

Results of Public Comments Received on "Establishment of the Carbon Credit Market"

July 14, 2023

Tokyo Stock Exchange, Inc.

Tokyo Stock Exchange, Inc. (TSE) announced the establishment of a Carbon Credit Market on June 9, 2023 and sought public comments until June 23. We appreciate the cooperation of those who have submitted valuable comments in reviewing this matter.

The summary of comments gathered, TSE's responses to the comments, and its final review based on them are as follows:

**Summary of comments gathered and TSE's responses**

| No. | Comments   | TSE's response  |
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| 1   | <ul style="list-style-type: none"> <li>• Registration requirements</li> <li>(1) Please consider whether it would be possible in the future to accept individual investors. Their entry can vitalize the market.</li> <li>(2) It says that to ensure stable operations, multiple officers and employees are required to be engaged. Would you clarify whether this means that two or more persons are required?</li> <li>(3) There is a requirement that the applicant must not be insolvent. Please consider providing a special rule to allow such an applicant to participate if, for example, they deposit "Participant security money."</li> </ul> | <ul style="list-style-type: none"> <li>• Registration requirements</li> <li>(1) TSE requires that Participants have a J-Credit account in their own name where the usage authority identified in the account information in the J-Credit Registry System is "account holder only," and Participants must be a corporation, government or local government, or voluntary organization that can open such a credit account.</li> <li>(2) As you indicated, multiple means two or more persons.</li> <li>(3) The requirement that the applicant must not be insolvent is meant to ensure stable settlement in the Carbon Credit Market. As you have stated, the risk of settlement defaults can be reduced to a certain extent by depositing Participant security money, but we have set this requirement because it is not</li> </ul> |

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|     | <ul style="list-style-type: none"> <li>Order types<br/>Please consider whether it is possible in the future to accept market orders.</li> </ul>   | <p>possible to limit the trading value to the amount deposited as Participant security money.</p> <ul style="list-style-type: none"> <li>In order to prevent erroneous order placement or extreme price volatility, market orders will not be introduced at the time of launch. We will consider introducing them in the future when the number of orders increases and the above risks are reduced.</li> </ul>   |
| 2   | <ul style="list-style-type: none"> <li>It would be better for a buyer of a J-Credit to have some way of obtaining information about the seller (project participant) before buying. (If it is difficult to disclose such information automatically, there should at least be a way to obtain it upon request, for instance.) Even if a trade is executed, if the seller does not completely transfer the credits, the trade will not be effected. In this case, there will be a significant impact on the buyer, such as not being able to purchase credits within the planned budget. It would be better to be able to confirm information on a seller (project participant) in advance (at the time of sale) to see whether the seller is reliable and conduct a reliable transaction.</li> <li>Please provide execution information and settlement information for export not only in CSV format but also in PDF format. Data in CSV format can be edited, so the format is flexible but the data is unreliable, whereas data in PDF format is reliable as it cannot be edited. If there are two formats, either of them can be used as needed, which would be convenient for asset management.</li> </ul> | <ul style="list-style-type: none"> <li>From the perspective of ensuring smooth transactions and collective price formation as should be the case for exchange trading, the counterparty to a transaction will not be shown (even if information is disclosed after the execution, if, for example, cancellation is accepted based on such disclosure, there will be no difference from individual OTC transactions). To protect against counterparty defaults on settlement, TSE will act as an intermediary for the settlement of funds and the transfer of credits, thereby eliminating the risk of loss of principal. In addition, in order to prevent unnecessary settlement defaults, TSE may impose sanctions on a Participant who has defaulted on settlement such as suspending its permission to trade or cancelling its registration.</li> <li>Thank you for your comments on the specifications of TSE's Carbon Credit Market System.</li> <li>We will use these comments as reference for future system development.</li> </ul> |

