to draw up support for something that was already likely to be put into place regardless, as opposed to pushing for a more ambitious target or objective. In this regard, the HAC’s overall impact on CORSIA is questionable, especially when compared to what it accomplished at Paris (interviews 1b, 3b, 4b, 6b). This is not to down play the value of increasing participation, but it is a different outcome than in Kigali. It appears much more limited, despite what would appear to be a very similar causal mechanism, with the exception of high-level political meetings of the HAC. The causal mechanism for the CORSIA case is reflected in Table 2.

CAUSE	-> Causal Mechanism ->			OUTCOME
	Step 1	Step 2	Step 3	
EU decides to use HAC in ICAO negotiations (Early 2016)	HAC adds political pressure to the negotiations	More and more actors mobilise to support HAC push strong pilot phase participation in CORSIA	A bit more support develops for the pilot phase of already agreed-upon CORSIA	HAC does not contribute to an agreement being reached (October 2016)

Table 2: Causal mechanism for negotiations leading to ICAO CORSIA

5. The causal mechanism and its contextual conditions

As the previous section presented both cases, this section assesses potential contextual conditions and presents a revised causal mechanism.

5.1 Contextual conditions

Since the ICAO CORSIA case serves as a deviant case, it facilitates an examination of the contextual conditions that caused the hypothetical causal mechanism developed in the Kigali Amendment case to break down. Considering both the potential contextual conditions from section 3.2.2 and the empirical evidence from the ICAO CORSIA case, three contextual conditions stand out that affected EU's use of the HAC. In other words, the absence of these three conditions in the CORSIA case likely prevented the EU from using the HAC in a way that contributed to the agreement. Conversely, their presence in the Kigali negotiations likely helped facilitate the causal mechanism. Let us consider each in turn.

The first condition is the availability of sufficient time for the HAC to influence the negotiations. In the ICAO negotiations, the EU only used the HAC very late in the negotiation process, mere weeks from the start of the final ICAO Assembly in late September 2016 (interview 1b, 3b, 7b). By the time the HAC had convened, the final framework of the agreement and its different phases had already been established via negotiations taking place both informally and within ICAO sub bodies (interview 1b, 7b, 9b, 11b; ICAO, 2016a, 2016b). Hence, there was little opportunity for the HAC to shape the substance of the final agreement, beyond encouraging states to join the voluntary pilot phase. Conversely, in the Kigali case, the HAC became involved in the negotiations at the OEWG meeting in July 2016, approximately three months before the final negotiations in Kigali (DG CLIMA, 2016). This provided ample time to lobby and push for its objectives.

The second condition is the involvement of the EU's HAC partners in the forum in question. Within ICAO, the SIDS have traditionally had a very limited presence and have thus been unable to follow the climate-related negotiations to the same extent as in other fora (interviews 1b, 6b, 11b). They were largely absent from the ICAO Council and its relevant sub-bodies responsible for drafting CORSIA (interviews 6b, 11b). An EU official stressed, "if you don't have the right countries there at

the time, you can't...They are not there. You can't rely on any of them" (interview 6b). Furthermore, SIDS and least-developed countries were exempt from having to join the CORSIA scheme (Morata Liebert, 2019). Without the SIDS, a key anchor of the HAC, the EU could not effectively use the coalition. On the other hand, in the Kigali case, the SIDS had been much more involved in the negotiations. Micronesia, one of the HAC members charged with leading the coalition's push for an agreement (King, 2016), had been making proposals for an HFC amendment to the Montreal Protocol since 2009. In its revised 2015 proposal, it was joined by the Marshall Islands and several other SIDS (Klaassens et al., 2015). The SIDS, particularly Micronesia, were viewed as credible, involved actors within the Montreal Protocol negotiations and maintained good working relationships with other negotiators (interview 6a).

Finally, the third condition relates to the general awareness of climate change in the negotiating forum in question. As ICAO's primary focus is aviation, even the negotiators handling CORSIA largely came from states' transport ministries (interviews 1b, 2b, 3b, 4b, 5b, 12b, 13b). They did not necessarily view climate change issues in the same way as in other fora, nor did they necessarily prioritise ambitious action. An official summarised the atmosphere as "In ICAO, I don't think the heads of delegations felt that they would be slapped on the back when they got home again...for this...for CORSIA, nor for...Perhaps they got pat on the back when they killed ETS. That's the mindset I think" (interview 1b). They were not necessarily as receptive or aware of the Paris Agreement targets or the commitments of the Paris Agreement (interviews 1b, 2b, 3b, 4b). One EU official saw this difference in background as a key limiting factor of the efficacy of the HAC:

"Because aviation people were not ready. They just weren't ready for this High-Level coalition. There wasn't I think much interest even from the European side, let alone from the rest of the world. It doesn't work. When you have the mindset of the environmentalist where you are in the preparation for the Paris Agreement or in these international meetings for environment, I don't know...It's a different atmosphere than the technical guys, the experts, from transport, and especially those in aviation" (interview 4b).

