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異種 ETS をリンクする際の障壁を理解する
— 北東アジアからの証拠と教訓 —

Understanding barriers to linking heterogenous Emissions Trading Schemes.
— Evidence from and lessons for Northeast Asia —



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Abstract:

Linking Emissions Trading Schemes (ETS) of countries with heterogenous climate policies is the Romeo and Juliet story of carbon pricing instruments. Despite being desirable, heterogenous linkage happens to be politically arduous to establish. But what exactly makes it more challenging for these jurisdictions to agree on ETS linkage? Focusing on Northeast Asia — we surveyed Chinese, Japanese and Korean experts negotiating the Paris Agreement Article 6 Rulebook. We test how Feasibility, Confidence and Willingness affect the specifics of linking in the region. Our results display differences in opinion amongst countries and subcategories of agents involved in the policy process. We identify three different kinds of political barriers to linking in Northeast Asia: an institutional resistance barrier revolving around administrative challenges; a governance-sharing barrier that embodies the difficulties to solve complex sovereignty questions; and an environmental integrity barrier based on a lack of Confidence between partners in the region. The results of this study have immediate policy implications and can help overcoming barriers to linking not only in Northeast Asia but also across the globe.

Policy insights:

- ETS linkage represents a serious administrative challenge, the intensity of which is inversely proportional to the experience jurisdictions have with ETS at the domestic level.
- In absence of prior regional integration, interest groups tend to oppose governance-sharing in order to preserve their influence on domestic carbon pricing. Finding answers to the fear of losing influence will determine the persistence of difficulties in harmonizing many linkage-sensitive design elements important for linked ETS sustainability.
- Questions of Confidence triggers defiance in the environmental integrity of potential partners' policy that could be overcome by resolving the lack of Willingness to harmonize design and set up common institutions.
- Beyond domestic institutional resistance resolvable only by strong political leadership, Confidence-building focused on governance-sharing is necessary at cross-sectorial levels.

Keywords: Linking; Governance; emissions trading; ETS; political barriers; governance; political economy; climate policy



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1. Introduction

In spite of two decades of respective research, proven merits and immediate policy relevance e.g. in the Paris Agreement Article 6, linking emission trading schemes (ETS), to a large extent, remains a theoretical idea. Except for Tokyo and Saitama in Japan since 2011, California and Québec in North America 2014, and most recently the European Union and Switzerland, success stories of linkage are rare and exclusively concern relatively similar jurisdictions. In other cases, tentative linkage has eventually politically failed as in the EU and Australia, or the Australia and New Zealand cases (ICAP, 2018). Ambitious past visions have faced the same fate, like the OECD-wide carbon market expected for 2015 or the establishment of “linkage-ready” ETS in major emerging economies by 2020 (Tuerk et al., 2009). These setbacks highlight the political sensitivity of linking, even at the regional level and amongst similar jurisdictions. Even more, it also shows the complexity of establishing linkages between countries with heterogeneous policy designs and environmental ambitions (Metcalf & Weishbach, 2011).

In order to convince rational stakeholders of the merits of linking, respective theoretical literature has identified several arguments. The typical framework considers cost-sharing and effort-sharing benefits as main motivations for potential partners to link (Burtraw et al., 2013). Linking additionally provides a bottom-up structure for enabling international collaboration in line with the spirit of the Paris Agreement, adding political and institutional benefits to the economic dimension (Flachsland et al., 2009). Also, the more heterogeneous prospective linking partners are, e.g. with respect to marginal abatement costs, the more beneficial linking is with respect to cost savings (Mehling et al., 2017). We interrogate the conception that these benefits are sufficient to surmount the different political barriers to ETS linkage, particularly in a heterogeneous climate policy context.

In this regard, Fankhauser et al. (2015) find that climate policy formation is based on contextual time-series interactions between conflicting interest groups of varying political power that define the conditions of policy formation through negotiations. Thus analyzing barriers to ETS linkage has to go beyond economic benefits. Instead, it must take into consideration how interests and interactions impact the implementation of linkage (Kroll & Shrogen, 2009).

The guiding hypothesis of this paper is that the impacts of the policy-making processes themselves generate barriers to the emergence of the institutional governance structure necessary for trading greenhouse gas (GHG) allowances across borders¹. Against this

¹ The Necessity of this governance structure is widely discussed in the literature: Tuerk et al. (2009) or Bodansky et al. (2015).



background, in this paper, we analyze the impacts of politico-economic factors on implementing ETS linkages in a heterogenous country context using Northeast Asia as an example. We identify three different kinds of political barriers to linking in Northeast Asia: an institutional resistance barrier revolving around administrative challenges²; a governance-sharing barrier that embodies the difficulties to solve complex sovereignty questions; and an environmental integrity barrier based on a lack of Confidence between partners in the region.

2. Method

Applying a case study design, this paper focuses on Northeast Asia and analyzes political and institutional barriers to linking heterogenous ETS in the Paris Agreement era. Northeast Asia is particularly suited for this study for several reasons. China, Japan, and the Republic of Korea have been considering regional linkages for years without entering into effective negotiations (CarbonPulse, December 2017). They represent heterogenous ETS, divergent climate ambitions², and distinct political regimes: China is a one-party only autocracy, while Japan and Korea are parliamentary democracies. The region features a working national ETS in Korea since 2015, a yet-to-be-launched national ETS in China³, and a linked sub-national ETS in operation in the Japanese prefectures of Tokyo and Saitama since 2011.

With respect to empirical research methodology, Knox-Hayes (2012) analyzes the nature of path dependencies in climate policy formation. She underlines power-relations in the process to pass climate legislation by mapping organizational opinions onto a policy field of legislative negotiations. Inspired by this approach, we adopt a methodology that is capable of both acknowledging and depicting the complexity of interactions impacting linkage implementation. For empirical data collection, we surveyed opinions about linking and necessary reforms. For the sample, we concentrated on a small group of experts of either representative in the negotiation teams or advisors to national delegation negotiating the Rulebook of Paris Agreement Article 6 visible in *Table 1*. The survey was conducted before, during, and after COP25 in Madrid. from October 2019 to January 2020. In order to eventually identify impacts on barrier generation, the two objectives of this approach are to map differences in opinions

² Japan is an Annex-I country with a 26% reduction target of its GHG emissions compared to 2013, the country recently pledged carbon neutrality for 2050. Korea and China are both Annex-II countries. Korea plans to reduce its GHG emissions by 37% compared to a Business-As-Usual scenario level by 2030 and recently promised carbon neutrality for 2050. China plans to reduce CO₂ emissions per unit of GDP by 60 to 65% in 2030 from 2005 level, plans to peak its GHG emissions around 2030 and recently commit carbon neutrality for 2060 (UNFCCC, 2020).

³ Phase 1 of CN ETS should begin soon. China already has eight functioning regional pilot ETS since 2013 in Shanghai, Beijing, Hubei, Tianjin, Fujian, Shenzhen, Guangdong and Chongqing.

between countries and agent subcategories and to identify interactions that influence political decisions on linking in China, Japan, and Korea to underline their impacts in generating barriers.