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|     | <ul style="list-style-type: none"> <li>I would like to be able to download the screen with information on the "Settlement Date, Total Payment, and JPX Deposit Account" after execution in PDF format since it is likely that many companies process settlements based on such information.</li> <li>Although I probably should log in to the market system every day to check sell orders on the order list, it is impossible to monitor the system all the time. So, it would be useful to have a function that tells us by e-mail or some other means when a sell order that meets the specified conditions is placed.</li> </ul> |   |
|     | <ul style="list-style-type: none"> <li>It is possible to narrow down orders by category on the order list screen and other screens, but it would be useful to add "region" to the categories to contribute to local consumption of local production, for example.</li> </ul>   | <ul style="list-style-type: none"> <li>In order to increase liquidity, TSE has adopted a system whereby trading is conducted according to the trading categories established by TSE, rather than by individual carbon credits, such as by region.</li> <li>In terms of individual credits, only information designated by a seller at TSE upon order placement can be confirmed after the trade is executed, and individual credits cannot be narrowed down when an order is being placed.</li> </ul> |
|     | <ul style="list-style-type: none"> <li>Please make it so that purchase amounts (in total and per ton) are shown on the J-Credit account. Companies will need to manage their J-Credit assets, but the amounts are not indicated on the account, making it difficult to manage assets. Execution information and settlement information can be exported in CSV format to use as purchase amount information, but because they are CSV data that can be edited, the information is not reliable as written evidence of purchase amounts.</li> </ul>  | <ul style="list-style-type: none"> <li>We understand that your comments are about the "J-Credit Registry System." Although this system is not operated by TSE, we will use your comments as a reference for future market operations.</li> </ul>  |

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|     | <ul style="list-style-type: none"> <li>Please make it so that the credit type (trading category layers: refer to the Appendix of the Outline of Specifications for the Carbon Credit Market) is shown on the J-Credit account. Currently, it is difficult to tell which credit is which at a quick glance, so if you hold multiple types of credits, you may select the wrong credit to retire.</li> </ul>   |   |
| 3   | <ul style="list-style-type: none"> <li>Please create a system that allows business operators which have participated in the market to exit at their own discretion.</li> <li>If estimated costs associated with market participation are not known by the fall of the fiscal year prior to the fiscal year in which the expenditures are to be made, please consider the following matters in light of the difficulty in deciding budgets. <ul style="list-style-type: none"> <li>(1) Regarding item (2) Participant registration (d) Payment of registration fee and deposit of Participant security money, please indicate at the earliest possible time when and how often the registration fee and Participant security money will be required and the amounts. Please also indicate the requirements for Participant security money.</li> <li>(2) Regarding item (3) Participant obligations (b) Fees for market participation, please indicate at the earliest possible time when the basic fee, transaction fee, and settlement fee will be charged and the amounts.</li> </ul> </li> </ul> | <ul style="list-style-type: none"> <li>A business operator registered as a Carbon Credit Market Participant may apply for the cancellation of its registration at its own discretion</li> <li>We will announce in advance the amount of money and the start date of collection as pointed out in (1) and (2), so that Carbon Credit Market Participants can fully consider them.</li> <li>Participant security money will be deposited as collateral for fees for market participation. We will announce the requirement (the amount) when the fees for market participation are determined.</li> </ul> |
| 4   | <ul style="list-style-type: none"> <li>Please extend the no-fee period for as long as possible, and even after fees are introduced, keep them low to stimulate trading.</li> </ul>   | <ul style="list-style-type: none"> <li>Fees such as those related to market participation will be zero for the time being, as we consider it desirable to vitalize the market and improve its convenience by inviting as many investors as possible to</li> </ul>   |

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|     |  | <p>participate and trade in the market from early on.</p> <ul style="list-style-type: none"> <li>We will consider how we can offer fees related to market participation, such as trading fees, at appropriate prices, and will announce them in advance.</li> </ul>  |
|     | <ul style="list-style-type: none"> <li>In the event of settlement defaults, will you apply sanctions other than public announcement?</li> </ul>  | <ul style="list-style-type: none"> <li>In the event of settlement defaults, TSE may, after requesting an explanation from the Participant as necessary, suspend or restrict its permission to trade, cancel its registration, or request improvements.</li> </ul>  |
|     | <ul style="list-style-type: none"> <li>A call auction will be conducted once in the morning and once in the afternoon, and only limit orders will be accepted. Do you think that trading will not be that active?</li> </ul>   | <ul style="list-style-type: none"> <li>J-Credits will be the items eligible for trading when the market is established, which is the same as in the demonstration project conducted in 2022. As such, the trading rules will basically be the same as those in the demonstration project.</li> </ul>   |
|     | <ul style="list-style-type: none"> <li>I understand that credits related to emissions reduction and absorption are separately treated in terms of trading categories. Is it possible to place limit orders on individual credits?</li> </ul>                           | <ul style="list-style-type: none"> <li>We understand that your question as to whether it is possible to place limit orders on individual credits means whether it is possible to trade project-based carbon credits separately. As the number of individual projects is so large, allowing orders to be placed on an individual project basis may spread out liquidity, and therefore, we will not adopt this approach.</li> </ul> |
|     | <ul style="list-style-type: none"> <li>TSE will only notify buying Participants of defaults three days after the execution. I think this measure is overly protective of credit sellers. Why will it take four days in total from the day of the execution?</li> </ul> | <ul style="list-style-type: none"> <li>We do not intend to protect or give preferential treatment to credit sellers.</li> <li>In order to minimize the impact of settlement defaults and probable defaults, TSE requires the selling Participant to promptly report to TSE any errors in the credit certification number or inability to transfer the quantity of carbon credits that have been executed.</li> </ul>               |

