



OFFICE OF INSPECTOR GENERAL

U.S. International Development Finance Corporation

Inspection of DFC's First Solar and Bio E Projects

September 30, 2025

Inspection Report DFC-25-001-IE

1100 New York Avenue, NW

Washington, DC 20527

<https://www.dfc.gov/oig>



Office of Inspector General U.S. International Development Finance Corporation

Report Highlights

Inspection of DFC's First Solar and Bio E Projects

What Was Inspected

The U.S. International Development Finance Corporation (DFC), Office of Inspector General (OIG) conducted an inspection of two DFC loan finance agreements. The agreements reviewed involved the FS India Solar Ventures Pvt. Ltd. (First Solar) and Biological E Limited (Bio E) projects, which are both based in India. DFC's loan agreements with First Solar and Bio E totaled \$500 million and \$50 million, respectively. The OIG's inspection objective was to evaluate each project's compliance with agreement terms and progress with established impact metrics.

What Was Found

The OIG found that DFC officials did not receive the annual environmental and social (E&S) reports for Bio E required under the finance agreement. Additionally, DFC's oversight of the First Solar project could be strengthened to monitor ongoing E&S compliance with deliverable requirements under the finance agreement. The OIG found mixed progress on the impact outcomes for both projects. Both the Bio E and First Solar agreements required the submission of specific document deliverables throughout each project's lifecycle and annual reporting on established impact outcomes.

The OIG inspection determined that:

- DFC did not adhere to established internal policies and procedures, resulting in insufficient E&S monitoring of the \$50 million Bio E investment.
- DFC officials did not receive the annual E&S reports for Bio E required under the finance agreement, and one deliverable was received three months after the deadline specified in the finance agreement.
- DFC officials did not follow policies and procedures for maintaining the required project deliverables within Insight.
- DFC did not obtain required annual audits from several of First Solar's supply chain material and component supplier vendors, nor did it verify that identified monitoring procedures for the construction of the First Solar facility were followed with respect to labor and working condition standards.



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- The Bio E project made progress meeting two core impact projections, while the First Solar project is still in the process of achieving its impact projections.

Recommendations

The OIG makes three recommendations to further strengthen the monitoring and oversight of DFC's investments. Specifically, the OIG recommends the following to DFC's Vice President of the Office of Development Policy and the Vice President of Portfolio Monitoring and Management.

- **Recommendation #1:** Direct staff to review the Bio E and First Solar project files and ensure all required deliverables from Schedule Y of the finance agreement have been uploaded to Insight, in accordance with the Office of Development Policy policies and procedures.
- **Recommendation #2:** Obtain missing deliverables and ongoing project deliverables.
 - a. For the Bio E project, assess the feasibility of obtaining the annual 2022, 2023, and 2024 environmental and social reports for project file closeout, given the loan has been repaid.
 - b. For the First Solar project, assess the feasibility of obtaining and reviewing supplier audits and contracts for applicable raw material and component vendors on an ongoing basis.
- **Recommendation #3:** Continue to monitor First Solar's impact, including through the June 30, 2026 annual Development Outcomes Survey and midpoint performance assessments, to have relevant information for assessing the project's core impacts and metrics.



Office of Inspector General

U.S. International Development Finance Corporation

MEMORANDUM:

Date: September 30, 2025

To: Dev Jagadesan
Acting Chief Executive Officer

From: Erika Ersland
Acting Assistant Inspector General for Audits, Office of Inspector General

Subject: Final Report – Inspection of DFC’s First Solar and Bio E Projects (Inspection Report DFC-25-001-IE)

The Office of Inspector General (OIG) conducted an inspection of DFC’s First Solar and Bio E projects. We identified three finding areas with three recommendations intended to further strengthen the monitoring and oversight of DFC’s investments. DFC reviewed the draft report and returned comments to the OIG. In accordance with the Council of the Inspectors General on Integrity and Efficiency standards for inspections, we reviewed DFC’s comments for relevance and completeness and included them in their entirety in Appendix II.

After reviewing information provided in response to the draft report, we consider two recommendations closed (Recommendations 1 and 2), and one recommendation open pending completion of planned activities (Recommendation 3).

We appreciate the cooperation and courtesies provided by your staff. If you have any questions or need additional information, please contact me at (202) 641-2614.

