

## Data Triangulation

**Table 1.**

**The inter-elements relationship structures and interview results for the Sub System of Business Actor Participation in Carbon Trading**

Relationship Structure	Source	Opinion of the Source	Interpretation	Conclusion
The larger the gap between NCCCRS migration and BUSINESS ACTOR conformity, the more NCCCRS migration pressure increases.	Budi Utomo, Head of SBU Serco PT. Sucofindo	The exchange <i>is stalled</i> because the entity does not exist, the Emission Reduction Certificate (SPE) has expired. Goods are being demoed, many news reports are not in accordance, even though the entity is exist.	The difference between NCCCRS migration targets and achievements has led to an increase in NCCCRS migration pressure.	The gap between NCCCRS migration and BUSINESS ACTOR conformity has a positive effect on NCCCRS migration pressure.
The higher the NCCCRS migration pressure, the more it increases the BUSINESS ACTOR resistance.	Lufaldy Ernanda, Director of Digital Asset Supervision, OJK	The approach to BUSINESS ACTOR is <i>voluntary</i> , to ensure that <i>business-as-usual</i> continues and does not impact economic stability.	Migration pressure on BUSINESS ACTOR is considered to have the potential to impact BUSINESS ACTOR's <i>business-as-usual</i> , resulting in increased BUSINESS ACTOR resistance.	NCCCRS migration pressure has a positive effect on increasing BUSINESS ACTOR resistance.
The higher the BUSINESS ACTOR resistance, the lower the NCCCRS migration target.	Budi Utomo, Head of SBU Serco PT. Sucofindo	The existing BUSINESS ACTOR was well established and recognized in the foreign carbon market and then suddenly moved, data as of July 2023 only two BUSINESS ACTOR had been successfully migrated, and that too, was BUMN BUSINESS ACTOR.	BUSINESS ACTOR resistance resulted in a decrease in the NCCCRS migration target.	BUSINESS ACTOR resistance negatively affects the reduction of NCCCRS migration targets.

	<p>Lufaldy Ernanda, Director of Digital Asset Supervision, OJK</p> <p>Dr. Syaiful Anwar, Head of Climate Change and Control Unit, Ministry of Environment and Forestry</p>	<p>When doing business at the beginning, of course BUSINESS ACTOR already has investment, cost and revenue, registration, audit, which is done abroad. So there are many considerations.</p> <p>Behind them there must be other crediting mechanisms that charge <i>like</i> Verra then Gold Standard and also Plan Vivo. And they want it to be like what they have done before.</p>		
<p>The lower the NCCCRS migration target, the wider <i>the gap</i> between NCCCRS migration and BUSINESS ACTOR conformity.</p>	<p>Budi Utomo, Head of SBU Serco PT. Sucofindo</p>	<p>There are concerns from the government about executing it, so that the Presidential Decree articles are not implemented firmly.</p>	<p>The difficulty of executing NCCCRS migration resulted in a decrease in the NCCCRS migration target, which resulted in <i>the gap</i> between NCCCRS migration and BUSINESS ACTOR conformity widening.</p>	<p>The decrease in the NCCCRS migration target has a positive effect on <i>the gap</i> between NCCCRS migration and BUSINESS ACTOR conformity.</p>
<p>The larger <i>the gap</i> between NCCCRS migration and BUSINESS ACTOR conformity, the greater the need for corrective action, namely incentives for BUSINESS ACTOR.</p>	<p>Budi Utomo, Head of SBU Serco PT. Sucofindo</p> <p>Lufaldy Ernanda, Director of</p>	<p>There are weaknesses in supervising and executing the Presidential Decree, as well as a lack of negotiation ability with BUSINESS ACTOR to execute the Presidential Decree.</p> <p>Ministries and Institutions need to sit together to create</p>	<p>To increase the achievement of the NCCCRS migration target, corrective actions are needed from all relevant MINISTRY/INSTITUTIONS that are oriented towards the policy direction.</p>	<p><i>The gap</i> between NCCCRS migration and BUSINESS ACTOR conformity has a positive effect on corrective action, namely incentives for BUSINESS ACTOR.</p>

	Digital Asset Supervision, OJK	specific solutions related to NCCCRS migration. It is important for MINISTRY/INSTITUTIONS to have the same perspective on the direction of their policies.		
The more incentives for BUSINESS ACTOR, the more NCCCRS migration conformity increases.	Lufaldy Ernanda, Director of Digital Asset Supervision, OJK  Dr. Syaiful Anwar, Head of Climate Change and Control Unit, Ministry of Environment and Forestry.  Djoko Hendratto, Former President Director of the Environmental Fund Management Agency	Called the economic value of carbon, the higher the value, of course the level of BUSINESS ACTOR awareness will also be higher.  BUSINESS ACTOR is used to having all the equipment provided by Verra. While in SRN they have to prepare it themselves. So <i>they don't</i> want to bother.  It needs to be clearly structured, what are the incentives and disincentives if BUSINESS ACTOR does not carry out its obligations to participate in mitigation actions.	Attractive incentives for BUSINESS ACTOR are needed to increase BUSINESS ACTOR migration desire.	Incentives for BUSINESS ACTOR have a positive effect on NCCCRS migration.
The more the NCCCRS migration conformity increases, the smaller <i>the gap</i> between NCCCRS migration and BUSINESS ACTOR conformity.	Budi Utomo, Head of SBU Serco PT. Sucofindo	BUSINESS ACTOR can be migrated to SRN so that carbon exchange listings can be added more quickly and easily.	BUSINESS ACTOR's willingness to migrate to NCCCRS causes <i>the gap</i> between NCCCRS migration and BUSINESS ACTOR's conformity to narrow.	NCCCRS migration conformity has a positive effect on <i>the gap</i> between NCCCRS migration and BUSINESS ACTOR conformity.