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|     | <ul style="list-style-type: none"> <li>• Will qualified invoices be issued in the late afternoon of the same day?</li> </ul>   | <p>The notification deadline is set for three trading days after that of the execution.</p> <ul style="list-style-type: none"> <li>• Invoices and settlement statements will be issued on the settlement date. Settlement information will be available on the Carbon Credit Market System from the business day following the execution date.</li> </ul> |
| 5   | <ul style="list-style-type: none"> <li>• Please separate solar credits held by the government from other electricity-based renewable energy credits. The market will be very difficult to use if government-held credits and other electricity-based renewable energy credits are all mixed up, because we cannot guarantee the vintage or technology used until after we buy it.</li> <li>• There is significant demand for J-Credits in particular, for specific reasons such as reporting for RE100, but there may be barriers to participation without user-friendliness.</li> </ul> | <ul style="list-style-type: none"> <li>• Based on this feedback, we will consider how government-held credits should be sold in the future.</li> </ul>  |
| 6   | <ul style="list-style-type: none"> <li>• We wish to express our congratulations to JPX for your plans to establish trading on the CCM later in 2023.</li> <li>• We note the initial planned availability of CCM trading to commence with J-Credits. So as to expand the range of opportunities available to CCM participants in 2024 and beyond, Puro.earth (which operates the Puro Standard - an ICROA endorsed independent carbon standard) will welcome the future expansion of CCM trading to also include credit types from the international, independent standards.</li> </ul>   | <ul style="list-style-type: none"> <li>• As you mentioned, only J-Credits will be available for trading when the market is established, but we will consider adding other carbon credits to be traded in light of future conditions and other factors.</li> </ul>   |
| 7   | <ul style="list-style-type: none"> <li>• IETA is a non-profit business organization created in 1999 to</li> </ul>  | <ul style="list-style-type: none"> <li>• The requirements for participation are listed in the Outline of</li> </ul>   |

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|     | <p>establish a functional international framework for trading in greenhouse gas emission reductions. Our membership includes more than 300 leading international companies operating in compliance and voluntary carbon markets. Since its foundation in 1999, IETA has been the leading voice of business on market-based ambitious solutions to climate change. We are a trusted adviser to governments to support them build international policy and market frameworks to reduce greenhouse gases at lowest cost, increased ambition, and build a credible path to net-zero emissions.</p> <ul style="list-style-type: none"> <li>• We warmly embrace the establishment of a carbon market in Japan and eagerly anticipate its development. Against this backdrop, I would like to raise the following two points.</li> <li>• Firstly, I understand that foreign companies not registered in Japan can also participate, but the conditions for participation, as published, do not clearly indicate this. Given the substantial interest from overseas, it would be advantageous to communicate in a manner that unequivocally demonstrates inclusivity towards foreign companies.</li> <li>• Secondly, the publication of announcements such as this one, along with any other public documents, in both Japanese and English would be highly appreciated. Consequently, we kindly request that all carbon Credit market rules and activities, encompassing traded credits, be made available in both Japanese and English to the greatest extent possible.</li> </ul> | <p>Specifications and do not exclude overseas corporations. The requirements for overseas and Japanese companies are the same, but overseas companies should pay particular attention to the following points:</p> <ol style="list-style-type: none"> <li>(1) Establishment of a bank account in the applicant's own name<br/>The bank account must be one at a financial institution located in Japan to enable transfers to and from TSE's bank account to be conducted on the settlement date.</li> <li>(2) Establishment of an account with the J-Credit Scheme Registry<br/>Overseas business operators should be able to open a J-Credit account, but please check with the J-Credit Scheme Secretariat, as there are certain documents that are needed to open the account.</li> <li>(3) Being a qualified invoice issuer<br/>Foreign business operators also can register as qualified invoice issuers (registration must be made with the tax office where the tax is paid).</li> </ol> <ul style="list-style-type: none"> <li>• We will continue to provide more documentation in English.</li> </ul> |

