



Report and Recommendation of the President to the Board of Directors

PUBLIC

Project Number: 56276-001
February 2023

Proposed Loans Special Purpose Vehicles owned by SAEL Industries Limited SAEL Biomass Energy Project (India)

This is a redacted version of the document approved by ADB's Board of Directors. The document excludes information that is subject to exceptions to disclosure set forth in ADB's Access to Information Policy.

Asian Development Bank

CURRENCY EQUIVALENTS

(as of 21 December 2022)

Currency unit	–	Indian rupee/s (₹)
₹1.00	=	\$0.0122
\$1.00	=	₹82.737

ABBREVIATIONS

ADB	–	Asian Development Bank
E&S	–	environmental and social
EHS	–	Environmental, Health, and Safety
ESMP	–	environmental and social management plan
GAP	–	gender action plan
GRM	–	grievance redress mechanism
IESE	–	initial environmental and social examination
OP	–	operational priority
PPA	–	power purchase agreement
SAEL Industries	–	SAEL Industries Limited
SCA	–	social compliance audit
SPV	–	special purpose vehicle
VVNL	–	Vidyut Vitran Nigam Limited
WBG	–	World Bank Group

WEIGHTS AND MEASURES

GW	–	gigawatt
km	–	kilometer
kWh	–	kilowatt-hour
MW	–	megawatt
t	–	metric ton

NOTES

- (i) The fiscal year (FY) of SAEL Industries Limited, SAEL Limited, and special purpose vehicles ends on 31 March. “FY” before a calendar year denotes the year in which the fiscal year ends, e.g., FY2023 ends on 31 March 2023.
- (ii) In this report, “\$” refers to United States dollars.

Vice-President	Ashok Lavasa, Private Sector Operations and Public–Private Partnerships
Director General	Suzanne Gaboury, Private Sector Operations Department (PSOD)
Director	Shantanu Chakraborty, Infrastructure Finance Division 1 (PSIF1), PSOD
Team leader	Sumika Nakane, Investment Specialist, PSIF1, PSOD
Project advisor	Mayank Choudhary, Principal Investment Specialist, PSIF1, PSOD ^a
Team members	Genevieve Abel, Principal Transaction Support Specialist (Integrity), Private Sector Transaction Support Division (PSTS), PSOD
	Christian Abeleda, Project Analyst, PSTS, PSOD
	Annalice Aliluya, Senior Investment Officer, Risk Analytics Unit (OPSD-RAU), PSOD
	Ranie Catimbang, Associate Social Development Officer (Safeguards), PSTS, PSOD
	Cecilia De Castro, Senior Safeguards Officer, PSTS, PSOD
	Annabelle Giorgetti, Senior Economist, PSTS, PSOD
	Monico Pedro Niccolo Gregorio, Senior Investment Officer, OPSD-RAU, PSOD
	Swati Jairath, Senior Investment Officer, PSIF1, PSOD ^a
	Manfred Kiefer, Principal Economist, PSTS, PSOD
	Aarti Mehra, Principal Investment Specialist (Guarantees and Syndications), Guarantees and Syndications Unit, PSOD ^a
	Noel Peters, Principal Investment Specialist (Climate Finance), OPSD, PSOD
	Stephen Peters, Senior Energy Specialist (Waste-to-Energy), Energy Sector Group, Sustainable Development and Climate Change Department
	Amanda Satterly, Principal Social Development Specialist (Gender and Development), PSTS, PSOD
	Richard Sherrington, Principal Safeguards Specialist, PSTS, PSOD
	Mriga Solanki, Counsel, Office of the General Counsel
	Grachelle Talicuran, Safeguards Officer, PSTS, PSOD
	Criselda Uy, Senior Operations Assistant, PSIF1, PSOD

^a Outposted to the India Resident Mission.

In preparing any country program or strategy, financing any project, or by making any designation of or reference to a particular territory or geographic area in this document, the Asian Development Bank does not intend to make any judgments as to the legal or other status of any territory or area.