CC: Head of Investments and Chief of Staff
Acting Vice President, Office of Portfolio Monitoring & Management
Acting Vice President, Office of Development Policy
All Vice Presidents
Director, Office of Accountability
Managing Director, Internal Controls

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Background

The Better Utilization of Investments Leading to Development (BUILD) Act of 2018 authorizes the U.S. International Development Finance Corporation (DFC) to invest in eligible projects that promote economic freedom and private sector development. These projects include joint ventures with businesses in host country participants. Under the BUILD Act, DFC also supports investment initiatives that encourage sound policy environments and foster sustainable, measurable social benefits alongside financial returns. To implement BUILD Act initiatives, DFC partners with private sector entities to invest across priority sectors such as critical infrastructure, critical minerals, food and health security, technology, and financial services.¹ DFC maintains an active global portfolio with investments in Africa, the Middle East, Latin America, the Caribbean, the Indo-Pacific, and Europe.

The DFC Office of Inspector General (OIG) conducted its first inspection to enhance the audit program and provide DFC and stakeholders with information on the status and economic development impact of active DFC projects worldwide. The objective was to evaluate, through this inspection, compliance with agreement terms and progress with established impact metrics.²

FS India Solar Ventures Pvt. Ltd. (First Solar)

DFC signed a \$500 million loan agreement with First Solar in July 2022 for the construction and operation of a 3.3 gigawatt (GW) solar module manufacturing facility located in SIPCOT Industrial Park, Pillaipakkam in Chennai, India. This project supported the U.S. Government's objective to reduce the private sector's reliance on highly concentrated solar supply chains linked to forced labor. First Solar uses cadmium telluride (CdTe) to manufacture its thin-film panels rather than polysilicon, the production of which has been associated with forced labor practices in Xinjiang, China. DFC's investment in First Solar's CdTe module production also supported India's solar power generation targets for 2030. DFC disbursed \$500 million to First Solar for the construction and operation of its plant between August 2022 and August 2023. The construction of First Solar's manufacturing facility was completed in July 2023 and First Solar is currently producing solar panels for commercial shipment. First Solar's loan is scheduled to be repaid by August 2029. DFC is actively monitoring the project's developmental progress against established expectations.

Biological E Limited (Bio E)

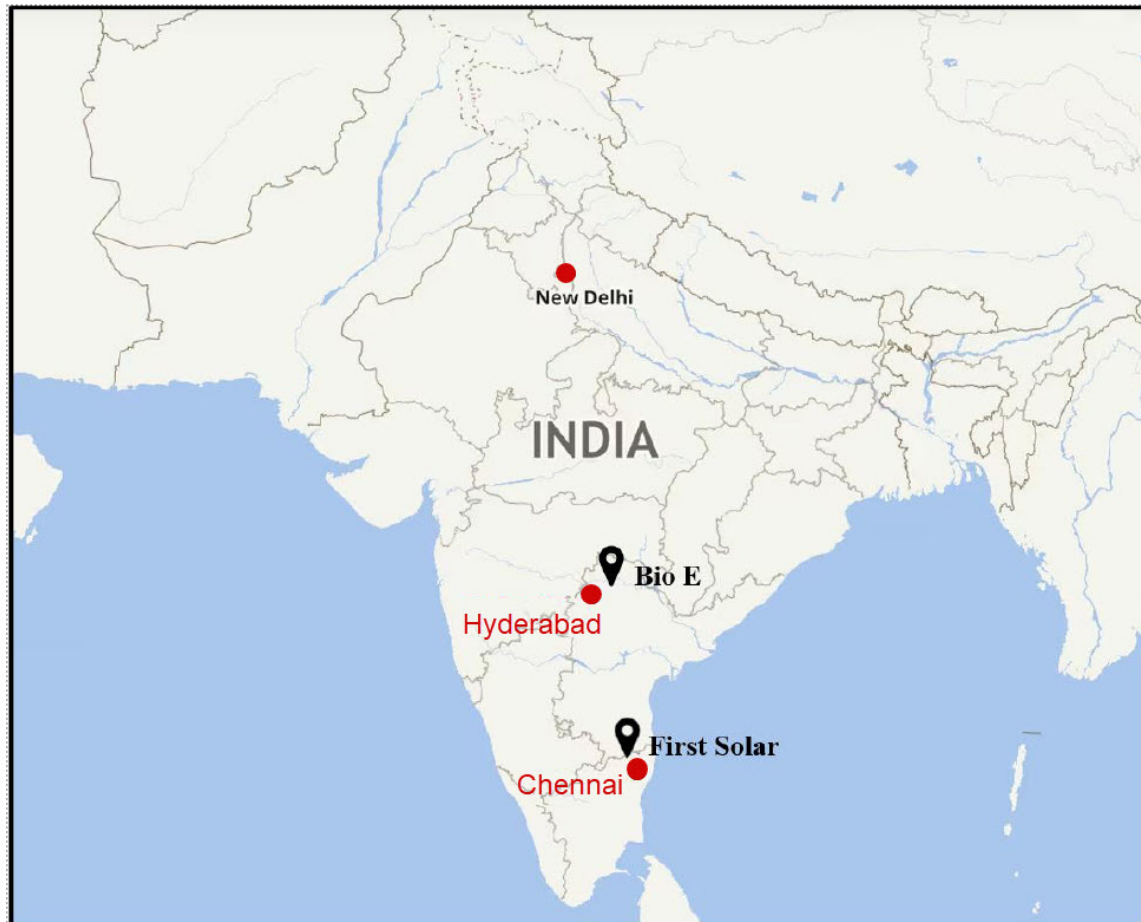
DFC approved a \$50 million loan to Bio E in October 2021 to expand its vaccine manufacturing capacity and scale up production. This project aligned with the U.S. Government's COVID-19 Global Response and Recovery Plan, aiming to accelerate pandemic response efforts and improve vaccine access in low-income countries with limited healthcare infrastructure. DFC made three