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| 8   | <ul style="list-style-type: none"> <li>• We would like to first acknowledge the diligent work that has done in developing the J-Credit Scheme. These programs have helped reduce over 6.1 mil. t-CO2 emissions over the past decade for Japan and have developed over 60 individual methodologies for generating, certifying, and verifying these offsets have taken place.</li> <li>• We would like to humbly recommend that the relevant officials form Government bodies / the Tokyo Stock Exchange Inc. consider aligning the J-Crediting mechanism with The Oxford Principles for Net Zero Carbon Offsetting. Following the outlined steps of <ul style="list-style-type: none"> <li>a First cutting emissions, use high quality offsets, and regularly revise offsetting strategy as best practice evolves</li> <li>b Second shift to carbon removal offsetting</li> <li>c Third shift to long-lived storage (credits with high durability)</li> </ul> </li> <li>• In line with the principles listed above, we believe developing potential removals ramps or quotas that scale overtime to be in alignment with the Paris Agreement will ultimately benefit the Japanese Carbon Exchange and help achieve climate objectives. Carbon removals with high durability will be critical to achieve these goals around mid-century. Luckily, these types of carbon removal credits are anticipated to become less expensive over time with accelerating commercial deployments, and as more traditional carbon reductions from nature-based solutions are anticipated to potentially become more expensive overtime due to scarcity of natural resources required.</li> </ul> | <ul style="list-style-type: none"> <li>• Thank you for your valuable feedback on the quality and creation of J-Credits.</li> <li>• We understand your comment is about the J-Credit methodology. Rules for the methodology are determined by not TSE but by the J-Credit Steering Committee.</li> </ul> |



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|     | <ul style="list-style-type: none"> <li>• The addition, by the relevant government organization(s) of a specific category for technology-based carbon dioxide removal (CDR) approaches, such as direct air capture with geological storage (DACCS), to the categories outlined in the “Appendix: Table of Trading Categories” of this consultations’ “Outline of Specifications for the Carbon Credit Market” would accordingly help to ensure that the Japanese exchange has the foundational structure to accommodate these approaches, which are rapidly commercializing today. This would add considerable value and strengthen the carbon credit market.</li> <li>• The inclusion of a technology-based CDR pathway would align with updates currently underway to the Rules and Guidelines for the Joint Crediting Mechanism to include carbon capture and storage approaches in its scope. We believe it would be most efficient for domestic and international carbon markets to be aligned in this regard.</li> <li>• Additionally, the inclusion of a technology-based CDR pathway within the J-Credit market would align with the leadership that the Japanese government has shown to-date in recognizing the importance of negative emissions technologies (NETs) for achieving net zero emissions in Japan.</li> <li>• Finally, introducing a credit rating system in line with systems such as those proposed by BeZero and acknowledging the possibility of carbon reversals, insurance policies, and recourse requirements</li> </ul> |                |

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|     | <p>that need to be in place to support a growing carbon trading market should be considered today to prepare for tomorrow.</p>  |  |
| 9   | <ul style="list-style-type: none"> <li>• The number of transactions was smaller than expected, and the number of sales in particular, which could be a problem. For this reason, I did not use the demonstration market as a price indicator. However, considering that the market will play a role providing reference prices for OTC transactions in the future, please consider any possible measures to prevent the kinds of manipulation that happen on exchanges.</li> <li>• In addition, when procuring J-Credits for reporting to comply with the GHG Protocol, the value of tCO2 converted into kWh/GJ is important. However, with the current method, these values cannot be confirmed until execution. Please discuss the pros and cons of treating items with different intrinsic values as the same product as well.</li> <li>• While there is a growing demand for high-quality credits in voluntary credit markets, OTC trading is still going strong, and there are some negative views about trading markets. However, I think it is a positive thing that TSE is going to establish Japan's market to keep up with other countries.</li> <li>• As they are compliant with the GX (green transformation) League, the demand for J-Credits is expected to increase in the future. I</li> </ul> | <ul style="list-style-type: none"> <li>• In order to ensure fair price formation and smooth settlement, TSE will monitor orders, trades, and settlements of Carbon Credit Market Participants in this market.</li> <li>• Specifically, we will indicate in the rules the types of order transaction patterns that could be viewed as manipulation, as you point out, and supervise these activities.</li> <li>• As you mentioned, we recognize that the value of carbon credits can vary depending on their usage.</li> <li>• There are two types of trading: the one close to OTC, where individual carbon credits are traded, and the one where carbon credits are traded on a standardized basis. TSE will adopt standardized trading when the market is established.</li> <li>• We will use your comments as reference for future market operation.</li> <li>• Thank you for your interest in TSE. We will continue our efforts to facilitate trading.</li> </ul> |