Table 1 – Sample⁴:

Category of actors	China	Republic of Korea	Japan
Officials	14 agents including: <ul style="list-style-type: none"> National Development and Reform Commission (NDRC) State Council Ministry of the Ecological Environment National center for climate change strategies under the Ministry of the Environment Energy Research Institute (ERI) Research Institute on Climate change and Energy transition Nanjing Information Engineering University (Advisor to the NDRC) 	6 agents including: <ul style="list-style-type: none"> Ministry of Foreign affairs Ministry of the Economy and Industry Ministry of the Environment Korea Research Center on Climate Change 	8 agents including: <ul style="list-style-type: none"> Ministry of the Environment (MoEJ) Ministry of the Economy, Trade and Industry (METI) OECC institution under the MOEJ Ministry of foreign affairs
Energy actors	7 agents including: <ul style="list-style-type: none"> 中国恩菲工程技术有限公司 (Enfi) 上海电气集团股份有限公司 (Shanghai Electric) 国家电网冀北电力公司 (State Grid Jibei Electric Power Company) 	2 agents including: <ul style="list-style-type: none"> Kepeco (Korea) 	2 agents including: <ul style="list-style-type: none"> Tepco Kansai denryoqu (Kepeco)
Corporate actors	7 agents including: <ul style="list-style-type: none"> 全联新能源商会 (All Union New Energy Chamber of Commerce) 中新城镇化(北京)科技有限责任公司 (China-Singapore Urbanization (Beijing) Technology Co., Ltd.) 	4 agents including: <ul style="list-style-type: none"> Korea Exchange EcoEye (SK ETS major trading company advisor) Korea industry federation 	5 agents including: <ul style="list-style-type: none"> Mitsui Institute for the Industry sector MUFG advisors to the MOEJ and METI
Size of the sample	28	12	15

In the interviews, we target Agents' perception of important actors involved in the process, actors' influence on decision making, and their opinion on Northeast Asia linking. Three factors act as research hypotheses as potential factors generating barriers to Northeast Asia ETS linking: Feasibility, Confidence and Willingness to link domestic ETS. The questionnaire⁵ focuses on the three agent samples' perceptions of these three factors. Different agent categories' perceptions of these factors then allow us to understand the patterns that weaken the policy process and the locus of blockages. More concretely, the empirical interview-based Feasibility-test assesses agents' perception of the practicality of linking implementation. It thus allows for identifying the impact of policy complexity on generating barriers. The Confidence-test explores both agents' awareness of linking benefits and their perception of linking partner reliability. It thus allows to understand the barriers originating from a lack of policy understanding and distrust towards potential partners. Finally, the Willingness-test examines the politics behind the barriers and asks for agents' acceptance of ETS design harmonization considered necessary for Northeast Asian linking (*Table 2*). This test identifies the Willingness

⁴ Agents were interviewed anonymously and only employers' names that were allowed to be disclosed are listed in *Table 1*.

⁵ English version of the questionnaire available in the appendix.



to harmonize heterogeneities in ETS design between the three jurisdictions and the underlying political networks.

Table 2 – Harmonization framework:

Regulation	Heterogeneities ⁶	Alignments or Reforms tested ⁷
CAP	≠ in size of the cap and cap trajectory	Absolute target ETS cap Common / similar rules for cap setting
Coverage	≠ sectorial coverage	Sectorial coverage alignment
Compliance	≠ inclusion threshold	National scheme Convergence of inclusion threshold/sector
Allocation	≠ allocation methodologies	Align allocation methodologies Similar method for initial allocation
	No auction or limited auction (SK)	Auction-based allocation Organize joint auctions Common trading platforms
Price management	Strong control (CN) – No control (JP) – Allocation committee (SK)	Common framework for price management Limit banking to same proportion
MRV	Different interpretations of international MRV standards	Align MRV rules for offset projects Align data monitored and gathered in the Registry

The questionnaire is based on a double structured quantitative and semi-structured qualitative survey approach similar to the ones employed in case-specific analysis in the conservation science research context (Young et al., 2018). Agents are required to answer 30 questions and respond to 13 statements on climate/ETS policy design harmonization⁸. For each question and statement, they can further elaborate on their position in a comment section.

Survey results are organized in two figures below. *Figure 1* aggregates the results of the Feasibility-, Confidence- and Willingness-tests at the sample level and displays the percentage of positive and negative answers per jurisdiction, enabling easy jurisdictional comparison. *Figure 2* is a Likert-type scale depicting sub-categories of agents' opinions on ETS policy harmonization proposals. It provides a more precise analysis for assessing power-relations and constraints in the policy process. This visualization tool allows for identifying patterns and mechanisms generating ETS linking barriers in the discussion chapter. Additional open questions render a deeper analysis of the reasoning behind each agent's positions possible. Direct quotes from the comment sections are included in this paper whenever they are particularly expressive and useful for the analysis.

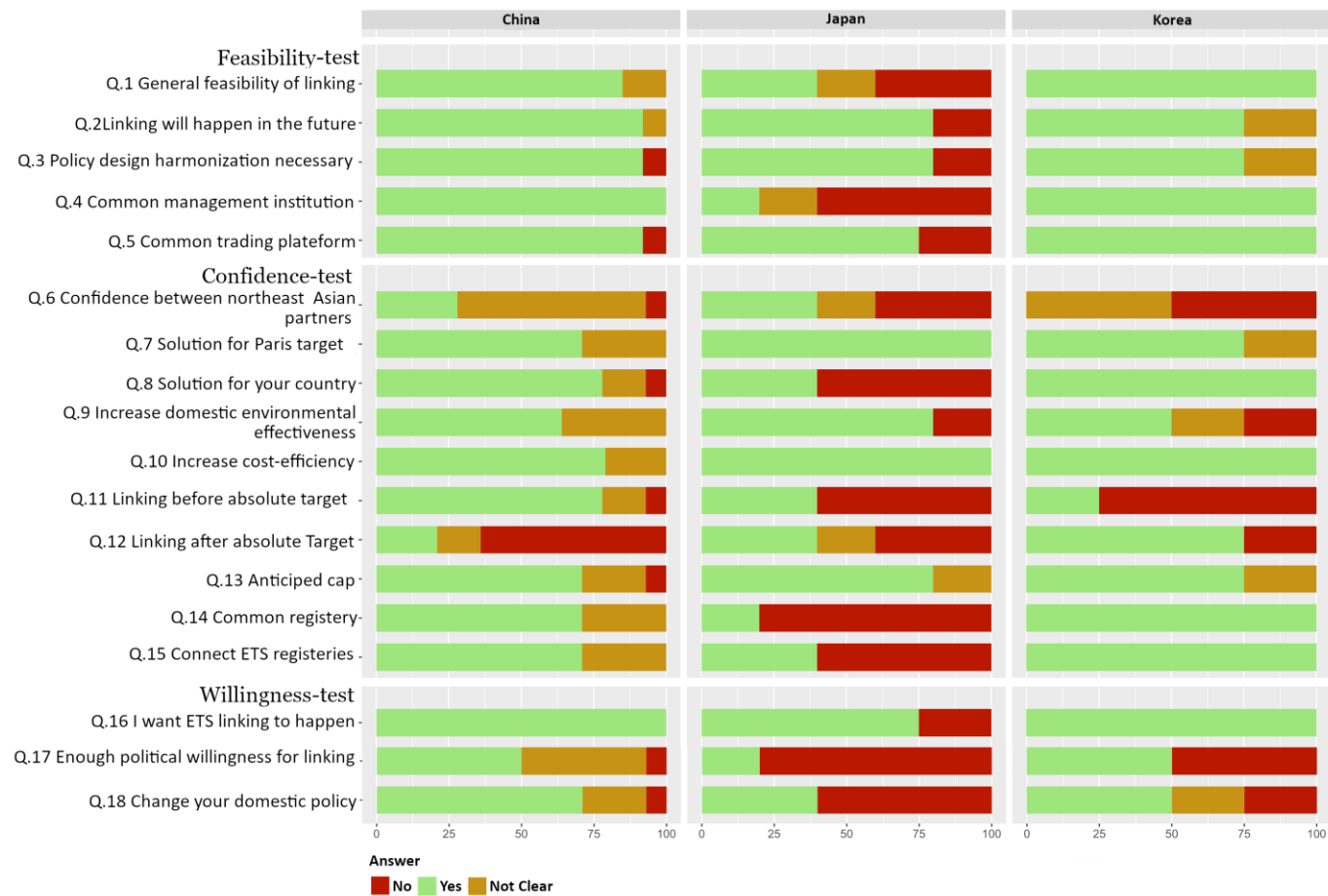
3. Results

⁶ Heterogeneities in design and policy analyzed in Dellatte & Rudolph S. (2020) with main sources on design (Tokyo Metropolitan Government, 2015; Ministry of Strategy and Finance of the Republic of Korea, 2012; NDRC, 2017; ICAP, 2019)

⁷ Case-specific framework and questionnaire elaborated based on studies on how to harmonize ETS with heterogenous design can be found in ICAP (2018), Bodansky et al. (2015), Tuerk et al. (2009), Metcalf. & Weishbach (2012) and Mehling et al. (2017).