¹ BUILD Act Title II Section 1421 (g)(3)(A); (C); (F)

² Please see Appendix I Objective, Scope, and Methodology for a detailed explanation of the inspection objective.

disbursements to Bio E between November 2021 and January 2023, totaling \$50 million. Bio E has completed the expansion of its pharmaceutical facility. On March 19, 2025, Bio E fully repaid the loan, nearly seven years ahead of its original final repayment scheduled for July 2032. DFC is currently working internally to close out the Bio E project.

Figure 1: Locations of Bio E and First Solar projects in India



Source: Map image obtained from online website

DFC's Project Lifecycle Process

DFC's investment process begins with a screening stage to assess project eligibility, followed by detailed due diligence at a level appropriate for the specific project. During the due diligence phase, DFC conducts reviews to gain an understanding of the project's anticipated environmental and social risks and impacts, and economic and development impact outcomes. DFC's due diligence process includes the economic and development impact assessment clearances which indicates the anticipated impact the project will have (i.e., jobs created, or products shipped).

DFC documents findings from its environmental and social risk due diligence in an environmental and social assessment document prior to commitment. DFC uses information gathered during the due diligence process to develop the finalized finance agreement and conduct project monitoring

following the financial closing of a direct loan. Officials in DFC’s Office of Development Policy (ODP) conducted the First Solar and Bio E environmental, social, and economic clearances, and monitored the project’s results. As a result of recent restructuring, in April 2025 ODP is currently responsible for conducting a project’s due diligence while the Office of Portfolio Monitoring & Management (OPMM) is responsible for monitoring.

Finding #1: DFC Did Not Adhere to Established Policies and Procedures Resulting in Insufficient Records Management and a Gap in the E&S Monitoring of the \$50 Million Bio E Investment

DFC’s finance agreement with Bio E required the company to submit specific document deliverables prior to each of the three disbursements.³ Per ODP’s policies and procedures,⁴ monitoring officials first upload the deliverables into SharePoint for review. Once they have been approved and accepted, monitoring officials must then upload the deliverables into Insight.⁵

The OIG determined that DFC did not follow these procedures for the Bio E project. DFC did not receive three required annual environmental and social (E&S) reports. Another deliverable, the Ozone Depleting Substance (ODS) phase out plan was required to be received prior to September 30, 2022. However, the ODS plan wasn’t received until January 2023—approximately 3 months after its required submission date of September 30, 2022. Below is a chart showing our analysis of Bio E’s deliverables:

Table 1: OIG’s Analysis of Bio E’s Finance Agreement Deliverables

Deliverables	Evidence of DFC Obtaining Deliverable?	Was Deliverable in SharePoint Project Folder?	Was Deliverable in Insight?
Development Outcomes Survey (2022-23)	Yes	No	Yes
Development Outcomes Survey (2023-24)	Yes	No	Yes
Overarching policy statement of environmental and social objectives and principles	Yes	Yes	Yes
Grievance mechanism	Yes	Yes	Yes

³ Schedule Y of the finance agreement outlines the deliverable requirements that the borrower must fulfill for DFC.

⁴ ODP Policies and Procedures Manual, effective September 12, 2023, last updated June 26, 2024. As of July 2025, separate policies and procedures for OPMM have not been issued.

⁵ DFC uploads project information into Insight to support the management and monitoring of projects.