Thus, there appeared to be little appetite for such an ambition-based approach in ICAO. Conversely, there was a much higher awareness of climate and the HAC within the Montreal Protocol. In many cases, Montreal Protocol negotiators worked in the same units and ministries as their UNFCCC counterparts (interviews 1a, 3a, 5a, 6a). Moreover, they shared similar priorities and view on environmental governance. In that sense, there was a natural awareness of the importance of the Paris Agreement and the HAC (interviews 1a, 7a, 9a).

These three conditions stand out as important considerations that not only facilitated the EU's ability to use the HAC to facilitate reaching an ambitious agreement in Kigali but also whose absence seemed to prevent the EU from using the HAC in a way that contributed to an ambitious agreement in Montreal for ICAO.

5.2 The causal mechanism

Table 3 describes the refined causal mechanism of how the EU's decision to use the HAC in a non-UNFCCC negotiation ultimately contributes to an agreement being reached. This is primarily facilitated via EU and HAC leaders engaging with each other on the negotiations, which then adds political pressure to the negotiations, leading to more and more actors mobilising to support the HAC, and wide-ranging support emerging for an agreement. While a relatively similar causal pathway (with the exception of step 1) was observed in the two cases, the mechanism did not lead to the same outcome in ICAO, as it was already apparent that an agreement would be reached. This absence of the expected outcome was likely due to the absence of the contextual conditions mentioned above. Although the causal mechanism was developed based on two specific case studies, it has been developed in order to be generalisable to other climate contexts.

CAUSE	-> Causal Mechanism ->				OUTCOME
EU decides to use HAC in non-UNFCCC negotiation	Step 1	Step 2	Step 3	Step 4	HAC contributes to an agreement being reached
	EU and fellow HAC leaders engage with each other	HAC adds political pressure to the negotiations	More and more actors mobilise to support HAC objectives	Wide-ranging support emerges for an agreement	
<p style="text-align: center;">Contextual conditions:</p> <ol style="list-style-type: none"> 1. The HAC has sufficient time to influence the negotiations (i.e. not last-minute involvement) 2. EU coalition partners are relatively implicated in the negotiating forum in question 3. General awareness and prioritization of climate change within the negotiating forum 					

Table 3: Revised causal mechanism and accompanying contextual conditions

6. Discussion and conclusion

This paper has developed a causal mechanism to unpack how the EU can use wide-ranging ambition-based coalitions outside the UNFCCC in other climate negotiations in order to facilitate an eventual agreement, including relevant contextual conditions. In the case of the Kigali Amendment, the EU's decision to use the HAC triggered a mechanism that ultimately led to the HAC contributing to an agreement. In the case of the ICAO negotiations, the EU's decision to use the HAC did not ultimately lead to the HAC contributing to the CORSIA agreement, due to the absence of necessary contextual conditions. However, that is not to say that the EU's use of the HAC there was for nought.

The developed mechanism is largely consistent with the larger literature on coalition building in multilateral climate negotiations. However, it is the identified contextual conditions that provide significant insight into the limits of replicating such a coalition outside the UNFCCC, particularly for the EU. In this vein, the paper has three consequences for the existing literature.

First, regarding the EU as a climate leader, it demonstrates the limits of the EU to use the UNFCCC to influence other climate negotiations. As an EU member state official summarised, the purpose of using the HAC outside the UNFCCC was “more that we were trying to use our leverage from the UN[FCCC] to change the dynamic in those fora” (interview 2c). However, as the case studies show, the EU cannot unilaterally do so without (1) a strong involvement from its coalition partners in that negotiating forum and (2) a general awareness and prioritization of climate change within the negotiating forum. Moreover, (3) it cannot decide at the last minute to do so, as appeared to be the case with ICAO. The second contribution relates to the study of coalition building on climate change. The paper demonstrates that a coalition can be usable and influential in situations outside of its original context. In that regard it underlines the need to expand the scope of the study of climate-based coalitions beyond exclusively within the UNFCCC. Lastly, and somewhat relatedly, the findings concretely demonstrate the potential for a new type of cross-forum strategic activity for multiple fora dealing with a similar issue area, as well as the conditions necessary for it to take place.