⁸ If they “Fully Agree”, “Partially Agree”, “Partially Disagree” or “Fully Disagree”.

Figure 1. Results of Feasibility-, Confidence- and Willingness-Tests⁹



⁹ See Appendix for the corresponding questionnaire.

3.1. Feasibility

The Feasibility-test aims at assessing how the perceived linking Feasibility affects actual ETS linking implementation in China, Japan, and Korea. Measuring Feasibility of linkage implementation means to analyze multiple institutional settings dependent on political interactions and each agent's perception of aspects connected to the Feasibility of policy implementation.

According to survey results, the perceived Feasibility has a relatively small influence on current Northeast Asian ETS linkage barriers, particularly with respect to the Korean and Chinese samples. In fact, a vast majority of agents believe regional ETS linkage will be established in the future [Q2] and that harmonization is necessary [Q3]. In contrast, the Japanese samples' rather negative Feasibility perception appears to generate barriers to linkage. More precisely, results indicate a fear of establishing and utilizing common institutions expressed by Japanese agents [Q4]. Second, despite a relative optimism towards policy harmonization in Japan, the Feasibility-test shows that the perception of Feasibility declines when the level of integration necessary to implement linkage is interrogated.

3.2. Confidence

The Confidence-test is a multidimensional exercise. It can be realized by directly surveying the level of Confidence in the samples or by questioning the adhesion to specific aspects connected to the Confidence factor. In addition, in our survey, two dimensions of the Confidence factor are tested for, which both can trigger barriers to linking: Confidence in the policy itself and Confidence in prospective linking partners.

The results of our survey show a weaker Confidence as compared to the Feasibility perception among all three samples. Also, the Confidence in prospective partners [Q6] seems to be lower than the average Confidence in the policy instrument design. In addition, the majority of the three samples have Confidence in ETS linking benefitting Paris Agreement target achievement [Q7] and economic efficiency [Q10], and also, though to a lesser extent, domestic target achievement and environmental effectiveness [Q9]. Samples are particularly split on cap specifics [Q11/12] and institutions pooling [Q13/14/15]. Even more than for Feasibility, the Japanese sample exhibits the lowest Confidence in general.

3.3 Willingness

According to the above results, a substantial part of the samples still believe linking will eventually be implemented because of the emission reduction urgency and respective cost-

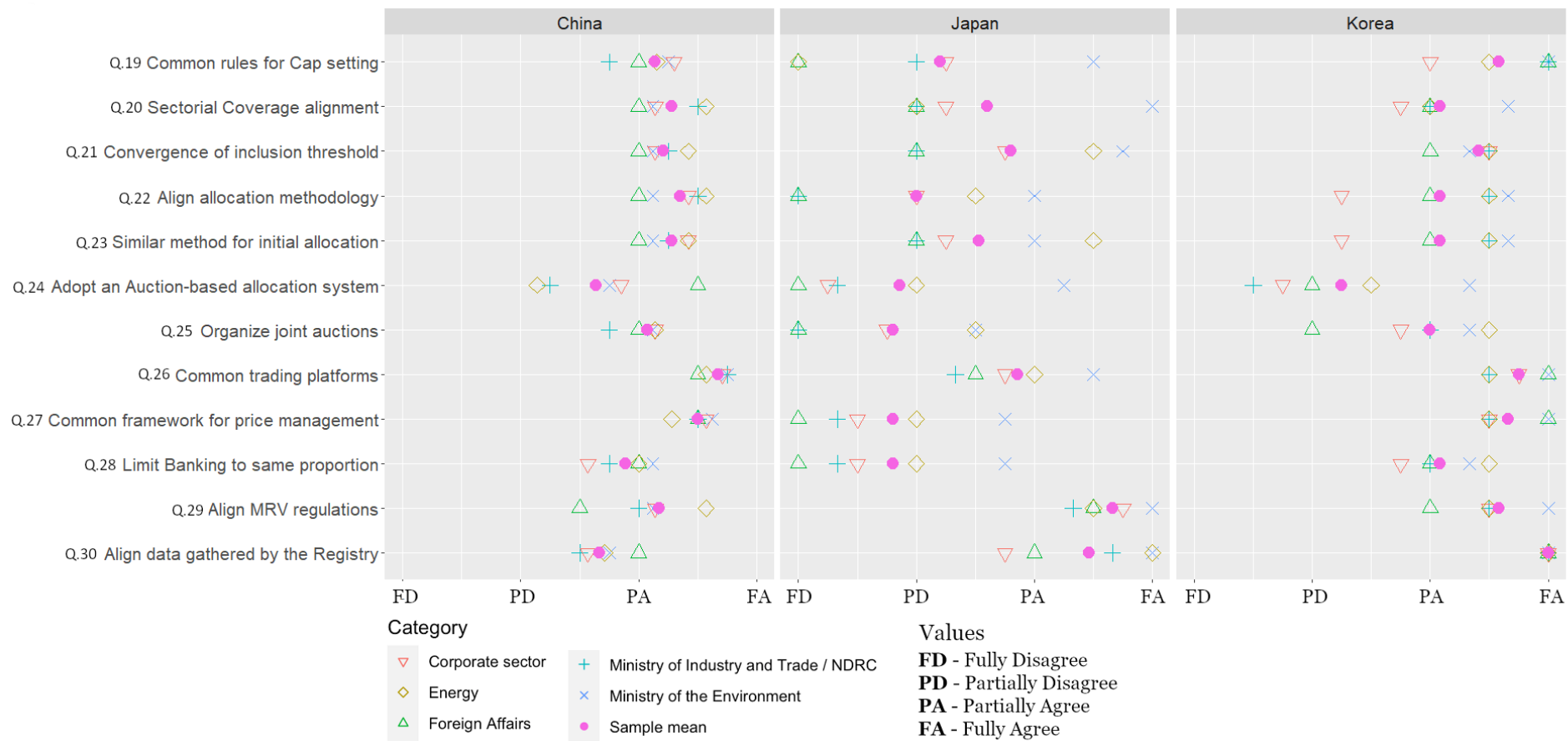


efficiency properties. Thus, beyond Feasibility and Confidence, political Willingness issues appear fundamental. Willingness results of the survey from all three samples are shown in two separate figures.

The most noticeable in *Figure 1* is the weak or uncertain perception of domestic political Willingness to link in the three countries [Q17]. Despite stated individual support of linking by a majority of agents [Q16], the Willingness to link and change policy design [Q18] is still perceived as problematic.

Figure 2 shows answers to twelve specific policy harmonization proposals of essential ETs design elements by sample and agents' subcategories, thus allowing a better understanding of the positions, constraints and mechanisms behind political Willingness. The results mainly show that one half of the harmonization items potentially represent an issue and can thus contribute to creating implementation barriers.

Figure 2 – Willingness to harmonize¹⁰:



¹⁰ See Appendix for the corresponding questionnaire.