CONTENTS

	Page
PROJECT AT A GLANCE	
I. THE PROPOSAL	1
II. THE PROJECT	1
A. Project Identification and Description	1
B. Development Impacts, Outcome, and Outputs	3
C. Alignment with ADB Strategy and Operations	3
D. Project Cost and Financing Plan	4
E. Implementation Arrangements	4
F. Projected Financial and Economic Performance	4
III. THE PROPOSED ADB ASSISTANCE	4
A. The Assistance	4
B. Value Added by ADB Assistance	4
C. Risks	4
IV. POLICY COMPLIANCE	5
A. Safeguards and Social Dimensions	5
B. Anticorruption Policy	7
C. Investment Limitations	7
D. Assurances	7
V. RECOMMENDATION	7
APPENDIXES	
1. Design and Monitoring Framework	9
2. List of Linked Documents	12

PROJECT AT A GLANCE

1. Basic Data		Project Number: 56276-001	
Project Name	SAEL Biomass Energy Project	Department/Division	PSOD/PSIF1
Country	India		
Borrowers	Chattargarh Renewable Energy Private Limited KTA Power Private Limited Sardarshahar Agri Energy Private Limited TNA Renewable Energy Private Limited VCA Power Private Limited		
Portfolio at a Glance	https://www.adb.org/Documents/LinkedDocs/?id=56276-001-PortAtaGlance		
2. Sector		ADB Financing (\$ million)	
✓ Energy	Renewable energy generation - biomass and waste		91.138
		Total	91.138
3. Operational Priorities		Climate Change Information¹	
✓ OP2: Accelerating progress in gender equality		GHG reductions (tons per annum)	487,200
✓ OP3: Tackling climate change, building climate and disaster resilience, and enhancing environmental sustainability		Climate Change impact on the Project	Medium
✓ OP5: Promoting rural development and food security		ADB Financing	
		Adaptation (\$ million)	9.200
		Mitigation (\$ million)	81.938
		Cofinancing	
		Adaptation (\$ million)	0.000
		Mitigation (\$ million)	0.000
Sustainable Development Goals		Gender Equity and Mainstreaming	
SDG 5.5		Effective gender mainstreaming (EGM)	✓
SDG 7.2			
SDG 13.a		Poverty Targeting	
		General Intervention on Poverty	✓
5. Safeguard Categorization		Environment: B	Involuntary Resettlement: B
			Indigenous Peoples: C
6. Financing			
Modality and Sources		Amount (\$ million)	
ADB		91.138	
Nonsovereign Local Currency Loan (Regular Loan): Ordinary capital resources		18.336	
Nonsovereign Local Currency Loan (Regular Loan): Ordinary capital resources		18.369	
Nonsovereign Local Currency Loan (Regular Loan): Ordinary capital resources		18.369	
Nonsovereign Local Currency Loan (Regular Loan): Ordinary capital resources		18.369	
Nonsovereign Local Currency Loan (Regular Loan): Ordinary capital resources		17.695	
Cofinancing^a		0.000	
None		0.000	
Others^b		30.360	
Total		121.500	
Currency of ADB Financing: Indian Rupee			

^a ADB will seek to reduce its exposure through a combination of risk transfers and getting on board parallel lenders.

^b Derived by deducting ADB financing and Cofinancing from Total Project Cost.

I. THE PROPOSAL

1. I submit for your approval the following report and recommendation on proposed loans of up to ₹7,540,400,000, in aggregate based on agreed allocation, to each of five special purpose vehicles (SPVs) incorporated as subsidiaries of SAEL Industries Limited (SAEL Industries) for the SAEL Biomass Energy Project in India.

2. The Asian Development Bank (ADB) will provide loans to Chattargarh Renewable Energy Private Limited, KTA Power Private Limited, Sardarshahar Agri Energy Private Limited, TNA Renewable Energy Private Limited, and VCA Power Private Limited (collectively, the borrowers) for the construction of five 14.9-megawatt (MW) biomass power plants utilizing agricultural residue as feedstock, in the districts of Bikaner, Churu, Hanumangarh, Jhunjhunu, and Sikar in Rajasthan state, India. The project will (i) reduce the burning of agricultural residue, which is the present mode of disposal by the farmers, causing air pollution in north India; (ii) provide additional income to the farmers; and (iii) further diversify the energy mix of India in favor of renewable energy. It is aligned with the Government of India's targets to reach 500 gigawatts (GW) of nonfossil energy capacity and meet 50% of cumulative electric power installed capacity from renewable energy sources, thereby reducing the carbon intensity of the economy by 45% by 2030.¹