At the same time, I acknowledge this paper is not without limitations. First, the paper relies primarily on a relatively subjective (though triangulated) assessment of influence in negotiations. Second, by focusing exclusively on the HAC, the paper has placed less emphasis on alternative explanations. For instance, in the Kigali case, the HAC should by no means be considered the only contributing factor to the ultimate agreement. As both the literature (Roberts, 2017) and our interviews revealed, the agreement was also facilitated by technological advancements, evolving attitudes in India and China and significant diplomatic outreach from the United States (interviews 2a, 4a, 5a, 6a, 7a, 8a). Third, although the two case studies provide for an excellent comparison, they took place in a very specific context and time-frame following the Paris Agreement. In that sense, while I sought to use a level of detail in the causal mechanism appropriate for mid-level generalisation, the same conditions might not be at play elsewhere. To that end, it would be very interesting to see research in the replication of coalitions in other negotiation settings.

7. References

- Alter, K. J., & Meunier, S. (2009). The Politics of International Regime Complexity. *Perspectives on Politics*, 7(1), 13-24.
- Bäckstrand, K., & Elgström, O. (2013). The EU's role in climate change negotiations: from leader to 'leadiator'. *Journal of European Public Policy*, 20(10), 1369-1386.
- Beach, D., & Pedersen, R. B. (2019). *Process-Tracing Methods: Foundations and Guidelines* (Second ed.). University of Michigan Press.
- Betts, P. (2021). The EU's Role in the Paris Agreement. In H. Jepsen, K. Monheim, M. Lundgren, & H. Walker (Eds.), *Negotiating the Paris Agreement: The Insider Stories* (pp. 111-138). Cambridge University Press.
- Birchfield, V. L. (2015). Coercion with kid gloves? The European Union's role in shaping a global regulatory framework for aviation emissions. *Journal of European Public Policy*, 22(9), 1276-1294.
- Brun, A. (2016). Conference Diplomacy: The Making of the Paris Agreement. *Politics and Governance*, 4(3).
- Cañete, M. A. (2015). Historic climate deal in Paris: speech by Commissioner Miguel Arias Cañete at the press conference on the results of COP21 climate conference in Paris. In Paris.
- Cañete, M. A. (2016). EU Climate Action and Energy Commissioner Miguel Arias Cañete on the follow-up to COP21 at the public session of the Environment Council. In *Council of the EU*. Brussels.
- Castro, P., & Klöck, C. (2021). Fragmentation in the Climate Change Negotiations: Taking Stock of the Evolving Coalition Dynamics. In C. Klöck, P. Castro, F. Weiler, & L. Ø. Blaxekjær (Eds.), *Coalitions in the Climate Change Negotiations* (pp. 17-34). Routledge.
- Council of the European Union (2016a). *28th Meeting of the Parties (MOP 28) to the Montreal Protocol on Substances that Deplete the Ozone Layer (Kigali, Rwanda, 10-14 October 2016) - Information from the Presidency and the Commission*. (12984/16). Brussels.
- Council of the European Union (2016b). *European climate diplomacy after COP21 - Council conclusions*. (6061/16). Brussels.
- Council of the European Union (2016c). *High-level Meeting (Montreal, 11-13 May 2016) and preparations for the ICAO Assembly (Montreal, 27 September - 7 October) - Information from the Presidency and the Commission*. (10290/16). Brussels.
- DG CLIMA (2016). *Montreal Protocol negotiations to phase-down climate warming hydrofluorocarbons (HFCs) enter crunch time*
- Dupont, C. (1996). Negotiation as Coalition Building. *International Negotiation*, 1, 47-64.
- European Parliament (2017). *MISSION REPORT following the ad hoc delegation to the 39th session of the ICAO Assembly, Montréal, Canada, 5 - 7 October 2016*. (PE595.691v01-00). Brussels.
- Furness, M., & Gänzle, S. (2017). The Security Development Nexus in European Union Foreign Relations after Lisbon. *Development Policy Review*, 35(4), 475-492.
- Groen, L. (2020). Group Interaction in the UN Framework Convention on Climate Change. In K. E. Smith & K. V. Laatikainen (Eds.), *Group Politics in UN Multilateralism* (pp. 267-284). Brill. https://doi.org/10.1163/9789004384446_015
- Hayer, S. (2016). *Decision-making processes of ICAO and IMO in respect of environmental regulations*. Brussels: European Parliament.
- High Ambition Coalition (2016a, 16/9/2016). *THE 39TH INTERNATIONAL CIVIL AVIATION ORGANISATION ASSEMBLY SECURING A MARKET-BASED MEASURE TO ACHIEVE CARBON NEUTRAL GROWTH FROM 2020*
- High Ambition Coalition (2016b, 10/14/2016). *Statements ahead of adoption of an amendment to the Montreal Protocol 28th Meeting of Parties*
- International Civil Aviation Organization (2016a). *ASSEMBLY THIRTY-NINTH SESSION Montréal, 27 September – 6 October 2016 EXECUTIVE COMMITTEE REPORT AND MINUTES*. (Doc 10082, A39-EX). Montreal.