In sum, Japan is the only country in which issues of all three factors are significant. Japan has internal Feasibility issues and also a serious lack of Confidence in potential partners. The Japanese sample judge political Willingness to be weak on almost all the criteria tested, which implies serious difficulties to carry out any kind of close collaboration in carbon pricing policies. The survey also reveals a deep division between the environment-oriented side of the sample (MoEJ and advisors) and the economy-oriented side (METI, corporate sector) about linking.

This result also partially applies to Korea, the most advanced country in the region in terms of ETS practice. The Feasibility-test indicates that a high level of cooperation or ETS linkage is considered worthwhile [Q4]. In contrast, the Confidence-test shows a less positive view, raising issues on environmental integrity [Q9] and cap [Q11]. Korean agents see political Willingness as mixed [Q17/18], and economy-oriented agents seem to treat the harmonization of the allocation method [Q22/23] and auctions [Q24/25] with reserve.

The Chinese sample, in contrast, differs from the two other samples with answers being largely positive towards linking. Other than Japan and Korea, China is an autocracy, so decision-making does not rest on the same basis. The Confidence-test exposes a fear that the two other partners might lack confidence in Chinese policy [Q6 comments]. The Chinese Willingness to cooperate with other jurisdictions is ambiguous [Q16/17], and most agents indicate a determination to achieve ETS linkage in the future.

4. Discussions

The above-outlined results support three fundamental barriers to linking ETS in the Northeast Asian heterogenous context.

4.1 The institutional resistance issue

The institutional resistance barrier conveys that the domestic institutional process typically complicates ETS linking. It echoes the administrative challenges that ETS linkage enforcement represents, especially between jurisdictions with heterogenous climate policy as already outlined by Bodansky et al. (2015). It additionally emphasizes what Ranson & Stavins (2015) described as the influence of unstable domestic political opinion on the issue.

Particularly in Japan, the survey indicates a perceived lack of administrative workability of linking legitimized only by apprehensions. In *Figure 1*, while the Feasibility perception in the Korean and Chinese samples is positive, this is not the case in the Japanese one [Q1]. Besides, there is an obvious contradiction in the Japanese samples' response to the Feasibility-test: A majority believes linkage will happen in the future [Q2], while only a



minority deems it feasible [Q1]. This contradiction suggests political reluctance with regard to linkage implementation in Japan. Japanese agents characterize the difficulties as being legal and administrative Feasibility issues of changing legislation for linkage in their own country. They explain this anxiety by “*skepticism in the capacity of the political decision-making process of the country to implement international cooperation in such a sensitive political subject both at the legislative and the executive level*” (Japanese METI agent interview, personal communication at COP25, December 4th, 2019). Fear of institutional change thus constitutes an important obstacle to Northeast Asia ETS linkages.

Bernstein & Cashore (2012) state that climate policy’s complex global governance nature implies a difficult multidimensional administrative challenge for stakeholders at the domestic level. It can also be observed in regional ETS linkage implementation. In *Figure 1*, most of the Japanese agents’ judge Willingness to change very weak [Q17] because of Japan’s institutional rigidity towards changes. Meanwhile, in spite of a tendency to believe in the necessity of policy harmonization [Q3], Korean agents show some anxiety at the idea of renegotiating with private sectors some hard-fought-for elements of the Korean ETS. This anxiety resonates in *Figure 2* with the lack of Willingness of corporate agents to revise sensitive design elements such as the initial allocation method [Q22/23]. This institutional inertia paradox generates resistance to change policy on the basis of authorities’ apprehensions of their own capacity to implement changes for ETS linking. Institutional inertia thus significantly weakens regional integration potential. In this regard, Korean agents express that their main concerns about a regional linkage Feasibility are actually the slow institutional process in Japan to adopt a genuine national scheme: “*More the Japanese scheme takes time to be developed, more it will slow down linkage implementation in Northeast Asia*” (Korean MoE agent interview, personal communication at COP25, December 10th, 2019).

Knox-Hayes (2012) and Fankhauser et al. (2015) explain the importance of prior policy efforts for enhancing the implementation of new climate policy. This can also be observed in our surveys. In *Figure 1*, the three samples conform to the necessity to have policy design harmonization in order to link ETS [Q3]. Regardless, *Figure 2* reveals that only Japanese agents associated with the Ministry of the Environment hold to the idea of a common management system, while there is resistance from business and energy sectors and the trade and foreign affairs ministries to endorse a common institution. On the contrary, Korea and China both show strong approval of the establishment of a common management mechanism to centralize market information [Q27]. Prior policy experiences partially explain this difference of perception. From their own domestic ETS experience, Korean stakeholders are already familiar with a strong centralized domestic institution¹¹. Chinese agents acknowledge being accustomed to a centralized system just being implemented for the CN ETS. Economy-

¹¹ *The Korean Allocation Committee* see (Ministry of Strategy and Finance of the Republic of Korea, 2012)

oriented agents in the Japanese sample, in contrast, have not experienced such a system yet and thus judge common institutions suspiciously. Hence, significant ETS experience seems consequential for mitigating institutional resistance.

4.2 Governance-sharing issue

4.2.a *The difficulties in sharing governance*

Uniformization of ETS design tailored for each domestic situation appears to be unrealistic. But, as Bodansky et al. (2015) underline, in the absence of default international rules, harmonization is the only credible option for ETS linking. Amongst linkage-sensitive design elements, the implementation of common institutions faces the biggest obstacles. In Figure 1, Japanese agents reject any kind of common management institution [Q4], while a majority supports privately organized common trading platforms [Q5]. This position is, however, not shared by China and Korea. Still, there is weak general Confidence between potential partners [Q6], which hints at similar anxieties with respect to institutional integration [Q6 and comments]. Altogether, the three countries appear to see design harmonization and decisional institutions differently, revealing a governance-sharing barrier.

Bernstein and Cashore (2012) emphasize that, in global climate policy, complex governance systems interact with complex sovereignty. The case of ETS linkage even complicates authorities' influence on domestic policy governance. Additionally, Mehling et al. (2017) express that linking translates into a loss of sovereignty and a reduction of autonomy that is supposedly outweighed by linkage benefits. However, as depicted in Figure 2, in Japan, the Willingness to harmonize price management [Q27], allocation methods [Q22/23], banking [Q28] or cap setting [Q19] is controversial among sub-categories of agents. Rejection is particularly acute in the economy-oriented parts of the sample (METI, corporate), interpreting these measures as “*losing sovereignty on important economic features*” (Japanese METI agent interview, personal communication at COP25, December 4th, 2019). In Korea, in contrast, harmonization is considered necessary for the good governance of a linked system, despite experienced difficulties of negotiating crucial design elements with covered sectors. Koreans are ready to share some sovereignty, if it provides a safeguard for data quality and strengthens Confidence between partners. Chinese agents follow a similar pattern and believe some common institution is “*necessary to control the flow and the quality of permits exchanged and ensure rules to be respected*” (NDRC agent interview, personal communication before COP25, November 15th, 2019). This difference in perceptions between samples displays a certain perception of sovereignty, which, in turn, shapes attitude divergences on governance-sharing.



That being said, Green et al. (2014) state that linking means shifting mitigation and capital outflow from a jurisdiction to another and implies potentially serious political risks for authorities. It also leads to sacrificing some control over domestic carbon market prices, which, according to Ranson & Stavins (2015), could not be critical in countries' decisions to adopt ETS Linkage. However, it does not seem to be that well-defined in our Northeast Asia case-study. Korea does not seem particularly worried about the loss of sovereignty, as confirmed in *Figure 2* by the results on Korean agents' perception of the implementation of a common framework for price management [Q27]. Instead, Korean agents express the presence of “*industry pressures*” (Korean MoE agent interview, personal communication at COP25, December 10th, 2019) demanding to increase liquidity and lower the burden at any cost. In contrast, in Japan, skeptical agents (MOFA and METI) express their uneasiness with governance sharing by putting a higher priority on “*keeping command on the national economic and energy policy*” (Japanese METI agent interview, personal communication at COP25, December 10th, 2019) than on potentially high carbon price in the future. While some carbon price sensitivity exists in Japan for a long time (Tuerk et al., 2009), our results show that it is dominated by the sensitivity to preserve domestic control over economic and energy policy. China does not seem to suffer a lot from this anxiety. On the contrary, once again the Chinese sample believes the linking advantages for the country are going to be big enough to compensate for some loss of control over carbon prices.