Deliverables	Evidence of DFC Obtaining Deliverable?	Was Deliverable in SharePoint Project Folder?	Was Deliverable in Insight?
Construction contractor management procedures and framework plan for overseeing construction activities	Yes	Yes	No
ODS phase out plan	Yes – Not Timely ⁶	Yes	No
2022 Annual E&S Report	No	No	No
2023 Annual E&S Report	No	No	No
2024 Annual E&S Report	No	No	No

Source: OIG analysis of Bio E Project Data

DFC Did Not Ensure Required Annual E&S Reports Were Submitted

DFC’s environmental clearance identified risks that warranted the inclusion of an annual E&S reporting requirement in the Bio E finance agreement. The agreement specified that Bio E must submit annual E&S reports by December 31 each year, beginning in 2022. These reports were to provide evidence of compliance with E&S requirements and detail significant incidents, occupational safety matters, labor issues, and environmental performance indicators. The finance agreement, as a formal safeguard, stipulated that failure to submit these reports would constitute an event of default. The OIG reviewed project files and made direct inquiries to both DFC and Bio E to obtain the annual E&S reports. However, DFC officials could not provide these reports to the OIG nor could DFC confirm that they received these reports from Bio E.

DFC Did Not Obtain the Ozone Depleting Substance Phase Out Plan Prior to Required Finance Agreement Deadline

Based on the environmental clearance, DFC required Bio E to submit an ODS phase out plan before September 30, 2022, due to the use of ozone-depleting substances in Bio E’s facility maintenance. Bio E submitted two ODS plans as required by the finance agreement, but not in a timely manner. Specifically, the OIG found that DFC did not receive and approve Bio E’s ODS phase out plan until January 2023, approximately three months after the date required in the finance agreement. Additionally, the ODS plan was not uploaded to Insight in accordance with ODP’s deliverable requirements.

Failure to document receipt of required deliverables prevented DFC from monitoring finance agreement compliance and limited its ability to conduct effective oversight. There is a risk that these missing deliverables may highlight issues within the project that necessitate further DFC oversight. Furthermore, deliverables that were received were not uploaded to Insight, thereby

⁶ Deliverable was received approximately three months after deadline as stated in the finance agreement (prior to Sept. 30, 2022).

limiting project officials' ability to monitor and verify the status of required submissions. As a result, DFC's \$50 million investment in Bio E was made without sufficient oversight to ensure that DFC's finance agreement deliverable requirements were fully met. Bio E fully repaid its \$50 million DFC loan on March 19, 2025, even though the company's loan payments extended to 2032. Thus, the corporation is in the process of completing all final obligations related to the project. This presents an opportunity for DFC to address outstanding documentation or clarify deviations from finance agreement terms.

Finding #2: DFC Could Strengthen E&S Oversight of the First Solar Project

The executed finance agreement between DFC and First Solar included an Environmental and Social Action Plan (ESAP) listing 16 required document deliverables. These deliverables were to be submitted at specific phases during the construction and operation of the solar panel manufacturing plant. First Solar's deliverables were based on environmental and social risks identified during the due diligence process. DFC used its internal project folders and the Insight system to store and track ESAP deliverables and related documentation, as required in ODP's policies and procedures. Although most of the required ESAP deliverables were obtained, project officials can improve their oversight to ensure all deliverables are received and that environmental and social risks are properly mitigated.



Photo #1. Image of First Solar manufacturing facility funded by DFC's investment.



Photo #2. Image of Chennai, India neighborhood.



Photo #3. Image of First Solar officials with materials.

Source: Photos above taken by OIG inspection team.

Oversight of Material Supplier Audits

As part of its ESAP obligations, First Solar was required to submit audits of its raw material and component suppliers before project commissioning and annually thereafter. This requirement stemmed from environmental risks related to First Solar’s manufacturing process, which involves cadmium telluride (CdTe)—a compound derived from cadmium (a toxic element) and telluride (a rare, mildly toxic metal). First Solar relies on multiple contractors to supply CdTe and other key materials.

Supplier audits are intended to evaluate environmental practices and identify deficiencies in First Solar’s raw material and component supply chain. Between August 2023 and January 2024, First Solar submitted audits for five material suppliers, although it reported working with eight. Following our May 2025 site visit we identified gaps in DFC’s oversight of supplier audit requirements. These gaps included DFC not consistently obtaining annual supplier audits and not uploading supplier audit documentation to Insight. First Solar reported working with 28 key material suppliers including two CdTe suppliers however DFC did not obtain audits and contracts for both suppliers. DFC officials acknowledged that since the initial ESAP submission, they had not requested follow-up audits or contracts. Also, the responsibility for submitting annual supplier audits rests with First Solar, and that internal staffing changes in DFC contributed to the oversight gap. In April 2025, DFC reorganized internally and created the Office of Portfolio Monitoring & Management (OPMM) to monitor its projects. Before this change, ODP handled these monitoring duties. DFC officials said that monitoring officers would review these documents onsite during site monitoring visits. Some missing audits raise potential concerns that may warrant further review by DFC officials. DFC could collaborate with First Solar to assess which supplier audits would be most beneficial to obtain on an ongoing basis.

