Comments on the Policy Paper Document/Presentation prepared by the Bureau of Energy Efficiency in November, 2022.

### Comment No: 1

Comment on (section/market design elements/others): Demand generation

### Key Observations:

As noted in the draft, a key challenge with the current ESCert and REC markets is an oversupply of certificates and insufficient demand, due to either lenient targets (for PAT) or insufficient enforcement (of RPOs). Therefore, if the ICM has to help India to achieve its NDC targets, then it is critical that the following elements are carefully designed and rigorously enforced:

- Target emission intensity trajectories for each sector: These need to be stringent enough to encourage the laggards to improve. They also need to ensure a realistically decreasing intensity trajectory over the years, so that the overall emission intensity of each sector reduces. Making them too lenient (say, in the name of competitiveness of industry) will defeat the purpose of setting up the ICM. Moreover, considering that existing ESCerts (and perhaps RECs) are also proposed to be converted to CCCs, the target emission intensity trajectories should be defined such that the demand for CCCs would be able to absorb the surplus ESCerts (and perhaps RECs). In this context, it should be noted that there is also an existing excess supply of unused CERs (which are also denominated in tCO2e) indicating the challenge of generating demand for CCCs.
- Penalties for non-compliance: The level of penalties for non-compliance must be high enough to encourage entities to participate in the market and buy certificates, if they are not able to invest in low-carbon technologies. Perhaps the penalty could be decided based on prevailing market prices for CCCs, and pegged to be (say) 200% of the market price of CCCs.
- Enforcement of penalties: As noted with the RPO regime, enforcement of penalties is a necessary prerequisite for the market to function effectively. Hence, an empowered mechanism to monitor compliance, impose penalties, and collect dues is required. This needs to be strengthened with transparency mechanisms such as publishing information about non-compliant entities, the extent of non-compliance, the penalties imposed, the penalties collected and so on.

### Key Suggestions:

- A transparent, public stakeholder consultation driven process, based on past performance data from the PAT regime, should be undertaken to identify the emission intensity targets and trajectories for each sector. These targets and trajectories should also be publicly available.
- The penalties for non-compliance to targets must be designed in such a way as to encourage market participation by non-complying entities to ensure sufficient demand for CCCs. One option to do this could be to peg the penalty to a multiple of the prevailing market price of CCCs.

- Clear institutional mechanisms and timelines must be codified as part of the market design process regarding monitoring, verification, penalty imposition, penalty collection, and dispute resolution. This is in addition to the institutional mechanisms such as a registry to issue CCCs, and relinquish them and a regulator to oversee the market.
- Information must be publicly available regarding not only market transaction summaries (such as volumes traded, prices discovered and so on, by sector), but also regarding non-complying entities, penalties imposed, penalties under dispute and so on.

## Comment No: 2

Comment on (section/market design elements/others): Renewable Energy Certificates

Key Observations:

With the falling prices of renewables, RECs have outlived their usefulness. However, due to the presence of some legacy REC generators, contractual obligations would have to be adhered to. Stringent imposition of RPOs would ensure that outstanding REC volumes come down drastically so that it becomes a minor issue to deal with. Even currently, one notices that the closing REC balance in March 2021 (3.2 million) is significantly lower than, say, in Oct 2022 (13.9 million) – indicating that RECs are purchased towards the end of the financial year to meet RPO obligations. A somewhat more stringent implementation of RPOs as is already proposed in the Electricity Act Amendment, 2022, along with somewhat more stringent targets consistent with the central government's long-term RPO trajectory, could bring this down to negligible quantities.

In view of current realities, new "REC generators" should not be allowed and only legacy REC generators contractual requirements should be honoured. Moreover, with DISCOMs being the entities with the most significant RPO requirements and DISCOMs (correctly) not being part of the ICM as proposed, migrating RECs to CCCs will make it more complicated for DISCOMs because they would have to voluntarily purchase CCCs from the ICM to meet their RPO targets with additional accounting challenges.