4.2.b Governance-sharing and power-relations

But what justifies these differences in the approach to governance-sharing for ETS linking? Metcalf and Weishbach (2011) mention that ETS linking creates distributional concerns affecting domestic groups such as businesses by creating new winners and new losers, which has an immediate impact on policy interests. It also means that ETS linkage disturbs the traditional power (im)balance between actors with respect to domestic carbon pricing policy. In this regard, a clear divide between China and the two other jurisdictions is visible in the outcomes of our survey.

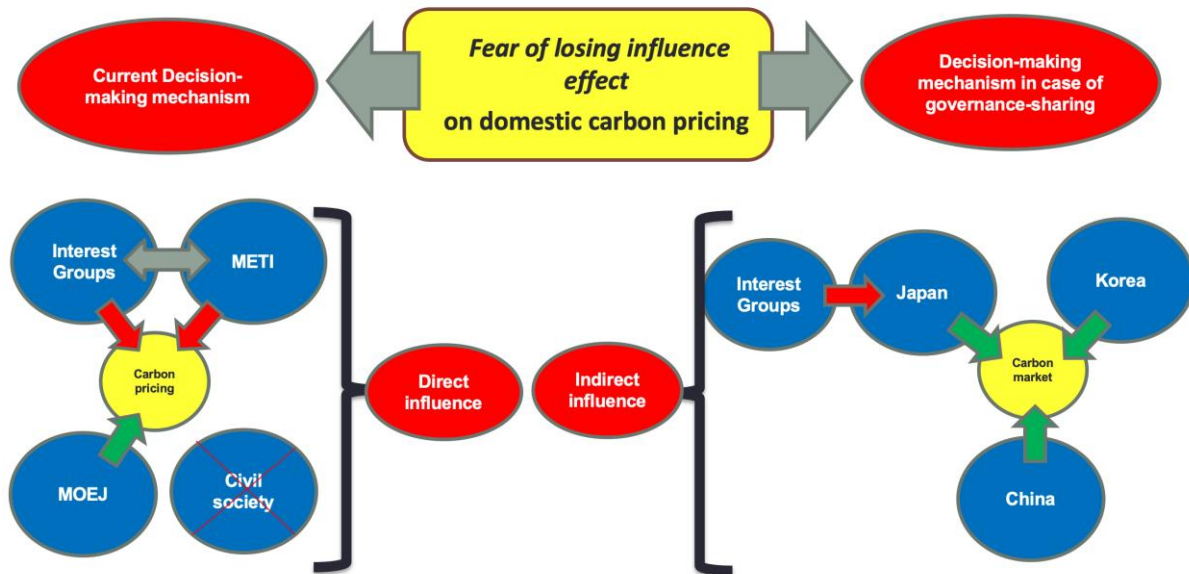
China shows a moderate interest in receiving a linkage-rent in *Figure 1* [Q10 and comments], the Confidence indicator shows an even greater appetite from the entire Chinese sample to support their domestic ETS through international linkage [Q6/8 and comments]. Priority is given to the international legitimacy of the national ETS against disturbing a not clearly established distribution of carbon price burden at the national level. This pattern also explains to a certain extent the converging Willingness to harmonize design expressed by different types of Chinese agents in *Figure 2* (with the exception of auction [Q24]). The two democratic countries Japan and Korea, in contrast, follow different mechanisms.

Bodansky et al. (2015) also state that each domestic ETS design element represents a compromise between diverging stakeholder interests within a country and any change could

create additional political barriers. Thus, governance-sharing poses a structural threat to domestically organized interest groups' capacity to influence national ETS design evolutions. As Markussen & Tinggaard (2005) emphasize for the EU ETS, and generalized later by Gulbrandsen et al. (2018) for Linking in heterogenous context, organized interests intuitively tend to invest their influence into maximizing their rents. This effect triggers differences in positions on linkage between Korea and Japan. In the Korean case, fears of governance-sharing are overlain by the cross-sector Willingness to lower the KETS price burden, despite previous issues to implement revenue-raising design elements (Kim, 2016). In the Japanese case, in contrast, fear of a high carbon price is currently superimposed by stakeholders' anxiety of losing their influence network on the national carbon pricing policy. This phenomenon, that we call the fear of losing influence effect, jeopardizes potential adherence to governance-sharing in Japan, while it does not in Korea. Corresponding to the fear of losing influence effect in Japan, industry pressure goes beyond skirting of carbon pricing, like documented for many years (Rudolph & Schneider, 2012; Rudolph & Park, 2010). In this case, these pressures further aim at avoiding the loss of influence on future domestic carbon pricing policy. The reason is to be found in the specific decision-making architecture in Japan. The Japanese sample justifies reluctance to ETS Linking by the relationships between the government and industry federations such as Keidanren, which oppose any ambitious carbon price for achieving Japan's Paris Agreement commitment (Keidaren, 2019). The influence of this relationship on Japanese government representatives is well-visible throughout the entire survey, with *Figure 1*'s contradiction linkage being a solution for achieving the Paris target [Q7] but not for domestic mitigation in Japan [Q8]. And in *Figure 2*, the unwillingness of corporate agents to harmonize design elements that would reduce direct influence on policy design and outcome (common price management [Q27], initial allocation methods [Q23/24], sectorial coverage [Q20] or banking [Q28]) further supports this notion. *Figure 3* depicts the very weak willingness of corporate actors on harmonizing design items that would mean a loss of direct influence in Japan: Common framework for price management, initial allocation methods or banking.



Figure 3 – Fear of losing influence effect



In order to further assess this fear of losing influence, opinions toward allocation harmonization and auctioning in Korea and Japan are interesting to have a closer look at. In *figure 2*, the weakest support for allocation harmonization in Japan comes from the corporate sectors, METI and Foreign Affairs, with METI being even more reluctant than corporate representatives [Q22/23]. *Figure 2* also shows a uniformity among the three countries with respect to the fear of auction-based allocation [Q24] and common auctions [Q25], but again most pronounced in Japan. Additionally, both allocation elements see a divergence of positions between environment- and economy-oriented side with a significantly lower Willingness at the economic side. Reasons provided in the interviews to justify rejections confirm that this positioning is purely self-interest driven. Corporate agents believe harmonizing allocation methodologies would create “*unfair competition rules due to cost-divergences*” (Japanese corporate agent interview, personal communication at COP25, December 3th, 2019) and they display great skepticism regarding the chances of negotiating a fair allocation system in the Northeast Asian region. Korean authorities, in turn, emphasize that “*free allocation was used by authorities to convince covered sectors’ representatives to take part in the scheme*” (Korean METI agent, personal communication at COP25, December 5th, 2019), thus showing the importance of the allocation design element as a levy to overcome industry opposition and facilitate domestic ETS implementation.

