

Environmental Examination Report

( 1 ) Project Name

Waste to Energy project

( 2 ) Project Site

India Karnataka

( 3 ) Project Outline

Construction and operation of the waste to energy project

( 4 ) Category Classification

Category B

( 5 ) Reason for Classification

The project belongs to no large-scale projects in the sensitive sector under the Guidelines, and it does not include sensitive characteristics and is not located in or around sensitive areas under the Guidelines; therefore it is likely to have no significant adverse impact on the environment.

( 6 ) Environmental Permits and Approvals

Pursuant to the laws and regulations of India, an approval process of the ESIA report by the authorities is not required in this project.

( 7 ) Pollution Mitigation Measures

It is confirmed that air quality, water quality, waste, soil contamination, noise and vibration, land subsidence and odor are properly managed.

( 8 ) Natural Environment

There are no designated sanctuaries inside or near the project site. In addition, there are no ecologically important forests, nor habitats of valuable species that are required to be protected by the laws of India and international treaties.

( 9 ) Social Environment

It is confirmed that the effects on local people are immaterial and that there will be no involuntary resettlement of residents in relation to the project.

( 1 0 ) International Standard  
IFC Performance Standards

( 1 1 ) Others, Monitoring  
JBIC will monitor the status of obtaining the power plant operating permit.

**Q1.** Please provide the address of the project site.

Address of the project site : KPCL Bidadi Site, Bidadi, Ramanagara, Karnataka

**Q2.** Please provide a brief explanation of the project.

11.5 MW Waste to Energy project at Bidadi by using 600TPD of segregated municipal solid waste

**Q3.** Is it a new project to be implemented or a project that has been implemented? If it has been implemented, has it received a serious complaint from local residents or a directive for improvement, a stop-work order, a project suspension order, etc., from a local environmental authority?

- New project to be implemented
- Project that has been implemented (with a complaint)
- Project that has been implemented (without a complaint)
- Other ( )

**Q4.** Do the laws or regulations of the country where the project will be implemented require the project to conduct environmental and/or social impact assessments (such as an Environmental and Social Impact Assessment (ESIA) and Environmental Impact Assessment (EIA))? If so, have they been conducted or planned?

- Required (Assessments done)
- Required (Assessments in progress or being planned)
- Not Required
- Other ( )

**Q5.** If environmental and/or social impact assessments have been conducted, have they been approved in accordance with the environmental and social impact assessment system of the country where the project will be implemented? If so, please also specify the date of the approvals and the name of the authorities.

- Approved (without condition(s))
- Approved (with condition(s))
- Under approval process
- Other ( )

Date of Approvals : \_\_\_\_\_

Name of Authorities : \_\_\_\_\_

**Q6.** Are there any environmental permits required other than environmental and/or social impact assessments? If so, have they been obtained? Also, if required, please specify the name of the permits.

- Obtained
- Not required
- Required, but not obtained yet
- Other ( )

Name(s) of required permit(s) :

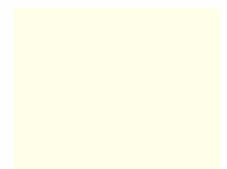
1. Consent for Establishment: obtained from KSPCB vide order No. CTE-321742 dated 20.11.2020
2. NOC for height clearance from AAI: Applied and NOC awaited.

**Q7.** Will the project be specified after JBIC made a funding commitment (as in the case of a two-step loan, where sub-projects cannot be specified at the time of a funding commitment)?

(Yes / No  )

If "Yes", please disregard the following questions.

If "No", please go to Q8.



**Q8.** Will JBIC's funding be used to serve as support for international balance of payments or to be used for the provision of goods or services that does not involve installation or implementation in particular sites or regions, as in the case of export/import or lease of machinery or equipment that is not connected with a particular project?

(Yes / No )

If "Yes", please disregard the following questions.

If "No", please go to Q9.

**Q9.** Are there any environmentally sensitive area(s) shown below in or near the project site(s)?

(Yes / No  )

If "Yes", please mark the applicable items and go to Q10.

If "No", please go to Q10.

- (1) National parks, nationally-designated protected areas (coastal areas, wetlands, areas for ethnic minorities or indigenous peoples, and cultural heritage, etc., designated by national governments)
- (2) Forests with important ecological value (including primary forests and natural forests in tropical areas)
- (3) Habitats with important ecological value (including coral reefs, mangrove wetlands, and tidal flats)
- (4) Habitats of rare species requiring protection under domestic legislation, international treaties, etc.
- (5) Areas in danger of large-scale salt accumulation or soil erosion
- (6) Areas with a remarkable tendency towards desertification
- (7) Areas with unique archaeological, historical or cultural value
- (8) Areas inhabited by ethnic minorities, indigenous peoples, or nomadic peoples with traditional ways of life (including areas which are used for cultural and spiritual purposes) and other areas with special social value

**Q10.** Does the project involve the following characteristics?

(Yes / No )

If "Yes", please specify their scale and go to Q11.