Given all these, it is perhaps best if RECs are kept out of the ICM altogether, and phased out gradually given their marginal contribution (5 GW of RE in REC framework out of total 120 GW RE today in the country) to the overall sector. RECs can continue to exist until then to honour existing REC generators' requirements and to enable DISCOMs to meet their RPO obligations.

Key Suggestions:

- It is perhaps best to keep RECs out of the ICM altogether since DISCOMs are not part of the ICM
- More stringent implementation of RPOs will reduce RECs requiring to be converted to CCCs to a minuscule amount.
- No new REC generators should be allowed.

## Comment No: 3

Comment on (section/market design elements/others): Obligated entities

### Key Observations:

The current list of obligated entities includes thermal power plants (TPPs) and petroleum refineries, whose primary output is a form of energy that is consumed by other sectors. We believe that it is best that such entities are left out of the obligated entities list in order to avoid the risks of double counting. For example, if an industrial unit consumes 1 GWh of grid electricity to produce 1000 tonnes of some product, and the grid emission factor is (say) 0.8 kg CO2e/kWh, then its GHG emissions intensity would be 0.8 kg CO2e / kg of product. But these emissions are not occurring 'within the factory gate' of the entity but at the TPP – whose emissions are proposed to be separately accounted in the draft proposal. Note that this challenge does not arise in the case of PAT where energy consumption within a factory premises is not double counted. To avoid this confusion, we suggest that only 'end consumers' of energy such as industrial units, commercial buildings and so on be considered obligated entities for the ICM. The sum total of their emissions would in any case represent most of the total emissions of the country, which is what is targeted by the NDC.

TPPs and petroleum refineries can continue to remain under the PAT scheme – along with DISCOMs which are also not expected to migrate to ICM – to ensure that their energy efficiency continues to improve. However, this would imply a reduced number of participants in the PAT scheme after migration to ICM, and liquidity in the ESCert market would go down. Therefore, it may be good to think of restructuring PAT to be more a compliance-based mechanism with associated penalties rather than a market-based mechanism. This needs further discussion and deliberation.

A related point is that, by the current definition, only the process and energy emissions within the industry premises are being accounted for. Thus, the process and energy emissions of the industrial unit's supply chain and downstream processes are not accounted. It should be ensured that, for the collection of obligated entities, the supply chain and downstream do not contribute significantly to overall emissions and it is OK to leave them out.

Key Suggestions:

- Energy producers such as thermal power plants and petroleum refineries should be left out of the obligated entities list to avoid double counting of emissions. Else, a more sophisticated mechanism of accounting for emissions without double counting needs to be developed, debated and finalized.
- BEE should assess the process and energy emissions of the supply chain and downstream segments of obligated sectors, and if they are found to be substantial, then they should also be included in the ICM the subsequent phases.

### Comment No: 4

Comment on (section/market design elements/others): Governance and oversight structure

Key Observations:

The ICM will have economy-wide impacts and implications across industries. Moreover, it will also affect demand and supply of various energy forms and hence it is best if energy related ministries are not part of the apex governance structures in order to avoid potential conflict of interest.

Consequently, the governance and oversight structure for the ICM should be completely independent of existing energy sector institutions. Given its overarching nature, it could potentially be housed under the PM's Council on Climate Change. Alternatively, it could be anchored within the MoEFCC with adequate empowerment. In addition, it may be good to set up a Market Monitoring Committee that actively tracks develops in the market and recommends any policy changes for better functioning of the market.

This is also consistent with the fact that the existing energy sector regulators and institutions are already stretched with the rapid changes within the energy sector. Extending their mandate to include carbon markets, which are somewhat beyond their core competence, may not be warranted.

As suggested above, TPPs and refineries should ideally not be part of the ICM. Thus, the obligated entities are mostly outside the energy sector – further strengthening the case for all relevant ICM institutions to be outside the energy sector.