Having said that, one could conclude that the power-relationship between industry and authorities has a stronger impact in Japan than in Korea. This would concur with the argument outlined by Fankhauser et al. (2015) that having a strong Willingness in the executive branch

to challenge interest groups when passing climate legislation is of utmost importance. On the flip side, industry pressure is also the reason for Koreans' weaker governance-sharing anxiety, because corporate sector interests have shifted from preserving influence to lowering the carbon price burden (a direct evolution of the mechanism developed by Kim (2016)). A partial explanation of this difference can be found in the absence of political changeover in Japan since the failed attempt to establish a national ETS in 2010 and the 3/11 triple catastrophe in the Fukushima region (Rudolph & Schneider, 2012). Also, it indicates a lack of balance between economic and environmental interests in Japan, which can supposedly be addressed by a carbon pricing instrument like emissions trading. Two factors collude to sustain this mechanism: foremost, a government architecture that heavily prioritizes short-term private sector interests in the political decision-making; subsequent, a lower adherence to the concept of effort and risk-sharing in ETS climate policy from the representatives of the economic sector. This last factor is particularly significant for explaining the rejection of governance-sharing in Japan, because any governance-sharing would de facto disturb a well-established power-relationship that is perceived as being more beneficial than any cost-efficiency gains from ETS linking ETS.

4.3 Environmental integrity issue

Environmental consequences of a regional linkage in Northeast Asia also generate concerns. *Figure 1* informs that linking is seen as a useful instrument to boost domestic environmental ambition [Q9] and cost-efficiency [Q10] by a majority of the three samples. It comforts the adherence to the notion that ETS Linking tends to lower the emissions reductions in countries with higher marginal abatement cost of carbon reduction and would provide extra mitigation outcomes at the linked market level (Green et al., 2014). Furthermore, opinions expressed in the three samples, especially coming from environmental-oriented agents, show that linkage is perceived as essential to trigger a much-needed higher environmental ambition [Q9 and comments]. Thereby, some Chinese agents express that “*sharing governance could even trigger higher domestic environmental ambition at the domestic level*” (Chinese MoEE agent interview, personal communication at COP25, December 6th, 2019). Still, it does not appear to be a sufficient argument to convince stakeholders in the three jurisdictions to trustfully collaborate. Weak Confidence [Q6] justifies this gap between the perceived theoretical environmental benefits of linking and the lack of actual application in Northeast Asia. More worrying, in *Figure 1*, it seems that the more ETS experience a country has, the more it is pessimistic about additional environmental benefits of linking [Q9]. One explanation for this can be the perceived divergence amongst potential partners about partners' environmental ambitions. This could trigger a particular barrier connected to the perceived environmental integrity of potential partners' policy.

Ranson and Stavins (2015) argue that ETS linking structurally connects the



environmental effectiveness of the joined system to the environmental integrity of each partners' domestic system. And as emphasized by Bodansky et al. (2015), any flaws in measuring, reporting, verifying (MRV) system threatens the integrity of the entire linked system not only the domestic one. Fears of poor-quality data coming from the partners is a common concern found in the Confidence-test [Q6 and comments]. This fear is directly related to the capacity of the three partners to establish (MRV) institutions that enable all partners to verify mitigation performance at the regional level. However, this capacity is jeopardized by the two previous institutional barriers [Q14/15]. In *Figure 2*, Korea's and Japan's Willingness to align MRV regulations [Q29] and data gathering in the registry [Q30] by far exceeds China's. It can be partially explained by the relatively low sensitivity of data disclosure currently anticipated in the CN ETS draft design (NDRC, 2017). In this paradoxical situation, doubts in potential partners' integrity can flourish, representing a lack of Confidence not so much in partner's intentions but in the reliability of the partners' policy. In addition to that, Ranson & Stavins (2015) also underline that linkage can imply tolerating a certain level of uncertainty about the quality of allowances coming from a foreign scheme. But under the structural absence of Confidence, this dimension of linking appears to be difficult to accept amongst Northeast Asian agents, giving rise to a double defiance phenomenon.

The first defiance, shared both in Japan and in Korea, finds its roots in China's intensity target-based ETS yearly adjusted to GDP, which will probably remain until at least 2030 (Chemnick & Storrow, September 2020). As *Figure 1* indicates, Japanese and Korean agents worry about this structural divergence in environmental ambition [Q11/12]. This notion is supported by Flachsland et al. (2009), who underline that the risk of selling "hot air"-allowances in case of asymmetrical environmental ambition is real and that endorsing linkage without assessing this risk could jeopardize each partner's domestic climate policy goal. Echoing this risk, Korean and Japanese expect a full linkage to give to Chinese authorities the power to set the environmental ambition of the entire linked market, which, in fact, would mean transferring key political decisions to China. It reinforces the linkage benefits paradox mentioned by Ranson & Stavins (2015) that, despite the advantages of linking heterogeneous ETS with, differences in ambition and prices represent a significant barrier to linking. However, as the environmental ambition of a linked ETS is based on cap setting and the lack of Confidence is mainly based on the expectation that one partner adopts strategic behavior and sets a loose cap (Bodansky et al., 2015), this barrier can be overcome by unanimously agreeing upon a common cap setting approach, currently rejected in Japan [Q19].

Figure 1 also shows the second Confidence-based defiance. A majority of the Japanese agents keep being skeptical even if China turns to an absolute target cap [Q12]. This opposition is connected to a general lack of trust in the current Chinese environmental policy intentions. Korea, in contrast, currently does not have an absolute target either, but it does not suffer the same suspicion from the Japanese sample in the comments. Korean MoE agents, in turn, share Japan's concerns toward China's environmental ambitions [Q11 comments], which demonstrates

the sensitivity of the question. On the Chinese side, it echoes the need felt to legitimize the CN ETS through international linkage. Similar concerns about integrity in the International Transfer of Mitigation Outcomes (ITMO) in the absence of international MRV institutions have been raised by Mehling et al. (2017). This last barrier revolves around a mistrust in the Chinese general environmental purpose and occurs to be difficult to manage.

4.4 Risks for a future North-East Asian ETS Linking

In this context, can linkage ever be made sustainable? The three previous barriers impede the current political mood toward a regional ETS linking in North-East Asia and make it difficult to institute. However, they also have broader impacts on the three countries' capacity to establish a sustainable linkage in the future. If political willingness evolves to a nicer horizon towards regional collaboration in ETS, this political-economic pattern draws some potential caveats for its sustainability. Indeed, only partial resolution of these barriers could ease linkage implementation but still significantly darken the linkage's sustainability. Three main problematics enable us to discuss this issue further: The Cap question, the harmonization of linkage-sensitive design items, and sustainability measures.

The cap feature is a significant advantage of Emissions Trading Schemes because it gives jurisdictions power to set the amount of emissions removed annually directly. However, this ETS advantage also triggers uncertain sustainability when combined with a lack of trust and Governance-sharing issues. In the survey, the three countries consider cap as a significant sovereignty item that complicates linkage achievement. This paper has already discussed the Korean and Japanese rejection of linking if the three countries do not have an absolute cap as an environmental integrity issue. Nevertheless, in the NDC world, where each country freely sets its ambition, the sustainability outcomes of linking ETS with different caps are not necessarily connected to the absolute or intensity target question but to predictability. If partners can agree on a governance mechanism to discuss cap trajectory, each jurisdiction can then ideally guarantee the linked scheme ensures a global cap stringent enough to achieve each national environmental goal (Burtraw et al., 2013). Except that in the North-East Asian case, even discussions on cap-setting rules seem challenging to achieve. The governance-sharing issue directly inhibits countries' ability to agree on any cap-setting policy with their potential partners. Without resolving the Japanese rejection of common rules, a sustainable linkage is impossible. The absence of some agreement on cap automatically risks the schemes' sustainability if one jurisdiction decides to implement a loose cap and adopt strategic behaviors to maximize rent (Marschinski R., 2008; Sterck et al., 2006). Hence, settling the absolute cap question does not guarantee that linkage discussion will be eased nor sustainable. Discussions will still face a lack of trust in the environmental integrity and governance-sharing reluctance. If confidence can arise, the solution to the cap question's sustainability lies in resolving the governance-sharing reluctance question. Ideally, the harmonization level should represent the



equilibrium that provides sufficient confidence in the partners' environmental integrity while allowing each country to keep enough control on the political decision to set at which level it wants to reduce its emissions.