II. THE PROJECT

A. Project Identification and Description

3. **Project identification.** Agriculture plays an important role in India's economy, accounting for 18.8% of the country's gross value added for fiscal year (FY) 2022.² However, it has also led to serious environmental challenges in managing the huge amount of agricultural residue generated from the harvesting process. A large portion of the residue is burned on-farm to clean the fields before sowing the next crop. The problem of on-farm burning has intensified because of the short window between the harvesting and sowing, high cost of straw management, labor shortage, and lack of market links to maximize residue use. The states of Haryana, Punjab, Rajasthan, and Uttar Pradesh in north India are among the largest producers of agricultural residue such as paddy straw and mustard stalks, most of which is burned in the fields, leading to severe air pollution, especially during the harvesting season from October to January.³ It also emits large amounts of toxic pollutants and greenhouse gases, such as methane, carbon monoxide, volatile organic compounds, and carcinogenic polycyclic aromatic hydrocarbons.

4. The challenge for India and many other developing member countries is to find a solution to manage and reduce agricultural waste in an environmentally and socially acceptable manner. Biomass power generation offers an effective solution by converting agricultural residue into a dependable and renewable source of electricity. Biomass is a sustainable form of power generation, and unlike solar and wind power, which are intermittent, can operate on a firm, reliable, and dispatchable basis, providing a more direct substitute for baseload generation using fossil fuels. The substitution effectively reduces the grid's greenhouse gas factor by displacing generation that otherwise would have been provided by fossil fuels.

¹ Government of India. Ministry of External Affairs. 2021. [National Statement by Prime Minister Shri Narendra Modi at COP26 Summit in Glasgow](#) and [India's Updated First Nationally Determined Contribution Under Paris Agreement \(2021–2030\)](#). New Delhi.

² Government of India, 2022. [Economic Survey 2021–22](#). New Delhi.

³ In early November 2022, Delhi's 24-hour average air quality index reached 424. An air quality index of more than 400 is considered severe and could affect healthy people and seriously impact those living with diseases.

5. The Ministry of New and Renewable Energy estimates surplus biomass availability in India at about 230 million metric tons (t) per annum, with agricultural residues corresponding to a potential of 28 GW of biomass power generation.⁴ However, it has not been developed as rapidly as solar and wind power. On 30 September 2022, India had an installed biomass power generation capacity of 10.7 GW.⁵ The ministry has been promoting bioenergy. Some states, such as Haryana, Punjab, and Rajasthan, have established state policies to promote biomass energy.

6. The sub-projects are in the state of Rajasthan, where more than 50% of the reported land is used for agriculture.⁶ During FY2017–FY2020, the state had an average annual biomass surplus of 3,546,890 t, of which 1,787,835 t was mustard stalks and husk, one of the feedstocks for the sub-projects. The state’s Policy for Promoting Generation of Electricity from Biomass, 2010 establishes measures such as reserved areas for biomass power plants to avoid excessive competition among such projects for feedstock supply.⁷ In addition, biomass power projects with installed capacity of less than 15 MW have “must-run” status not subject to merit order dispatch.

7. **Project design.** (Confidential information redacted)⁸.

8. (Confidential information redacted).

9. (Confidential information redacted).

10. **Gender context.** Women’s representation in India’s energy sector remains low because of safety and security concerns at project sites, misperceptions of women’s capabilities, insufficient human resource policies, and societal norms and workplace practices.⁹ (Confidential information redacted)¹⁰ SAEL Industries has taken measures to strengthen gender equality in the workplace including implementing a policy on preventing sexual harassment, a flexible work policy, and segregated facilities for men and women. Its labor policy, which extends to contractors, includes training on the prevention of sexual harassment at workplace within the company and in local communities. Gender gaps persist in India’s agriculture sector. As a result of increasing migration of men from rural to urban areas, women are playing an increasing role as cultivators, entrepreneurs, and laborers.¹¹ However, women’s increased participation in agriculture is not leading to their increased socioeconomic empowerment. To address this, women farmers require inclusive opportunities to access information, markets, and other productive resources to increase their agricultural productivity and household incomes.¹² The project’s gender action plan (GAP) seeks to help close some of these identified gender gaps.

⁴ Government of India, Ministry of New and Renewable Energy. 2021. [Bioenergy Overview: Current Status](#) (accessed 5 December 2022).

⁵ [National Power Portal](#).

