



European Bank
for Reconstruction and Development

MEMORANDUM

To: Directors and Alternate Directors **Ref:** CS/AU/22-29 (Addendum 2)
From: Secretary General **Date:** 16 June 2022
Copy: President / Executive Committee
Subject: Management Comments on EvD Cluster Evaluation of Solar Power Operations

Attached for information is a document on the above.

Submission: ☒ Information
Timeline: ☒ Audit Committee: 23 June 2022
Approval Date: ☒ Not applicable (information only)
Effective Date: ☒ Not applicable (information only)
Next Reporting: Not Applicable
Key Decision(s) or other content: ☒ Not applicable (information only)

Budget Implications: N/A

Legal Classification: Other
Submission Basis: In accordance with the Bank's Evaluation Policy (BDS12-324) approved by the Board on 16 January 2013

Public Disclosure: This document is not for disclosure under Section III.2 of the Access to Information Policy

Key Risks: Not applicable

Strategic Context: The SIP is a key corporate planning tool in EBRD used to operationalise Strategic Capital Framework (SCF) priorities.

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EvD Cluster Evaluation of Solar Power Operations

Final Management Comments

Executive Summary

- Management welcomes the cluster evaluation of solar power operations, which is relevant and timely given the strategic importance that solar energy as an affordable, simple, tested and scalable technology plays in delivering green economy transition in EBRD's countries of operations and achieving net zero by 2050. The report is comprehensive, balanced and well researched; it focuses on the right themes and areas to facilitate learning from the past experience and apply the emerging lessons for the Bank's future activities in solar power development.
- Management welcomes the report's findings highlighting strong additionality and the important role that the EBRD's solar operations played in decarbonisation of energy systems thus furthering the achievement of climate-related goals. Management also notes the report's recognition of results achieved by intense policy dialogue that EBRD undertook to enable solar projects and promote solar energy development in COOs. Management notes that the reorganisation of VP3 with a centralised function dedicated to climate policy and delivery will further improve our policy offering in this area.
- Management believes that the existing challenges and issues with developing solar power in COOs, such as intermittency, rising panel costs and ESG issues in the supply chain are appropriately raised and addressed in the report.
- The discussion of the Bank's performance in Ukraine is valuable (in particular related to Feed-in-Tariffs (FiT) analysis in EBRD's risk assessment, function of the Guaranteed Buyer, and transfer of the solar portfolio in the country to corporate recovery). Nevertheless, Management believes it would benefit from a more comprehensive cause-and-effect analysis and a nuanced discussion of the drivers behind challenges with the development of solar energy in this country. In particular, Management notes that the network imbalances (seasonal, daily or regional) are created in all countries where renewable energy is being installed (including as result of auctions), and the financial distress of the regulator was not caused by the FiT but by a complex combination of factors stemming from the initial design of its funding structure.
- Although the report suggests that the Bank ignored signs of overheating on the renewable energy (RE) market and failed to send a clear signal to stop future investment, Management notes that the Banking teams did, in fact, apply lessons learned from earlier cases of reduced FiT (Poland, Bulgaria) when structuring the financing for the RE projects. Further, in second half of 2019, after the Ukrainian government did not implement the RE compensation mechanism via the TSO, the Bank had indeed reduced its pipeline of FiT-supported projects considerably and decided to limit its exposure.
- Overall, the report appropriately outlines a holistic set of sector-wide system stability measures that the Bank can support – including through investments in networks, storage, hydrogen, demand side management, decommissioning, additional baseload and hydro balancing capacity, as well as long-term planning for variable RE. The report's recommendations to consider hybrid auctions and increase efforts to obtain co-financing for solar projects are welcomed and are in line with the Bank's ongoing endeavours. As such, Management agrees with the strategic and operational recommendations provided in the report and believes their implementation will help the Bank sustain its climate ambition.

Management's comments on the EvD's study recommendations are provided below.

Strategic recommendations

Recommendation 1: *In countries experiencing rapid growth of solar power and network integration challenges, strengthen and increase support for expanding the capacity of power systems to successfully integrate intermittent renewable energy sources. This would entail intensifying policy support (including the development of related regulation, market reforms and capacity building), as well as starting financing for electricity storage, decommissioning of old thermal power plants (including support for “just transition”), construction of new thermal and hydro balancing capacity, network upgrades, cross-border interconnections and demand management.*

Management welcomes the recommendation and agrees to explore ways to intensify relevant policy support and financing for ensuring the sector-wide network stability measures (including networks, storage, hydrogen, demand side management, decommissioning, additional baseload and hydro-balancing capacity). The Bank will continue to provide the required support to the countries experiencing rapid growth of solar power and network integration challenges. Management notes that the development of investment pipeline aimed at network stability measures will require time and will depend on availability of bankable project opportunities and donor funding in some countries.