Beyond cap, the mechanism behind the governance-sharing barrier in Japan heavily obstructs harmonization in some linkage-sensitive design features like allocation methodology or, to a lower extent, coverage. The consequences of this obstruction, if persisting, could be severe for the sustainability of a future Linking in the region with risks of generating "Hot Air" ITMOs and allowances leakage (Sterck et al., 2006; Mehling et al., 2017). Harmonization of sectorial coverage, compliance, and allocation features does not create but erases potential unfair competition and generates beneficial distributional effects (Burtraw et al., 2013). Indeed, the emergence of un-linked individual cap-and-trade in the region where sectors are covered and allocated very differently like today¹² produces potential competitive distortion between trading partners. Notwithstanding, the samples understand this reality, and the mechanism behind the governance-sharing barrier does not block every kind of design harmonization. More potential harmonization disturbs the domestic effort-sharing equilibrium; more it tends to be rejected. In *Figure 2*, harmonizing inclusion threshold looks accessible but still sensitive for METI in the Japanese sample. It reveals an acknowledgment of the necessity to create fair competition rules between covered entities. Meanwhile, MRV settings seem easier to achieve, which demonstrates a theoretical attachment to structural transparency. However, if some of these blockages persist, it could seriously endanger the sustainability of linkage. A convergence of design is an essential part of ETS linkage, especially in EITE sectors, to avoid carbon leakage to the jurisdiction with a higher inclusion threshold or a roomier allocation methodology. In addition to that, harmonization is a powerful instrument to raise environmental ambition among partners. Japanese and Korean representatives are worried about the Chinese scheme's environmental integrity, and these features are precisely the design harmonization that has to be negotiated to enhance environmental ambition.

Emissions Trading Schemes can be made sustainable by the implementation of sustainability measures like auction or banking limitation. Reforms for ETS linkage could represent an exciting period to implement such measures and enhance sustainability in the connected schemes. Auctioning finds its interest for ETS sustainability because it can guarantee revenue to concerned jurisdictions and give the market the responsibility of initial allocation. At the moment, Korean authorities plan to implement a 10% auction allocation from 2021 (MoEK, 2018) and China considers partial-auction implementation for the future, according to Chinese agents interviewed. Even if all ministries actors of the three samples acknowledge the

¹² South-Korea plans to move to a 10% auctioning system for non-EITE sectors while 90% will remain freely allocated. In China, the CN ETS initial allocation will be benchmarked, owing to a lack of data reliability. The subnational Japanese ETSs use Grandfathering to compute the individual baseline. Noticeably different from the other EA systems, Japanese covered entities trade Excess Reduction Credits (ERC) received for reductions beyond their reduction obligations and do not receive any initial allocation.

potential interest of raising revenues, *Figure 1 & 2* show a uniformity among the three countries in fear of the economic consequences of an extra carbon cost derived from an entirely auction-based allocation. In addition to that dimension, auction rejection also encompasses the fear of losing influence effect of the governance-sharing Issue by structurally reducing interest-groups capacity to influence initial allocation. That being said, if auction-allocation represents a real competition issue for EITE sectors in the absence of a carbon border adjustment mechanism, the implementation of a common regional auction-system would equalize competition between trade partners (Burtraw et al., 2013). However, current oppositions to Auction at the domestic level also jeopardize auctioning in case of linkage. This rejection of sustainability measures enlightens the mechanism behind the fear of governance-sharing: According to the Korean survey, *authorities used free allocation to convince covered sector representatives to participate in the scheme*. This depletion of Auction as a levy to facilitate ETS implementation embodies the compromise that has been necessary to resolve the reluctance to carbon pricing. Thus, risks are that the same pattern would infer potentially strong oppositions to ETS linkage implementation.

The Chinese case seems to imply less apprehension from the economic representatives to lose their influence on the decision-making process in a case of linking. However, similarly to the two other countries, NDRC agents reject auction-based allocation encompassing the very low probability to see Auctions becoming mainstream in the country. Additionally, the weak Chinese adherence to banking limitation also demonstrates a comparable habitus in the rejection of further sustainability measures. Corporate sector representatives express that the CN ETS's intensity target nature would allow covered entities to bank more permits for the future when the scheme turns absolute. They fear common banking limits would endanger their position when tighter cap conditions would apply. This unwillingness does not directly come out of the governance-sharing issue. Nevertheless, anxieties of the potential consequences of linkage still block the sustainability of the linked market.



Table 3 – Summary risks for a future Northeast-Asian linking:

Design element	Sample	Barrier	Kind of risk triggered by the barrier			Literature
Cap	Japan	Governance-sharing	System	Robustness	+	Burtraw et al., 2013; Marschinski R., 2008; Sterck et al., 2006
Sector coverage	Japan	Governance-sharing	Economic	Efficiency	+	Burtraw et al., 2013
Compliance	Japan	Governance-sharing	Environmental	Ambition		(Carbon leakage) Burtraw et al., 2013
Allocation	Japan	Governance-sharing	Economic	Efficiency	+	Sterck et al., 2006; Mehling et al., 2017
Auction	Japan Korea China	+	Environmental	integrity		Environmental effectiveness Burtraw et al., 2013
Temporal flexibility	Japan China	+	Governance-sharing	Environmental integrity	+	Sterck et al., 2006; Mehling et al., 2017
Price management	Japan	Governance-sharing	System	Robustness	+	Sterck et al., 2006; Mehling et al., 2017
			Environmental	Ambition		+ Economic Efficiency

There are strong connections between governance sharing and barriers to sustainability. Fears of losing influence threaten many of the environmental and competitive advantages of linkage. Thus, resolving governance-sharing rejection and its mechanisms will determine the persistence of difficulties to settle Cap questions, allocation methods, and sustainability measures. It is especially true in Japan, the country with weaker political willingness to ETS implementation and where these barriers are the most acute. Without encompassing these issues, the probability of a sustainable linkage in North-East Asia is low and unprobeable.

5. Conclusions

Based on extensive stakeholder interviews with Chinese, Japanese, and Korean UNFCCC negotiation team members, this paper supports the notion that, despite economic advantages, heterogeneous domestic climate policies create effective obstacles to international ETS linkage in Northeast Asia. Beyond the political risk of instituting a structural rent, fears of losing domestic control over policy design and results appear to be the number one concern. Also, political barriers to ETS linkage are connected to jurisdictions' preceding experiences with ETS.

Our results further suggest that in China and Korea the perceived Feasibility has a relatively small influence on Northeast Asia ETS linkage implementation. In Japan, however, the perceived low Feasibility indicates a specific fear regarding expected domestic implementation difficulties. The survey also shows a connection between the perception of Feasibility and the level of integration necessary to implement linkage. However, questions of Confidence dominate Feasibility issues in the generation of barriers. While concerns about environmental integrity are detectable, questions about institutional integration excel in importance. Once again, Japan is the country with the weakest Confidence in both linking itself and potential partners. Willingness appears to vary considerably across the three countries. Fears to lose control over important aspects of economic policy trigger resistances to linkage in all samples, but particularly in Japan. This anxiety jeopardizes partners' Willingness to harmonize linkage-sensitive design elements.