⁶ Punjab Renewable Energy Systems Private Limited. 2021. *Biomass Assessment Study for Power Generation in the State of Rajasthan 2021*. Mumbai.

⁷ Government of Rajasthan Energy Department. 2010. *Policy for Promoting Generation of Electricity from Biomass, 2010*. Jaipur.

⁸ (Confidential information redacted).

⁹ International Energy Agency and Council on Energy, Environment and Water. 2019. [Women Working in the Rooftop Solar Sector](#). Paris.

¹⁰ (Confidential information redacted).

¹¹ Government of India. Press Information Bureau. 2018. [Growing Migration of Men is Causing Feminization of Agriculture Sector, says Economic Survey](#). Delhi. 2018 (accessed 9 April 2021).

¹² I. Pattnaik, K. Lahiri-Dutt, S. Lockie, and B. Pritchard. 2017. [The feminization of agriculture or the feminization of agrarian distress? Tracking the trajectory of women in agriculture in India](#). *Journal of the Asia Pacific Economy*. 23 (1). pp. 138–155.

11. **Borrower and sponsor.** (Confidential information redacted)¹³

12. (Confidential information redacted).

13. ADB conducted integrity due diligence¹⁴ on the borrowers, their board and management, shareholders, and significant contracting entities. They do not appear to constitute a significant or potentially significant integrity risk. ADB has obtained reasonable assurance that the borrowers were not established and are not being used for money laundering or terrorism financing in the project jurisdiction. No tax integrity due diligence was required.

B. Development Impacts, Outcome, and Outputs

14. **Impacts.** The project is aligned with the following impacts: at least 500 GW of nonfossil energy capacity reached and 50% of cumulative electric power installed capacity are met from renewable energy sources, and carbon emissions intensity reduced by 45% by 2030 (footnote 1).

15. **Outcome.** The project will have the following outcome: renewable energy generation from agricultural waste increased in India.¹⁵ It will generate an average of about 544 gigawatt-hours of energy per annum and help avoid the emission of about 487,200 t of carbon dioxide on average annually from FY2026. The project will reduce particulate emissions caused by open burning of biomass waste, resulting in improved health outcomes.

16. **Outputs.** The outputs will be (i) five climate-resilient biomass energy plants commissioned, (ii) local gender-inclusive employment generated, and (iii) growth of local economy supported with gender inclusion enhanced.

C. Alignment with ADB Strategy and Operations

17. **Consistency with ADB strategy and country strategy.** The project is consistent with the following operational priorities (OPs) of ADB's Strategy 2030: (i) accelerating progress in gender equality (OP 2); (ii) tackling climate change, building climate and disaster resilience, and enhancing environmental sustainability (OP 3); and rural development and food security (OP 5).¹⁶ The loans contribute to ADB's ambition to provide cumulative climate finance of \$100 billion during 2019–2030. The project is also aligned with pillars 2 (inclusive provision of infrastructure networks and services) and 3 (addressing climate change and increasing climate resilience) of ADB's country partnership strategy for India, 2018–2022.¹⁷ The country partnership strategy also refers the government's priority of doubling farmers' incomes, which the project will support through feedstock procurement from the farmers. The project has been assessed as being aligned with the Paris Agreement in accordance with the Guidance Note on Implementing Operations' Alignment with the Paris Agreement at ADB and is fully aligned with ADB's Energy Policy, prioritizing support for renewable energy development.¹⁸

¹³ (Confidential information redacted).

¹⁴ ADB. 2003. [Enhancing the Asian Development Bank's Role in Combating Money Laundering and the Financing of Terrorism](#). Manila.

¹⁵ The design and monitoring framework is in Appendix 1.

¹⁶ ADB. 2018. [Strategy 2030: Achieving a Prosperous, Inclusive, Resilient, and Sustainable Asia and the Pacific](#). Manila.

¹⁷ ADB. 2017. [Country Partnership Strategy: India, 2018–2022—Accelerating Inclusive Economic Transformation](#). Manila.

¹⁸ ADB. 2021. [Energy Policy](#). Manila.; ADB. 2022. [Guidance Note on Implementing Operations' Alignment with the Paris Agreement at ADB](#). Manila.

D. Project Cost and Financing Plan

18. (Confidential information redacted).

19. (Confidential information redacted).