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|     | hope that this market will help facilitate smooth trading.  |  |
| 10  | <ul style="list-style-type: none"> <li>• 1. Outline of Specification 1. (1) Items eligible for trading<br/>Can I understand that surplus reduction allowances allocated by the GX-ETS will be available for trading in the future? Or will the scope go beyond that, and is there a possibility that voluntary carbon credits from Japan and overseas will be available for trading?</li> <li>• 2. Outline of Specification 2. (2) Registration requirements b.<br/>The specifications require having a system in place to ensure stable operations. For example, in a case where a special purpose company (SPC) such as a limited liability company is involved in the transaction (e.g., a case where the SPC is involved in the transaction as the vehicle of a fund for carbon credits), would it be possible to determine whether the requirement is fulfilled by focusing on the system of the SPC's business agent rather than the SPC itself? I am sorry that this is a hypothetical question.</li> <li>• 3. Outline of Specifications 2 (2) (b) Application for registration as a Participant<br/>Do we understand that we are not specifically required to submit a written confirmation indicating that we have no relationship with anti-social forces? (I think that this was required at the time of application for participation in the demonstration project.)</li> </ul> | <ul style="list-style-type: none"> <li>• The specific method and timing for trading of surplus reduction allowances allocated by the GX-ETS have not yet been decided, but we expect to make them available in the future as simulated trading was conducted in the demonstration project.</li> <li>• Only J-Credits will be available for trading when the market is established, but we will consider adding other carbon credits to be traded in light of future conditions and other factors.</li> <li>• To ensure stable operations, two or more officers and employees are required to be engaged. If the SPC's business agent establishes a system in which two or more officers and employees are engaged, we will determine that the requirement is fulfilled.</li> <li>• Applicants for the demonstration project were required to submit an application form for registration and a written confirmation indicating that they have no relationship with anti-social forces by placing their signatures and seals on both documents. However, when the market is established, applicants will be required to agree to the written confirmation indicating that they have no relationship with anti-social forces and then submit an application form for the</li> </ul> |

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|     | <ul style="list-style-type: none"> <li>• 4. Outline of Specifications 2 (2) (d) Payment of registration fee and deposit of Participant security money<br/>The Participant security money will be zero for the time being. I understand that this measure is to encourage more investors to participate when the scheme launches. However, you could also consider that the introduction of Participant security money will secure safety of settlement, which may give confidence to Participants. (Even in such a case, the level and scope of such a measure should remain appropriate so as not to discourage Participants). To the extent possible, please tell us why you have decided that the Participant security money will be zero for the time being (such as results of the demonstration project, interviews with related parties, etc.).</li> </ul> | <p>Carbon Credit Market registration with their signature and seal.</p> <ul style="list-style-type: none"> <li>• We are envisaging Participant security money to be deposited as collateral for fees for market participation. However, as you pointed out, the rules also allow for the collection of Participant security money as collateral for settlement. We will consider whether such money is required in light of the future settlement situation.</li> </ul> |
|     | <ul style="list-style-type: none"> <li>• 5. Outline of Specifications 3 (4) Categories of trading</li> <li>• For example, in reporting under “Act on the Rational Use of Energy”, only J-Credits in the field of energy saving that use the methodologies EN-S-019, 043 and 044 can be calculated as use of non-fossil fuel energy, but I understand the initial trading categories in this market are not in line with this classification. I do not know whether there is any actual demand for trading categories to match this classification as of now, but can I understand that there is still room to review the trading categories in the future based on the categories of credits eligible under various schemes and actual</li> </ul>   | <ul style="list-style-type: none"> <li>• The categories of trading were changed once during the demonstration project. Since the new categories were preferred by most, they will be used when the market is established. However, of course, this does not mean that we will not review the categories in the future based on trading demand and other factors.</li> </ul>   |

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|     | <p>trading demand?</p> <ul style="list-style-type: none"> <li>• 6. Outline of Specifications 5 Treatment of settlement defaults and probable defaults</li> <li>• Do I understand that if a trade is executed but the settlement is not conducted and the execution is cancelled, the trading fee already paid by the Participants will not be refunded?</li> </ul> | <ul style="list-style-type: none"> <li>• The treatment of trading fees when a settlement is not conducted and the execution is cancelled will be clearly indicated when the amount and collection method of fees related to market participation are determined in the future.</li> </ul> |

Comments submitted by individuals (Nos. 1, 2, and 4); Hokkaido Electric Power Co., Inc. (No.3); Gaia Environment (S) Pte Ltd. (No. 5); Puro.earth (No. 6); International Emissions Trading Association (No. 7); 1PointFive and Carbon Engineering (No. 8); Sumitomo Corporation (No. 9); and Mori Hamada & Matsumoto (No. 10)