Monitoring of Labor and Working Conditions During Plant Construction

Before DFC’s first disbursement, First Solar was required to submit a contractor management plan addressing all aspects of International Finance Corporation Performance Standard 2 (IFC PS 2), which covers labor and working conditions applicable during the construction phase. While the construction company hired a construction management firm (CMF) to monitor working conditions during construction, DFC officials found that the CMF’s monthly progress reports, which documented labor and working conditions, omitted monitoring procedures for the following IFC PS 2 requirements:

- Upholding workers’ rights to organize and form unions [IFC PS paras. 13 – 14].
- Providing all workers with clear, understandable contracts [paras. 8 – 12].
- Enforcing anti-discrimination and equal opportunity policies [paras. 15 – 17].
- Preventing child and forced labor [paras. 21 – 22].

These requirements affected approximately 2,000 workers involved in building the manufacturing facility. DFC officials then provided First Solar with guidance and examples on how the CMF could monitor and report on the omitted requirements and conveyed their expectation of receiving future reports that address the IFC PS 2 aspects raised. However, the addition of the above-mentioned monitoring requirements for IFC PS 2 were never included in the CMF's reporting. Although DFC officials relied on the CMF's reports to monitor working conditions, they acknowledged that a more comprehensive construction contract incorporating IFC PS 2 requirements would have strengthened oversight. DFC officials conducted a site visit to First Solar during construction; however, the monitoring report did not assess compliance with IFC PS2. In August 2025—after our site inspection, DFC revised its E&S site visit template to include an IFC Performance Standards compliance checklist incorporating monitoring procedures identified for the First Solar project.

Improved Oversight Could Mitigate Potential E&S Deficiencies

The OIG found that DFC's E&S oversight of First Solar was incomplete because DFC did not obtain all required deliverables. Specifically, DFC obtained only a part of First Solar supplier audits and contracts, and did not ensure the CMF reported on specific IFC PS 2 areas. DFC's due diligence for First Solar led to the requirement of these ESAP deliverables in the finance agreement. For example, DFC officials reviewed First Solar's supply chain and manufacturing process and requested that First Solar provide supplier audits to DFC annually. However, DFC did not obtain First Solar's audits of material suppliers on an annual basis. DFC officials said they experienced staffing challenges that caused the oversight gap in tracking and requesting this finance agreement deliverable. Additionally, DFC officials said they review supplier contracts and audits as part of their on-site environmental and social monitoring visits to First Solar. DFC's most recent environmental and social monitoring site visit was in May 2023, which was during the facilities construction phase, and did not include a review of the supplier audits or contracts. As a result, DFC could be unaware of potential environmental and social deficiencies associated with First Solar.

Finding #3: Mixed Progress on Impact Outcomes for Bio E and First Solar Projects

The BUILD Act established DFC and assigned it statutory responsibilities to develop standards and methods to measure both projected and actual development impact. To fulfill this mandate, DFC's ODP prepares clearances that estimate anticipated development impact, while OPMM is responsible for monitoring the project during the implementation period. OPMM uses the annual Development Outcomes Survey (DOS) required under the finance agreements, periodic site visits, and project performance assessments to monitor post-disbursement impact outcomes.



Photo #4. Image of Bio E pharmaceutical manufacturing facility funded by DFC's investment.



Photo #5. Image of First Solar manufacturing facility funded by DFC's investment.

Source: Photo #4 provided by DFC loan recipient and Photo #5 taken by OIG inspection team

The Bio E Project Made Progress Meeting Two Core Impact Projections

DFC's \$50 million direct loan to Bio E helped support India's COVID-19 vaccination campaign. DFC officials established three sector specific core impacts, two for economic growth and one for innovation. To measure these core impacts, DFC officials established metrics and projected outcomes to track performance for two of Bio E's core impacts. DFC officials monitor these metrics and projected outcomes through DOS submissions, site visits, and performance assessments. Below is a table showing Bio E's development progress against reported results from its last DOS submission.

Table 2: OIG’s Analysis of Bio E’s Finance Agreement Deliverables⁷

Core Impact	Metric	Projection	Progress Reported (2023-24)	Outcome Achieved?
Economic Growth	Number of COVID-19 Vaccines Delivered	Producing 700 million COVID-19 vaccines per year	3.5 million non-COVID-19 vaccines produced	No
Innovation⁸	None established	None established	N/A	N/A
Economic Growth	Job creation	Hiring 378 new employees	536 employees total	Indeterminate ⁹

Source: OIG review of Bio E’s economic assessment, performance assessment, and 2023-24 DOS results.