#### Key Suggestions:

- The inter-ministerial Steering Committee should be anchored within the PMCCC or MoEFCC, and chaired by an official from that agency.
- The ICM Governing Board should similarly be anchored within the PMCCC or MoEFCC, and chaired by an official from that agency.
- The ICM Administrator should be an agency outside of any of the existing energy ministries and be set up as a separate office. The Administrator should set up, or house, a Market Monitoring Committee that actively tracks developments in the market (such as liquidity, prices, volumes, consolidation etc.) and recommends policy changes to make the market competitive and vibrant. Similar to CERC, the Administrator should publish weekly, monthly and annual market monitoring reports.
- The ICM regulator should be an institution different from CERC but outside of the energy regulators. The ICM trading platforms can also, therefore, not be energy trading platforms and can include, for example, platforms such as MCX.
- The ICM registry should not be POSOCO, which is an electricity system operator. A different agency outside the energy sector should be made the registry for the ICM.

While setting up newer institutions and building their capacity may take some time, it is an investment that would be justified because of the scope of the carbon market and its economy-wide impacts. This will also help to prevent existing institutions from getting too stretched and performing functions beyond their core mandate and perhaps getting caught up in jurisdictional battles.

### Comment No: 5

Comment on (section/market design elements/others): Other comments

### Key Observations:

- The draft proposes two different ways of generating CCCs through offsets and by compliance. It is not clear whether the CCCs generated in these two ways would be fungible, because the offset CCCs are based on additionality while the compliance CCCs are based on a given target.
- The draft proposal does not provide any details about how the 'Conservativeness factor' that will be used to convert ESCerts to CCCs, will be estimated. It can be a useful tool to encourage liquidation of ESCerts before the CCC regime by discounting ESCerts when converting to CCCs

   so that there is limited carry-over from the current regime to the new regime.
- Certainty of trajectory would be important for obligated entities to enable them to plan their investments to migrate to a low-carbon pathway. Therefore, it is desirable that the sector-wise emissions intensity reduction targets are specified for a reasonable time period (say, five year blocks) within which they are not revised. Accounting for compliance should, of course, be done on an annual basis.
- It is not clear from the current proposal whether the CCCs can only be purchased to meet one's emission intensity targets, or can also be purchased to trade in the market. Given the nascent stage of development of the ICM, it may be better if CCC trading is introduced gradually and not at the outset. Once, the market stabilizes and regulatory structure is in place, elements such as trading of CCCs can be introduced.
- Given the complex nature of ICM and its potential economy-wide impacts, it may be prudent to roll out the ICM itself in a phased manner by targeting one or two sectors initially. This will help in ironing out any kinks in the process before rolling it out widely to the entire economy. The Timeframe section mentions a pilot phase – it is not clear whether this refers to a similar approach.
- To further encourage obligated entities to comply with their targets (either by reducing their emissions intensity or by purchasing CCCs), a colour-coded labelling of entities on the lines of the S&L scheme could be thought of. The colour coding could be based on the extent of under-achievement or over-achievement of the target. Entities could be mandated to display this label (which would be allocated to them by the registry based on their performance) on all their products, website, and all published material.
- The ICM proposal should be finalized based on reasoned consideration of all the comments received. To this end, it would be good if BEE publishes all the comments that are received and its reasoned responses to the comments, along with the final ICM document. This will increase confidence in the process and avoid any challenges in future.

### Key Suggestions:

- The policy should clarify whether the CCCs generated through the offset route and the compliance route are mutually fungible and tradeable. It should further clarify how these relate to the international market and how they would be extinguished from the domestic market if sold on the international market.
- The policy should detail out how the 'Conservativeness factor' would be computed. It can potentially be a tool to minimize converting ESCerts to CCCs.
- For each sector, it is desirable to provide a reasonably long-term (say, five-year) emissions intensity trajectory to enable industries to plan their investments.
- It would be prudent to not allow trading of CCCs from the outset, but introduce such elements only once the market has stabilized and the regulatory mechanism is in place.

- Similarly, it would be prudent to roll-out the ICM itself gradually by introducing it for one or two sectors initially, learning any lessons from the exercise and then making it an economy-wide market. The 'pilot phase' mentioned in the Timeframe section (Section 10) should be clarified / expanded upon.
- The administrator should consider introducing a mandatory colour-coded emission intensity labelling system to categorize each obligated entity by its emission intensity level.
- BEE should publish all the comments received on the draft ICM proposal and its reasoned responses to the comments.

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