Based on these results, we identify three main politico-economic barriers to Northeast Asian ETS linkage, all of them particularly persistent in Japan. First, an institutional resistance barrier revolving around the perceived political capacity to implement institutional changes. It describes linkage as a serious administrative challenge, the intensity of which is inversely proportional to the experience jurisdictions have with ETS at the domestic level. Second, a governance-sharing barrier connected to the level of institutional integration necessary to link ETS across jurisdictions and to fears of losing control over domestic economic and energy policy. It originates in a weak Confidence between partners, in the difficulties of authorities to settle complex sovereignty issues and in the political risk of potentially losing some control over domestic policy. The mechanism leading to this issue in Northeast Asia is the fact that, in absence of prior regional integration, interest groups tend to oppose governance-sharing in order to preserve their influence on domestic carbon pricing. Third, the environmental integrity barrier indicates the impact the lack of Confidence has on environmental concerns. The first dimension of this barrier is connected to the policy itself implemented in potential partner jurisdictions. This dimension could be overcome by resolving the lack of Willingness to harmonize design and set up common institutions. The second dimension centers around a mistrust in the general environmental intentions in China. Overcoming this dimension



necessitates long-term Confidence-building and the capacity to set up joint regional MRV institutions.

In sum, finding answers to the fear of losing influence will determine the persistence of difficulties in harmonizing many linkage-sensitive design elements important for the sustainably linked ETS. Further research focusing on specific agent categories and their behaviors with respect to the fear of losing influence on domestic carbon pricing policy could provide important insights for overcoming this fear. Beyond domestic institutional resistance resolvable only by strong political leadership, Confidence-building focused on governance-sharing is necessary at cross-sectorial levels. But still, mistrust in environmental policy integrity between potential ETS linking partners could well remain the hardest barrier to overcome. An international framework for linkage and MRV, however, would be a promising remedy. Overall, however, only by comprehensively overcoming the set of issues creating barriers to ETS linking in Northeast Asia will a regional carbon market become possible.

6. Declaration of Interest statement

The authors declare not having any conflict of interest for this study.

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9. Appendices

9.1 Questionnaire

Guidelines to answer the questionnaire:

- There are three tables in the questionnaire.
 - Table.1 and Table.3 are open questions or “Yes or No” questions. To answer the “Yes or No” questions, please write an “X” in the case of the answer of your choice.
 - For Table.1 & 3, you are asked to evaluate the confidence of your answer using a scale from 1 (weak confidence = I am really not sure of what I am saying) to 4 (strong confidence = I am pretty sure of what I say).
 - Table.2 is based on statements. You are asked to choose if you agree or disagree with each specific statement. To answer the statements questions, please write an “X” in the case of the answer of your choice.
 - For comprehension, you can always comment on your answers.
 - You are asked to answer the questions and statements using your opinion about “what is the position of your country / of the authority you represent”.
 - The questionnaire targets your opinion as representative of your institution.
 - If you believe the authority you represent does not have a position yet on a specific question/statement topic, please write down your own opinion about what is most probably going to be the position of the authority you represent and notify it in the comment section.
 - If you don’t know how to answer a question or a statement, please choose no option and explain why in the comment section.
 - The questionnaires are anonymous but you are asked to identify the country you are from and the institution you represent (e.g.: The Ministry of Environment, the Ministry of Foreign affairs, Research Institute, etc...). Please identify specifically your institution with its official name.
 - Your answers will not be disclosed individually but will be aggregated per country and randomized.
 - **For Chinese representatives:** ETS means the National Chinese ETS. However, you can use the example of the Pilots ETSs to explain your answer in the comment section.
 - **For South-Korean representatives:** ETS means the national SK ETS.
 - **For Japanese representatives:** You are asked to give your opinion about a potential future National ETS. However, you can use the example of the Tokyo and Saitama ETSs to explain your answers in the comment section.
-

Table 1: Confidence scale: 1 = Weak / 2 = Medium / 3 = Good / 4 = Strong

	Question in Figure 1 and 2	Question	Yes	No	Not clear yet	Confidence in your answer?	Comments
1		What is your general opinion about ETS Linkage?					
2	Q16	Would you like an ETS linkage in North-East Asia including your country to happen?					
3	Q2	Do you believe ETS Linking will happen in the future with your country?					
4		If yes, in your opinion, around when will Linkage happen?					
5		Do you believe ETS Linkage can be a good option for your country?					
6		What would be the most direct benefit of Linkage for your country?					
7		What would be the most direct disadvantage of Linkage for your country?					
8	Q10	Do you believe Linkage could increase cost-efficiency of Carbon pricing in your country?					
9	Q9	Do you believe Linkage could increase the environmental effectiveness of Carbon pricing in your country?					
10		Do you believe Linkage could affect the environmental effectiveness of Carbon pricing in your country?					
11	Q17	Do you believe there is enough political willingness for Linking in your country?					
12	Q8	Do you believe Linking can be a solution for your country to achieve their commitment to the Paris Agreement?					
13	Q7	Do you believe Linking can be a solution for the world to enforce the Paris Agreement and stay below the 2°C of					



		warming?					
14		Do you believe your country has enough technological advance to make linking feasible?					
15		What would be the institutional environment necessary for Linking?					
16	Q6	Do you believe there can be enough confidence to Link ETS between China, South-Korea and Japan?					
17	Q1	Do you believe linkage is feasible in your country?					
18	Q3	Do you believe policy design harmonization is necessary to link EA ETSs?					
19	Q18	Are you willing to change your domestic carbon pricing policy in order to implement linkage in EA?					
20	Q4	Do you believe implementing a common management institution is feasible in case of an EA Linkage?					
21	Q11	Do you think linking is possible between China (Intensity-based ETS) and absolute systems (Korea and Japan) while being environmentally effective to reduce GHG?					
22	Q12	Do you believe linking can only happen when China turns to an absolute target ETS?					
23		Do you think a restricted linkage could be implemented at the beginning to test Linking in East-Asia?					
24		Do you think a restricted linkage is feasible for your country?					

Table 2: Evaluate the strength of your opinion according to the statements

	Question	Statement	Fully	Partly	Partly	Fully	Comments
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	in Figure 1 and 2		agree	agree	disagree	disagree	
25	Q19	We agree to implement common rules for cap setting in the three linked markets (e.g. enhance data reporting quality to the same level in the three jurisdictions).					
26	Q20	We agree to harmonize sectoral coverage in the three jurisdictions (China, Japan, South-Korea).					
27	Q21	We agree to implement a certain level of convergence of emissions inclusion thresholds per sector between the three linked partners?					
28	Q22	We agree to align the allocation methodologies between the three countries.					
29	Q23	We agree to have similar method of initial allocation in the three EA countries.					
30	Q24	We agree to adopt an auction-based allocation system for Linking.					
31	Q25	We agree to organize joint auctions in case of Linking in East-Asia.					
32		We agree to the creation of common auction platform(s) between the three countries.					
33	Q28	We agree to limit banking to similar proportion in the three countries.					
34	Q5 & Q26	We agree to create common trading platform(s) for the linked market.					
35	Q27	We agree to establish a common framework for price management in ETS in East Asia.					
36	Q29	We agree to align MRV rules for offsetting projects.					
37	Q30	We agree to align data monitored by the MRV system and gathered in the registry.					

Table 3: Confidence scale: 1 = Weak / 2 = Medium / 3 = Good / 4 = Very strong



	Question in Figure 1 and 2	Question	Yes	No	Not clear yet	Confidence in your answer?	Comments
38		What is your opinion about transparency in Carbon market linkage?					
39	Q13	Would you agree your ETS CAP to be anticipated in order to allow Linking to happen in confidence with partners?					
40		Would you agree to publicly disclose the list of non-complying entities from your domestic scheme?					
41		Would you agree to publicly disclose all MRV information about offsetting projects allowed in your domestic ETS?					
42	Q15	Would you agree to connect the three ETS registries in EA to ease linking?					
43	Q14	Would you agree to enforce a common registry system among EA Linked ETS?					