Because the primary purpose of this project was to support India’s COVID-19 vaccination campaign, an important metric was the number of COVID-19 vaccines delivered. DFC officials initially projected that Bio E would produce 700 million doses per year. Bio E did not meet its projected output due to a sharp decline in demand for COVID-19 vaccines. To address the decline in demand, Bio E pivoted its operations to focus on manufacturing other vaccines, including oral polio, pneumococcal, and future typhoid conjugate vaccines. While these outputs represent relevant public health contributions, this differs from the originally established metric. DFC officials stated they did not establish new metrics or projections for the alternate vaccines that Bio E was producing. Instead, DFC officials explained they began tracking the total number of vaccines sold as an indicator within the DOS. Another DFC official acknowledged the project was underperforming against its stated metric, and their site visit determined Bio E’s progress as “indeterminate,” meaning monitoring officials were unable to make a determination about the overall development impact performance. Since Bio E repaid its DFC loan early, DFC officials will no longer receive annual DOS updates.

First Solar is Working to Meet Its Impact Projections

DFC provided First Solar a \$500 million loan to construct and operate a solar panel manufacturing facility. First Solar’s clearance established three sector specific core impacts, corresponding metrics, and projections. DFC monitored the progress of these metrics through the DOS and performance assessment.¹⁰ Below is a table showing First Solar’s reported DOS results.

⁷ These core impact metrics were originated prior to the creation of the current Development Impact division.

⁸ DFC officials said they did not establish metrics or projections to monitor the innovation core impact.

⁹ The number of jobs reported represented total employees and didn’t indicate whether the job positions were new.

¹⁰ According to ODP’s policies and procedures manual, project performance assessments occur three times: first year, midpoint, and impact maturity (defined as the year in which projected impacts are expected to occur).

Table 3: First Solar Core Impact, Metrics, and Reported Progress

Core Impact	Metric	Projection	Progress Reported (2024-25)	Outcome Achieved?
Economic Growth	Direct Jobs Supported	1,001 jobs created	879 employees	In-progress
Innovation	Product Shipments	3.3 GW in peak wattage capacity of shipments	2.694 GW in peak wattage capacity of shipments	In-progress
Economic Growth	Percentage of Sales in India	100% of sales in India	28% of gross revenue from India	In-progress

Source: OIG review of First Solar’s economic assessment, performance assessment, and 2024-25 DOS results.

DFC officials are currently monitoring the project to assess whether the projections will be met. First Solar uses the DOS to report its results related to these core impact metrics to DFC. In its 2024-25 DOS, First Solar stated that it currently employs 879 full-time employees, which is close to meeting the 1,001 direct-jobs-created projected goal. The company also reported 2.694 GW of total peak wattage corresponding to product shipments,¹¹ making progress towards meeting its second projected impact goal of 3.3 GW in peak wattage capacity of shipments. Furthermore, DFC set 100% of local (Indian) sales as the target for product sales. DFC officials explained they do not have annual targets to measure these metrics but expect them to be achieved by the loan maturity date in August 2029. First Solar reported 28% of local sales in the 2024-25 DOS and 33% of local sales in 2023.

DFC’s ability to assess First Solar’s progress is reliant on the DOS reporting. Continuing to collect data on peak wattage associated with product shipments and local revenue for units sold will support DFC in effectively monitoring the First Solar project. Additionally, this information will enable DFC officials to conduct performance assessments and evaluate the project's progress toward achieving its intended impact outcomes.

¹¹ The “total peak power generation capacity corresponding to solar panel shipments” means that the maximum energy level of the panels is measured for every shipment First Solar produces.

Conclusion

The inspection found that DFC officials did not adhere to established policies and procedures, resulting in insufficient records management and a gap in the E&S monitoring of the \$50 million Bio E Investment. DFC officials did not obtain three required annual E&S reports and did not obtain one Bio E deliverable until three months after the deadline specified in the finance agreement. Also, DFC did not follow its policies and procedures to upload all the Bio E deliverables received to Insight. There is a risk that these missing deliverables may highlight issues within the project that necessitate further DFC oversight. As a result, DFC's \$50 million investment in Bio E was made without sufficient E&S monitoring to ensure that DFC's finance agreement deliverable requirements were fully met.

DFC could improve its E&S oversight of the First Solar project by obtaining ongoing required annual audits from several of First Solar's supply chain material and component supplier vendors. DFC did not ensure monitoring procedures for the facility's construction met intended labor and working conditions standards identified in the finance agreement. DFC officials stated they experienced staffing challenges that caused the oversight gap in tracking the annual supplier audits. As a result, the corporation could be unaware of potential E&S deficiencies associated with First Solar. Therefore, DFC should continue its oversight to ensure applicable annual First Solar material supplier audits are obtained.