Source: Primary Data, 2023

**Table 2.**

**The inter-elements relationship structures and interview results for the Sub-system of Carbon Trading Implementing Regulations Completion in Ministries/Institutions**

Relationship Structure	Source	Opinion of the Source	Interpretation	Conclusion
<p>The bigger the gap between regulatory completion and completeness, the more the pressure on regulatory completion increases.</p>	<p>Lufaldy Ernanda, Director of Digital Asset Supervision, OJK</p> <p>Dr. Syaiful Anwar, Head of Climate Change and Control Unit, Ministry of Environment and Forestry.</p>	<p>Carbon trading is <i>a regulated market</i>, so <i>the business actorsh factor</i> is on the regulator. The regulatory ecosystem is only 20-25%, <i>the missing link</i> is still 75%.</p> <p>According to the mandate of Presidential Decree 98/2021, all <b>MINISTRY/INSTITUTIONS</b> must have a carbon trading roadmap. Meanwhile, many <b>MINISTRY/INSTITUTIONS</b> do not have one yet.</p>	<p>The difference between regulatory completion and completeness causes increased pressure on regulatory completion.</p>	<p>The gap between regulatory completion and completeness has a positive effect on NCCCRS migration pressure.</p>
<p>The higher the pressure for regulatory resolution, the more it increases the conflict between <b>MINISTRY/INSTITUTIONS</b></p>	<p>Dr. Syaiful Anwar, Head of Climate Change and Control Unit, Ministry of Environment and Forestry.</p> <p>Lufaldy Ernanda, Director of Digital Asset Supervision, OJK</p> <p>Djoko Hendratto, Former President</p>	<p>The policy process in government is not yet understood by all, especially when there is economic value, it becomes different and some feel dominant.</p> <p>There needs to be a common vision and mission between <b>MINISTRY/INSTITUTIONS</b> so that their perspectives are the same, so that their policy direction is the same.</p> <p>Because the <b>MINISTRY/INSTITUTIONS</b> are equal, one Ministry cannot</p>	<p>The pressure to finalize regulations related to carbon trading has caused conflicts between <b>MINISTRY/INSTITUTIONS</b> to increase, including differences of interest in each <b>MINISTRY/INSTITUTION</b>.</p>	<p>Regulatory settlement pressure has a positive effect on increasing conflicts between <b>MINISTRY/INSTITUTIONS</b></p>

	Director of the Environmental Fund Management Agency	regulate another Ministry for its own interests.		
The higher the conflict between MINISTRY/INSTITUTIONS, the slower the regulatory completion.	Lufaldy Ernanda, Director of Digital Asset Supervision, OJK  Dr. Syaiful Anwar, Head of Climate Change and Control Unit, Ministry of Environment and Forestry.  Uus Usman, Head of SBU Serco Division of PT. Sucofindo.	Political year, regulators will focus more on political interests. Policy products are business actort on hold first.  One MINISTRY/AGENCY is driven by businessmen, another MINISTRY/AGENCY maintains the forest well. One thinks about investment coming in, one thinks about not letting us be colonized again.  The structure and ecosystem are not ready. We are working our way up to prepare the standards and procedures.	Conflicts of interest between MINISTRY/INSTITUTIONS result in delays in the completion of regulations	Conflicts of interest between MINISTRY/INSTITUTIONS have a negative impact on the target of completing regulations.
The slower the completion of regulations, the wider <i>the gap</i> between completion and completeness of regulations.	Lufaldy Ernanda, Director of Digital Asset Supervision, OJK  Bayu Nugroho, Coordinator of Environmental Protection of Manpower electricity, Ministry of Energy and	There needs to be a common perspective between MINISTRY/INSTITUTIONS, but this discussion has been going on for too long.  It all depends on the conditions of each country, adjusting to existing government programs and funding.	The significance of conflicts of interest between MINISTRY/INSTITUTIONS results in a delay in the target for completing regulations, which results in <i>the gap</i> between completion and completeness of regulations becoming wider.	The slowdown in the target for regulatory completion has a positive impact on <i>the gap</i> between regulatory completion and completeness.

	Mineral Resources.			
The bigger <i>the gap</i> between the completion and completeness of regulations, the more corrective action is needed, namely the role of government support.	Budi Utomo, Head of SBU Serco PT. Sucofindo	There are weaknesses in monitoring and executing the Presidential Decree	To improve the completion of regulatory completeness, corrective action is needed from the legislative authority by intervening with the relevant MINISTRY/INSTITUTION to encourage the acceleration of regulatory completion.	<i>The gap</i> between the completion and completeness of regulations has a positive effect on corrective action, namely the role of government support.
The more the government's support increases, the more complete the regulations become.	Intan Fauzi, Member of the Indonesian House of Representatives Commission VI	The authority, power and authority according to the role, duties and functions of the Indonesian House of Representatives can be used. Good relations with the ranks of the Council members as a government network can help cross-sector and cross-regional issues.	Support from the authorities through intervention in MINISTRY/INSTITUTIONS results in MINISTRY/INSTITUTIONS making efforts to accelerate the completion of regulations.	Legislative intervention has a positive effect on the completeness of regulations
The more complete the regulation, the smaller <i>the gap</i> between the completion and completeness of the regulation.	Lufaldy Ernanda, Director of Digital Asset Supervision, OJK	The development of this carbon market is policy-based, regulations are issued to regulate its trade. <i>So quote and quote , we are a regulated market , not a voluntary market.</i>	The completeness of carbon trading regulations causes <i>the gap</i> between settlement and completeness of regulations to narrow.	Completeness of regulation has a positive effect on <i>the gap</i> between completion and completeness of regulation.

Source: Primary Data, 2023