With the new VP3 structure now in place, Management has strengthened its ability to pursue ambitious policy engagements for renewable energy integration in its countries of operations in a coordinated manner via the newly created Climate Strategy and Delivery and Policy Strategy and Delivery departments. Policy support for the development of related regulation, market reforms and capacity building are areas where the Bank can apply previous experience of successful engagement in energy and other sectors. This includes experience gained from managing a massive capacity building programme in Ukraine (Ukraine Reform Architecture – URA) to support different policy teams in setting policy benchmarks and thus providing context for deploying capacity to deliver on required reforms in support of a transaction. These “reform support teams” then become very useful entry points for various policy and operational initiatives and are currently the main delivery structure for the Ukraine’s reconstruction.

Recommendation 2: *Where economically justified, encourage relevant authorities to consider hybrid auctions, integrating storage, particularly for large solar generation capacities.*

Management agrees with this recommendation and acknowledges that hybrid auctions combining electricity generation and storage can be a viable solution for the development of solar energy in an integrated way. The Bank has already started working on such solutions, including in Uzbekistan as part of upcoming phases of the wind auction programme, and in Lebanon, with few more in the pipeline. In the same vein, Management will intensify upstream policy dialogue to create a regulatory/ legal framework conducive to the successful integration of intermittent renewables, including hybrid auctions where relevant. Subject to available funding for technical assistance, Management will engage with policy makers on competitive bidding processes for renewable energy sources, will provide, when feasible, policy support on key integration challenges for renewables within the scope of assignments, and provide implementation support for hybrid solutions when identified as the policy maker’s preferred solution. Management notes however, that applying this type of auction will have to be done on a selective manner, based on the economic viability of larger solar projects (as stipulated by the recommendation) and taking into account the wider context of the power system in the country (for example, the regulatory framework).

Operational recommendations

Recommendation 3: *For future country-specific solar PV financing frameworks incorporate in the Board Report:*

- *Analysis of the impact of additional electricity generation capacity, envisaged to be financed under the financing frameworks, on network balancing. It should include a summary from the discussions with a TSO/SO and national authorities, as well as the 5-year electricity balance forecast of supply (including the baseload, decommissioned capacity, all commissioned and key pipeline projects, as well as the growth of distributed solar power), and consumption, including at peak generation time.*
- *Assessment of the tariff regime's sustainability, by comparing the tariff price to local LCOE on a like-to-like basis, to clearly demonstrate the level of implicit subsidy.*

Management agrees with this recommendation. Management endorses the finding that deeper diagnostics of the national energy system for relevant countries would be beneficial for informing the best way for EBRD to engage in a country's development of solar power. As a discussion with (transmission) system operators takes place as part of the assessment of the impact of the solar capacity envelope on the national system stability, Management is supportive of adding a summary of such an analysis to relevant board documents for new country-specific solar PV financing frameworks. Management notes that FIT sustainability review, (i.e. the assessment of tariff regime's sustainability), has already been part of the Risk review in the EBRD for some time and we will continue to do so. The Bank typically seeks to size the debt to withstand a tariff reduction scenario. This was the case with the last several projects in Ukraine, for instance.

Recommendation 4: *Increase efforts to obtain co-financing for solar projects with specific targets and incentives:*

- *Commercial for projects in more advanced markets, also through policy dialogue aimed at making banking regimes more RE-friendly.*
- *Blended for projects in ETCs and SEMED by approaching selected donors, to attract investors into countries with unrealised solar power potential more effectively (and to match other IFIs' offer).*

Management welcomes this recommendation and agrees to explore ways to increase co-financing for solar projects. The Bank already had its loans in several Jordan's solar projects syndicated with B-lenders, and will intensify its efforts in attracting commercial banks. Management also notes the importance of capital markets for mobilising funding to the sector and will explore opportunities to finance solar projects through the capital and financial markets development work. As co-financing for solar projects would be pursued selectively, subject to availability and appetite in the particular market, it is Management's view that setting specific targets and incentives would be challenging. Finally, Management will also continuously look for opportunities and explore blended finance solutions with donors to expand solar and other RE capacity in less developed markets, although notes that this will be subject to donor funds availability.