E. Implementation Arrangements

20. (Confidential information redacted).¹⁹

F. Projected Financial and Economic Performance

21. (Confidential information redacted).²⁰²¹²²

III. THE PROPOSED ADB ASSISTANCE**A. The Assistance**

22. ADB will provide loans of up to ₹7,540.4 million to the SPVs—up to ₹1,464,000,000 to Chattargarh Renewable Energy Private Limited, ₹1,519,800,000 to KTA Power Private Limited, ₹1,517,000,000 to Sardarshahar Agri Energy Private Limited, ₹1,519,800,000 to TNA Renewable Energy Private Limited, and ₹1,519,800,000 to VCA Power Private Limited. The loans will have a tenor of 12 years from the signing date, with floating interest rates. The SPVs will be bound by commercial terms and financial and operational covenants stipulated in the financing agreements.

B. Value Added by ADB Assistance

23. ADB's assistance will help reduce the risk perception associated with biomass power projects in India, which depend on financing from public sector banks, and create awareness of the benefits of biomass power that can be applied to other rural communities and developing member countries. ADB will provide long-term commercial financing, which continues to be challenging for biomass power projects as domestic financial institutions have largely reached their exposure limits for the energy sector and the number of public sector banks has fallen from 27 in 2017 to 12 in July 2022 after mega mergers.²³ Also, domestic financial institutions have much smaller funding limits for biomass than for the other forms of renewable energy, further limiting the availability of public sector financing for biomass power projects. ADB's engagement will ensure that the projects implement ADB's Safeguard Policy Statement (2009) and thereby adopt internationally recognized environmental and social (E&S) standards. ADB is also working with SAEL Industries to implement a GAP that promotes gender equality through greater inclusion of women in skilled jobs and communication with the farmer communities on gender equality.

C. Risks

24. (Confidential information redacted).

25. (Confidential information redacted).²⁴

¹⁹ (Confidential information redacted).

²⁰ (Confidential information redacted).

²¹ (Confidential information redacted).

²² (Confidential information redacted).

²³ Mint. 2021. [12 Government Owned Banks in India 2021](#). India.

²⁴ (Confidential information redacted).

26. (Confidential information redacted)²⁵
27. (Confidential information redacted).²⁶
28. (Confidential information redacted).

IV. POLICY COMPLIANCE

A. Safeguards and Social Dimensions

29. ADB has categorized the investment in compliance with ADB's Safeguard Policy Statement (2009) as follows: environment (category B), involuntary resettlement (category B), and indigenous peoples (category C).²⁷

30. ADB has undertaken due diligence and reviewed the project's potential E&S impacts and the measures to avoid, minimize, mitigate, and compensate for the adverse impacts in the safeguard reports and plans. External consultants conducted social compliance audits (SCAs) and initial environmental and social examinations (IESEs), and developed environmental and social management plans (ESMPs) and draft livelihood restoration plans for each plant.

31. The IESEs found that E&S impacts from the construction of the biomass energy facilities are site-specific and temporary, and can be mitigated through good construction site management and implementation of the ESMPs. Social impacts related to land acquisition will be offset through appropriate compensation which will allow stakeholders to purchase new land or offset any livelihoods impacts with support via the Livelihood Restoration Plans. Potential environmental impacts from operation include impacts of flue gas emissions on ambient air quality, collision and electrocution risks for bird species, noise, generation of solid waste (e.g., ash), groundwater abstraction, increased traffic and road accidents because of increased movement of vehicles delivering the feedstock, and occupational and community health and safety risks.

32. The borrowers and the E&S consultants confirmed that the plants are designed and will be operated to comply with India's emission standards for thermal power plants, and the WBG's EHS Guidelines for Thermal Power Plants. The plants are within airsheds that may be considered as degraded for particulate matter (PM10 and PM2.5) based on the WBG's EHS Guidelines for air emissions and ambient air quality. Analysis of expected flue gas emissions, and results of air dispersion modelling confirmed that modelled contribution to ambient air quality are within the limits set by the WBG's EHS Guidelines for projects within non-degraded airshed and for airsheds that may be considered as degraded for particulate matter (PM10 and PM2.5). Based on interviews and rapid field survey, there are no significant observations of species of conservation importance within the vicinity of the project sites. The project sites are not within conservation areas for the great Indian bustard. The ESMPs included mitigation measures for minimizing impacts on bird species such as installation of bird diverters or diffractors and perch rejecters. Ash management options include providing ash to farmers as a soil amendment and to cement processing plants as raw material. ADB will require evidence of ash disposal arrangements and/or approved ash management plan from the State Pollution Control Board from the borrowers prior to operation.