The Bio E project made progress meeting two core impact projections, while the First Solar project is still in the process of achieving its impact projections. DFC should continue to monitor the First Solar project to fully assess the project's impact progress against projected outcomes.



Photo #6. Image of Bio E pharmaceutical manufacturing facility funded by DFC's investment.

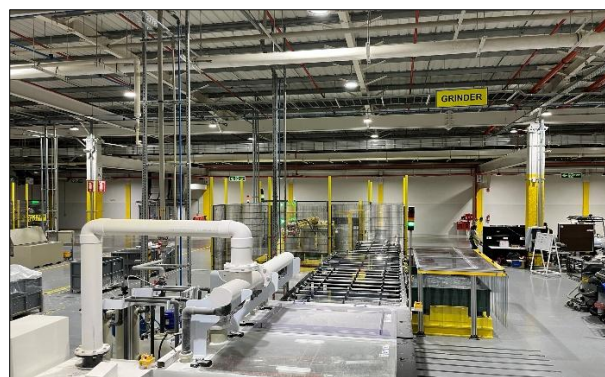


Photo #7. Image of First Solar manufacturing facility funded by DFC's investment.

Source: Photo #6 provided by DFC loan recipient and Photo #7 taken by OIG inspection team.

Recommendations

The OIG makes the following recommendations to DFC's Vice President of the Office of Development Policy and the Vice President of Portfolio Monitoring and Management:

- **Recommendation #1:** Direct staff to review the Bio E and First Solar project files and ensure all required deliverables from Schedule Y of the finance agreement have been uploaded to Insight, in accordance with the Office of Development Policy policies and procedures.
- **Recommendation #2:** Obtain missing deliverables and ongoing project deliverables.
 - a. For the Bio E project, assess the feasibility of obtaining the annual 2022, 2023, and 2024 environmental and social reports for project file closeout, given the loan has been repaid.
 - b. For the First Solar project, assess the feasibility of obtaining and reviewing supplier audits and contracts for applicable raw material and component vendors on an ongoing basis.
- **Recommendation #3:** Continue to monitor First Solar's impact, including through the June 30, 2026 annual Development Outcomes Survey and midpoint performance assessment, to have relevant information for assessing the project's core impacts and metrics.

Evaluation of Management Comments

The OIG provided the draft report to DFC on September 12, 2025. On September 26, 2025, DFC provided their response, which is included in Appendix II of this report. DFC concurred with all three of our recommendations. DFC took responsive actions following the issuance of the official draft report to address recommendations 1 and 2. The OIG reviewed DFC's actions for recommendations 1 & 2 and consider both closed. Recommendation 3 remains open pending completion of DFC's planned activities.

Appendix I: Objective, Scope, and Methodology

Objective

The objective was to evaluate, through this inspection, compliance with agreement terms and progress with established impact metrics. This inspection was designed to provide DFC and relevant stakeholders with critical information about these projects' implementation and oversight.

Scope

This inspection was conducted under the authority of [Public Law No. 110-181](#), as amended, and the [Inspector General Act of 1978](#), as amended. The work was performed in accordance with the Council of the Inspectors General on Integrity and Efficiency's Quality Standards for Inspection and Evaluation and DFC OIG 500 Inspection and Evaluation Policies and Procedures.

The inspection covered the period from October 21, 2024, through September 12, 2025 and included the review of two DFC projects, First Solar and Bio E, from the due diligence stage through project monitoring. These projects were judgmentally selected due to DFC's significant investment exposure in India. First Solar received a \$500 million direct loan to help reduce reliance on solar supply chains linked to forced labor. Bio E received a \$50 million direct loan to expand its vaccine production capacity.

Methodology

The OIG initially scheduled site visits to First Solar in Chennai and Bio E in Hyderabad, India, from February 8 to 21, 2025. However, due to changing priorities, the site visits were suspended. We rescheduled and conducted a site visit to First Solar's manufacturing facility in Chennai, India from May 8 to 17, 2025. We met with First Solar officials and toured the solar manufacturing facility in May 2025. During this visit, the team also met with U.S. Consulate Chennai officials to discuss the investment's strategic impact. We were unable to conduct a site visit to Bio E because in March 2025 the company prepaid its loan in full and officials were unable to accommodate the inspection team. As an alternative, we sent a structured questionnaire to verify compliance with loan conditions. Bio E returned the completed questionnaire and facility photos on May 8, 2025.

Our fieldwork included collecting and analyzing project documentation, including environmental and social assessments, finance agreements, and clearance records. We reviewed DFC's internal controls consistent with GAO's Standards for Internal Control in the Federal Government ([GAO-14-704G](#)). We evaluated financial, environmental, social, economic, and development impact due diligence and monitoring activities to verify compliance with the BUILD Act. We interviewed DFC officials across multiple offices, including Development Policy, Financial Management, General Counsel, Health and Agriculture, Portfolio Monitoring and Management, and the Chief Risk Officer.