- International Civil Aviation Organization (2016b). *COUNCIL — 207TH SESSION Montréal, 15 February — 11 March 2016 SUMMARY MINUTES WITH SUBJECT INDEX*. (10073-C/1183 C-Min. 207/1-13). Montreal.
- International Civil Aviation Organization (2016c). *COUNCIL — 208TH SESSION Montréal, 20 April 2016 and 16 May — 17 June 2016 SUMMARY MINUTES WITH SUBJECT INDEX*. (10087-C/1184 C-Min. 208/1-16). Montreal.
- Kellow, A. (2012). Multi-level and multi-arena governance: the limits of integration and the possibilities of forum shopping. *International Environmental Agreements: Politics, Law and Economics*, 12(4), 327-342.
- King, E. (2016, 26/7/2016). Paris 'high ambition coalition' to tackle unfinished business. *Climate Change News*. <https://www.climatechangenews.com/2016/07/22/paris-high-ambition-coalition-to-tackle-unfinished-business/>
- Klaassens, E., Barifi, P., Gancheva, M., Vancauwenbergh, S., & Zamparutti, T. (2015). *Main Issues at Stake for the 27th Meeting of the Parties to the Montreal Protocol*.
- Klöck, C., Castro, P., Weiler, F., & Blaxekjær, L. Ø. (2021). *Coalitions in the Climate Change Negotiations*. Routledge.
- Martinez Romera, B. (2017). *Regime Interaction and Climate Change: The Case of International Aviation and Maritime Transport*. Routledge.
- Morata Liebert, T. (2019). Global climate change governance from Paris to Montreal: Enabling factors for ambitious EU climate action. In U. Liebert & A. Jenichen (Eds.), *Europeanisation and Renationalisation: Learning from Crises for Innovation and Development* (pp. 215-229). Verlag Barbara Budrich.
- Morin, J.-F., & Orsini, A. (2014). Policy coherency and regime complexes: the case of genetic resources. *Review of International Studies*, 40(2), 303-324.
- Niang, A. (2016, 17/9/2016). Commission calls on High Ambition Coalition to broker ambitious ICAO deal.
- Obergassel, W., Arens, C., Hermwille, L., Krebich, N., Mersmann, F., Ott, H. E., & Wang-Helmreich, H. (2016). *Phoenix from the Ashes—An Analysis of the Paris Agreement to the United Nations Framework Convention on Climate Change*.
- Oberthür, S., & Dupont, C. (2021). The European Union's international climate leadership: towards a grand climate strategy? *Journal of European Public Policy*.
- Parker, C. F., Karlsson, C., & Hjerpe, M. (2017). Assessing the European Union's global climate change leadership: from Copenhagen to the Paris Agreement. *Journal of European Integration*, 39(2), 239-252.
- Puerto, M. (2016). *19 Funders Pledge \$53 Million to Expand Energy Efficiency*
- Roberts, M. W. (2017). Finishing the job: The Montreal Protocol moves to phase down hydrofluorocarbons. *Review of European, Comparative & International Environmental Law*, 26(3), 220-230.
- Schunz, S. (2019). The European Union's environmental foreign policy: from planning to a strategy? *International Politics*, 56(3), 339-358.
- Valero, J. (2016, 13/9/2016). EU solicits support for watered down aviation emissions deal. *EURACTIV*. <https://www.euractiv.com/section/transport/news/eu-solicits-support-for-watered-down-aviation-emissions-deal/>
- Wurzel, R. K., Connelly, J., & Liefferink, D. (2017). *The European Union in International Climate Change Politics: Still Taking a Lead?* Taylor & Francis.

8. Annex: List of interviews

Kigali Amendment	Date	Category
1a	04/11/2021	EUMS
2a	16/11/2021	EUMS
3a	16/11/2021	EUMS
4a	18/11/2021	EU
5a	26/11/2021	EUMS
6a	01/12/2021	EUMS
7a	02/12/2021	EUMS
8a	14/12/2021	Non-EU
9a	17/12/2021	Secretariat
CORSIA	Date	Category
1b	14/06/2021	EU
2b	16/06/2021	EU
3b	17/06/2021	EU
4b	30/06/2021	EU
5b	01/07/2021	EUMS
6b	06/07/2021	EU
7b	06/07/2021	EU
8b	27/07/2021	EU
9b	28/07/2021	EUMS
10b	29/07/2021	Non-EU
11b	11/08/2021	EUMS
12b	18/02/2021	EU
13b	22/02/2021	EUMS