²⁵ (Confidential information redacted).

²⁶ (Confidential information redacted).

²⁷ ADB. [Safeguard Policy Statement](#).

33. A climate risk assessment identified an increase in temperature and decreased water availability as climate change hazards that may cause a moderate impact on the project during its lifetime. The project includes \$9.2 million in resilient measures, and ADB and SAEL Industries will discuss additional adaptation options presented in the climate risk assessment that may be adopted by sub-projects.

34. The SCAs included a review of the project's land acquisition processes for the five main plant sites and determined that land had been acquired in accordance with legal requirements and that acquisitions had been undertaken on a willing buyer, willing seller basis with no outstanding issues or complaints identified. Land is also required to develop the transmission lines for each plant (about 5 km long on average) and water pipelines at two of the project sites. Transmission line development will require long-term land access for tower footings, creating some economic displacement. The right-of-way and 27-meter easement will involve some temporary damages to crops because of stringing during construction. Easement rights for the project will create some impacts on landowners because of use restrictions dictated by law. Current planning suggests there are 11 structures identified within the transmission line easement across all five projects: five of them residential, five agricultural or abandoned, and one unknown or abandoned. Wastewater pipelines for Chirawa (about 16.00 km) and Dhod, Sikar (about 18.38 km) connect the two plants to the nearest sewage treatment plant. The pipeline route will be finalized and surveyed before the construction phase. Laying down the pipeline will require permanent land take and temporary land use restriction for about 6 months, affecting about 1–2 cropping seasons. Developers of transmission lines have recourse to law to access land and, as such, land acquisition and access triggers ADB Safeguard Policy Statement (2009) Safeguard Requirement 2. The sub-projects have committed to avoiding physical displacement for the development of the transmission lines. However, economic displacement impacts associated with loss and damage to crops will be managed through livelihood restoration plans. Land for the wastewater pipeline will be acquired on a negotiated basis. Informal land users and other unidentified households affected by land acquisition will be assessed for inclusion in the resettlement and livelihood restoration plans' impact management programs.

35. The SCAs found that a grievance redress mechanism (GRM) had yet to be rolled out at the project sites. The IESEs reported the lack of stakeholder awareness about the project. The project needs to implement an effective GRM and stakeholder engagement plan to support land acquisition, environment, health, and safety discussions. The updated IESEs and ESMPs need to include the results of meaningful consultation. As the project develops and workers access the sites, the project will also be required to implement a worker GRM as part of the overall labor management plan.

36. ADB will require the borrowers to develop and implement ESMPs to ensure compliance with ADB's Safeguard Policy Statement (2009), international good practices, and applicable national and local laws and regulations. The ESMPs will include procedures for screening and assessing the potential E&S impacts from project components with design, location, and alignment that were not yet final at the time of the IESE. The borrowers will be required to prepare and implement commensurate mitigation measures during the construction and operation of these components. ADB will require each borrower to report on ESMP implementation, implementation of each of the resettlement and livelihood restoration plans, and compliance status with the Safeguard Policy Statement (2009) and applicable national laws, regulations, and good international practices.

37. **Effective gender mainstreaming.** Following ADB's Policy on Gender and Development (1998),²⁸ SAEL Industries has incorporated measures to promote gender equality and/or women's empowerment in its business activities. Key features of the GAP are (i) a target for women holding technical or management roles; (ii) the development and implementation of a gender policy to support the hiring, retention, and advancement of female staff; (iii) piloting of procurement of agricultural waste or other goods or services from women-owned microbusinesses or women's self-help groups; (iv) dissemination of communication material with gender equality messaging targeted at farmers; and (v) inclusion of a gender module in the farmer training delivered by SAEL Industries. SAEL Industries will submit periodic reports on the implementation of gender measures to ADB.