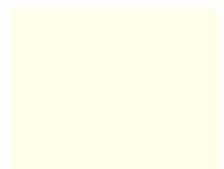
If "No", please go to Q12.

- (1) Involuntary resettlement or loss of means of livelihood (Number of affected people: \_\_\_\_\_)
- (2) Groundwater pumping (Scale: \_\_\_\_\_ m<sup>3</sup>/year)
- (3) Land reclamation, land development, and land clearing (Scale: \_\_\_\_\_ ha)
- (4) Logging (Scale: \_\_\_\_\_ ha)

**Q11.** Under the environmental and social impact assessment system of the country where the project will be implemented, do the applicable characteristics (1) – (4) of Q10 above and their scale serve as the basis for executing an ESIA for the project?

- Yes, they do
- No, they do not
- Other ( \_\_\_\_\_ )

**Q12.** Is the project likely to have a significant social impact, including human rights?



(Yes / No )

If "Yes", please describe the impacts and go to Q13.

If "No", please go to Q13.

- Likelihood of a significant impact on human rights ( )
- Other ( )

**Q13.** Will JBIC's funding or NEXI's insurable value be equal to or less than 5% of the total project cost, or will JBIC's funding or NEXI's insurable value be equal to or less than SDR 10 million? (If the funding or insurable value is additional to a project that has been supported by JBIC or NEXI, please add up the previous funding or insurable value and the funding or insurable value being considered to apply for this time.)

(Yes / No )

If "Yes", please disregard the following questions.

If "No", please go to Q14.

**Q14.** Is the project for capital investment or working capital in a project that has been implemented and does it involve no material change in output or function (as in the case of maintenance of the existing facilities, non-expansory renovation project, and acquisition of rights and interests without additional capital investment)?

(Yes / No )

If "Yes", please disregard the following questions.

If "No", please go to Q15.

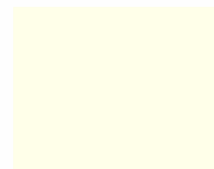
**Q15.** Is the project in any of the following sectors?

( Yes / No)

If "Yes", mark the applicable sectors and go to Q16.

If "No", please disregard the following question.

- (1) Mining
- (2) Oil and natural gas development
- (3) Pipelines
- (4) Iron and steel (projects that include large furnaces)
- (5) Non-ferrous metals smelting and refining
- (6) Petrochemicals (manufacture of raw materials; including complexes)
- (7) Petroleum refining
- (8) Oil, gas, and chemical terminals
- (9) Paper and pulp
- (10) Cement plants (including a greenfield quarry)
- (11) Manufacture and transport of toxic or poisonous substances regulated by international treaties, etc.
- (12) Thermal power
- (13) Nuclear power
- (14) Hydropower, dams, and reservoirs
- (15) Power transmission and distribution lines involving large-scale involuntary resettlement, large-scale logging, or submarine electrical cables
- (16) Roads, railways, and bridges
- (17) Airports
- (18) Ports and harbors
- (19) Sewage and wastewater treatment having sensitive characteristics or located in sensitive areas or their vicinity



- (20) Waste management and disposal
- (21) Agriculture involving large-scale land-clearing or irrigation
- (22) Forestry
- (23) Tourism (construction of hotels, etc.)

**Q16.** Please provide information on the scale of the project (project area, area of plants and buildings, production capacity, amounts of power generation, etc.). In addition, please explain whether an environmental and/or social impact assessment is required on account of the large scale of the project in the country where the project will be implemented.

- The project is under implementation in an industrial area at Bilekempanahalli Village, Bidadi, spread over ~10 acres.
- Project capacity: 11.5 MW
- Technology: Incineration Technology (using Moving Grate)
- Fuel: 600TPD of Segregated MSW / RDF
- Estimated Annual generation: 75.55 MUs, @75% PLF  
(PLF of 50% in year 1 and rising in increments of 5% every year till it reaches 75%)
- Environmental Norms: As per MSW Rules, 2016  
ESIA not required as capacity is below 15 MW  
CFE obtained from KSPCB on 20/Nov/2020
- Water: 300 kLD
- Water source: From Kaveri river through KIADB  
or STP water from BWSSB Doddabele STP