Appendix II: Management Comments

MEMORANDUM

September 18, 2025

TO: Nagasilpa Jujjavarapu
Acting General Counsel, Office of the Inspector General

FROM: Mildred Callear
Vice President and Chief Financial Officer

Mildred
Callear

Digitally signed by
Mildred Callear
Date: 2025.09.19
10:14:34 -04'00'

SUBJECT: DFC's Management Comments to "Inspection of DFC's First Solar and Biological E Projects"

DFC is appreciative of the OIG's thorough inspection report, highlighting the Corporation's thorough and risk-based approach to monitoring its Bio E and First Solar projects. While the report did not identify any significant deficiencies in environmental or social compliance or the Corporation's development impact measurement and monitoring processes, DFC concurred with and has already addressed the OIG's recommendations.

OIG Recommendation #1: Direct staff to review Bio E and First Solar project files and ensure all required deliverables from Schedule Y of the finance agreement have been uploaded to Insight, in accordance with the Office of Development Policy policies and procedures.

Management Response: DFC analyzed the project files for Bio E and First Solar and verified that the required deliverables from Schedule Y of each respective finance agreement (except for those mentioned in recommendation #2) were uploaded to Insight.

Responsible Party: Office of Portfolio Management and Monitoring

Target Resolution Date: Completed

OIG Recommendation #2: Obtain missing deliverables and ongoing project deliverables.

- a. For the Bio E project, assess the feasibility of obtaining the annual 2022, 2023, and 2024 environmental and social reports for project file closeout, given the loan has been repaid.
- b. For the First Solar project, assess the feasibility of obtaining and reviewing

supplier audits and contracts for applicable raw material and component vendors on an ongoing basis.

Management Response: DFC assessed the impact of these missing deliverables on its project monitoring capability. For Bio E, obtaining further reporting was not deemed necessary because DFC no longer has a contractual relationship with the project. In the case of First Solar, documentation already submitted to DFC properly demonstrated the client's supply chain management capacity and, as such, obtaining further supplier audits and contracts was not deemed necessary.

Responsible Party: Office of Portfolio Management and Monitoring

Target Resolution Date: Completed

OIG Recommendation #3: Continue to monitor First Solar's impact, including through the June 30, 2026 annual Development Outcomes Survey and midpoint performance assessment, to have relevant information for assessing the project's core impacts and metrics.

Management Response: DFC will continue to monitor First Solar's development impact achieved through the collection and review of the annual Development Outcomes Survey, the record of which is documented in DFC's impact performance assessments and dashboards.

Responsible Party: Office of Portfolio Management and Monitoring

Target Resolution Date: 4th Quarter of FY 2026

/s/

Appendix III: Glossary of Acronyms and Abbreviations

Table 4 contains definition of all acronyms and abbreviations used in this report.

Table 4: Acronyms and Abbreviations

Acronym	Definition
Bio E	Biological E Limited
BUILD Act	Better Utilization of Investments Leading to Development Act of 2018
CdTe	Cadmium Telluride
CMF	Construction Management Firm
COVID-19	Coronavirus Disease 2019
DFC	U.S. International Development Finance Corporation
DOS	Development Outcomes Survey
E&S	Environmental and Social
ESAP	Environmental and Social Action Plan
First Solar	FS India Solar Ventures Pvt. Ltd.
GW	Gigawatt
IFC	International Finance Corporation
ODP	Office of Development Policy
ODS	Ozone Depletion Substance
OIG	Office of Inspector General
OPMM	Office of Portfolio Monitoring and Management
PS	Performance Standard



Office of Inspector General

To report fraud, waste, abuse, or mismanagement, contact the DFC OIG Hotline at +1 833-OIG-4DFC (833-644-4332) or visit <https://www.dfc.gov/oig/hotline>. You can also write to DFC Office of Inspector General, 1100 New York Avenue, NW, Suite 270 West, Washington, DC 20527. The identity of each writer and caller can be kept confidential, upon request, to the extent permitted by law.

NOTICE

Pursuant to PL 117-263, section 5274, non-governmental organizations and business entities identified in this report have the opportunity to submit a written response for the purpose of clarifying or providing additional context to any specific reference. Comments must be submitted to OIGSection5274Submissions@dfc.gov within 30 days of the report issuance date and we request that comments not exceed 2 pages. The comments will be appended by link to this report and posted on our public website. We request that submissions be Section 508 compliant and free from any proprietary or otherwise sensitive information.