38. The borrowers will comply with national labor laws and, pursuant to ADB's Social Protection Strategy (2001), will take measures to comply with the internationally recognized core labor standards.²⁹ The borrowers will report regularly to ADB on their and their contractors' compliance with such laws and the measures taken. Information disclosure and consultation with affected people will follow ADB requirements.³⁰

B. Anticorruption Policy

39. The borrowers were advised of ADB's policy of implementing best international practice relating to combating corruption, money laundering, and the financing of terrorism. ADB will ensure that the investment documentation includes appropriate provisions prohibiting corruption, money laundering, and the financing of terrorism; and remedies for ADB in the event of noncompliance.

C. Investment Limitations

40. (Confidential information redacted).

41. (Confidential information redacted).

D. Assurances

42. Consistent with the Agreement Establishing the Asian Development Bank (the Charter),³¹ ADB will proceed with the proposed assistance upon establishing that the Government of India has no objection to the proposed assistance to the borrowers. ADB will enter into suitable finance documentation, in form and substance satisfactory to ADB, following approval of the proposed assistance by the ADB Board of Directors.

V. RECOMMENDATION

43. I am satisfied that the proposed loans would comply with the Articles of Agreement of the Asian Development Bank (ADB) and recommend that the Board approve:

- (i) the loans of up to ₹7,540,400,000 from ADB's ordinary capital resources, in aggregate based on agreed allocation, to each of five special purpose vehicles incorporated as subsidiaries of SAEL Industries Limited for the SAEL Biomass

²⁸ ADB. 1998. [ADB's Policy on Gender and Development](#). Manila.

²⁹ ADB. 2003. [Social Protection](#). Manila (adopted in 2001).

³⁰ Summary Poverty Reduction and Social Strategy; and Safeguards and Social Dimensions (accessible from the list of linked documents in Appendix 2).

³¹ ADB. 1966. *Agreement Establishing the Asian Development Bank*. Manila.

Energy Project in India, with such terms and conditions as are substantially in accordance with those set forth in this report, and as may be reported to the Board; and

- (ii) the waiver of the single obligor limit for the ₹7,540,400,000 loans, in aggregate for each of five special purpose vehicles, as set forth in para. 40 of this report.

Masatsugu Asakawa
President

9 February 2023

DESIGN AND MONITORING FRAMEWORK

Impacts the Project is Aligned with			
At least 500 GW of nonfossil energy capacity reached and 50% of cumulative electric power installed capacity are met from renewable energy sources, and carbon emissions intensity reduced by 45% by 2030 ^{a,b}			
Results Chain	Performance Indicators	Data Sources and Reporting Mechanisms	Risks and Critical Assumptions
Outcome Renewable energy generation from agricultural waste increased in India	By FY2026: a. At least 544 gigawatt-hours of energy produced annually by the new biomass energy plants (FY2022 baseline: 0) b. At least 650,000 metric tons of agricultural wastes treated annually by the new biomass energy plants (FY2022 baseline: 0) c. At least 487,200 metric tons of carbon dioxide emissions avoided annually (FY2022 baseline: 0) (OP 3.1) d. Number of farmers supplying the new biomass power plants with agricultural wastes increased to 20,000 (FY2022 baseline: 0) (OP 5.2)	a.–d. Company's annual development effectiveness monitoring report	R: Production and/or operation are lower because of lower-than-expected agricultural waste availability or conversion efficiency of the biomass energy plants.
Outputs 1. Five climate-resilient biomass energy plants commissioned 2. Local gender-inclusive employment generated	By FY2026 1a. Five climate-resilient biomass energy plants with a total capacity of 74.5 megawatts commissioned in Rajasthan (FY2022 baseline: 0) (OP 3.1.4 and 3.3.1) ^c 2a. Number of jobs created in construction of the new biomass energy plants increased to 2,750 (FY2022 baseline: 0) 2b. Number of jobs created in operation of the new biomass energy plants increased to 1,250 (FY2022 baseline: 0)	1a.–3d. Company's annual development effectiveness monitoring report	R: Activities are delayed or canceled because of a pandemic outbreak or other force majeure. A: Loan financing is disbursed as scheduled.

Results Chain	Performance Indicators	Data Sources and Reporting Mechanisms	Risks and Critical Assumptions
<p>3. Growth of local economy supported with gender inclusion enhanced</p>	<p>2c. Proportion of women in technical or management roles at the headquarters of SAEL Industries Group^d increased to at least 20% (FY2022 baseline: 11%, 14 women of 132 total technical or management roles at the headquarters (OP 2.1.1)</p> <p>2d. One gender equality policy developed and implemented by SAEL Industries Limited and the five project SPVs^e (FY2022 baseline: Not applicable (NA)) (OP2.3.2)</p> <p>3a. Procurement of agricultural waste or other goods or services from at least 100 women-owned microbusinesses or 10 women's self-help groups piloted (FY2022 baseline: Not applicable (NA))</p> <p>3b. At least five pieces of communication material targeted at farmers with gender equality messaging that seeks to empower women or otherwise promote greater gender equality disseminated^f (FY2022 baseline: Not applicable (NA)) (OP2.3.2)</p> <p>3c. At least one gender module included in the farmer training delivered by SAEL Industries Limited^g (FY2022 baseline: Not applicable (NA)) (OP2.3.2)</p> <p>3d. Annual domestic purchases during operation increased to at least \$19.4 million (FY2022 baseline: 0)</p>		
<p>Key Activities with Milestones</p> <p>1. Five climate-resilient biomass energy plants commissioned.</p> <p>1.1 Company carries out development and preconstruction works for the biomass energy facilities by Q2 FY2023.</p> <p>1.2 Contractor starts the construction of the biomass plants by Q4 FY2023.</p> <p>1.3 The Asian Development Bank executes loan agreements with five project SPVs by Q1 FY2024.</p> <p>2. Local gender-inclusive employment generated.</p>			

<p>2.1 SAEL Industries Group recruits and promotes staff in technical and management roles at headquarters in a gender-inclusive manner by Q4 FY2026.</p> <p>2.2 SAEL Industries Limited and the five project SPVs implement a gender equality policy by Q4 FY2026.</p> <p>3. Growth of local economy supported with gender inclusion enhanced.</p> <p>3.1 Women-owned microbusinesses or women's self-help groups for procurement of agricultural waste identified by Q1 FY2026.</p> <p>3.2 Communication materials with gender equality messaging developed by Q1 FY2026.</p> <p>3.3 Gender module designed for incorporation in the farmer training delivered by SAEL Industries Limited by Q1 FY2026.</p>				
<p>Inputs</p> <table> <tr> <td>Asian Development Bank (loans):</td> <td>\$91.1 million</td> </tr> <tr> <td>SAEL Industries (equity):</td> <td>\$30.4 million</td> </tr> </table>	Asian Development Bank (loans):	\$91.1 million	SAEL Industries (equity):	\$30.4 million
Asian Development Bank (loans):	\$91.1 million			
SAEL Industries (equity):	\$30.4 million			

A = assumption, FY = fiscal year, GW = gigawatt, OP = operational priority, SPV = special purpose vehicle, Q = quarter, R = risk.

^a Government of India. Ministry of External Affairs. 2021. [National Statement by Prime Minister Shri Narendra Modi at COP26 Summit in Glasgow](#). New Delhi.

^b Government of India. 2022. [India's Updated First Nationally Determined Contribution Under Paris Agreement \(2021–2030\)](#). New Delhi.

^c Each biomass power plant will install air-cooled condensers and automatic drain pumps as a part of climate adaptation measures.

^d SAEL Industries Group includes SAEL Industries Limited and its subsidiaries.

^e The gender policy will include guidance on how to support hiring, retention, and advancement of female staff.

^f Communication material will include posters, brochures, radio, or social media. Gender-inclusive messaging may include photos, slogans, quotes, videos, or stories.

^g The gender module will cover context-specific gender issues such as joint household planning and budgeting, gender-based violence, child marriage, and/or girl's education.

Contribution to Strategy 2030 Operational Priorities

Expected values and methodological details for all OP indicators to which this project will contribute results are detailed in Contribution to Strategy 2030 Operational Priorities (accessible from the list of linked documents in Appendix 2).

Source: Asian Development Bank.

LIST OF LINKED DOCUMENTS

<http://www.adb.org/Documents/RRPs/?id=56276-001-4>

1. Sector Overview
2. (Confidential information redacted)
3. (Confidential information redacted)
4. Contribution to Strategy 2030 Operational Priorities
5. (Confidential information redacted)
6. (Confidential information redacted)
7. Country Economic Indicators
8. (Confidential information redacted)
9. (Confidential information redacted)
10. (Confidential information redacted)

Supplementary Documents

11. (Confidential information redacted)
12. (Confidential information redacted)