

**The World Bank GEF Project - Environmentally Sustainable Development of the Iron and Steel Industry in China**

**Enterprise Demonstration (2nd Round) and Replication Activity**

**Guide for Application**

**Foreign Environmental Cooperation Center**

**Ministry of Ecology and Environment**

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# Introduction to activities

On May 23, 2001, China signed the Stockholm Convention on Persistent Organic Pollutants (POPs) (hereinafter referred to as the Convention), which entered into force for China on Nov. 11, 2004. The Parties to the Convention are obliged, under the requirements of Article 5, to take actions to reduce or eliminate the release of unintentionally produced POPs (UPOPs) listed in Annex C and to promote the application of the best available techniques (BAT) and the best environmental practices (BEP). UPOPs include a particular group of substances such as polychlorinated dibenzo-*p*-dioxins (PCDDs) and polychlorinated dibenzofurans (PCDFs) (together referred to as dioxins, the most representative UPOPs), polychlorinated biphenyls (PCBs), hexachlorobenzene (HCB), pentachlorobenzene (PeCB), hexachlorobutadiene (HCBD) and polychlorinated naphthalenes (PCNs). The *National Implementation Plan for the Stockholm Convention on Persistent Organic Pollutants in China* (NIP, 2007) requires taking emission reduction actions for UPOPs such as dioxins. Iron ore sintering and electric arc furnace steelmaking are the priority sectors where actions are needed.

To help China fulfill its obligations under the Convention, the Ministry of Ecology and Environment of China (represented by FECO, the Foreign Environmental Cooperation Center), developed the GEF supported project “*Environmentally Sustainable Development of the Iron and Steel Industry in China*” with the support of the World Bank. The project aims to reduce UPOPs produced and released from the steel and iron industry in China, through the introduction, demonstration and replication of BAT/BEP, to strengthen the application of new technologies and regulatory capacity in the industry, and to promote environmentally sustainable development of the industry. Meanwhile, the project will also advance the realization of ultra-low emissions in the steel and iron industry, synergistically reduce the release of other environmental pollutants, facilitate the battle against pollution and help reduce pollution and carbon emissions, and make contributions to protecting global human health and ecologic environment. In June 2020, the project was reviewed and approved by the 58th GEF Council, for inclusion into the GEF-7 project work plan. Currently, the GEF has approved the project preparation grant (PPG) for the project.

In accordance with project activity design of the World Bank GEF Project - Environmentally Sustainable Development of the Iron and Steel Industry in China (hereinafter referred to as the Project), the Project will conduct BAT/BEP demonstration targeting 2 iron ore sintering production lines and 1 electric arc furnace steelmaking production line and conduct BAT/BEP replication of achievements and experience targeting 20 production lines during the implementation stage (of the full-sized project). On April 7, 2021, FECO issued the “Call for Expression of Interest for Enterprise Demonstration Activity for The World Bank GEF Project - Environmentally Sustainable Development of the Iron and Steel Industry in China”. At present, one iron ore sintering production line has been preliminarily selected as a candidate demonstration production line.. According to the project plan and design, it is planned to select 2 more demonstration production lines (1 iron ore sintering production line and 1 electric arc furnace steelmaking production line) and 20 replication production lines. Therefore, the open call of enterprises for the project has hereby been initiated. FECO will conduct review and evaluation on the qualification of candidate enterprises and select eligible enterprises for World Bank no objection.

# Qualification requirements

Qualification requirements for the demonstration and replication enterprise:

1. Legally registered in China as an independent legal entity.
2. Has iron ore sintering or electric arc furnace steelmaking production line(s).
3. The production line to be applied for demonstration should meet one of the following conditions, while the production line applying for replication activities only are not subject to the following requirements:
4. The production line applying for reconstruction and upgrading has passed completion acceptance and has been in operation for consecutive production for at least two years;
5. The production line applying for reconstruction is newly built (has been put into operation for less than two years) and meets the ultra-low emission standards;
6. The feasibility study and EIA report for production lines planning to build have been approved and it is planned that the construction will start before the end of 2022.
7. The proposed plans for reconstruction and upgrading of the production line to be supported by the project voluntarily include additional technical and management practices in accordance with Stockholm Convention BAT/BEP guidance, building on the existing plan for ultra-low emission reconstruction, and promise to have dioxins emissions meet the expected BAT/BEP standards (see details in Objectives).
8. After implementing the demonstration or replication activities, the applied production line should meet the requirements of applicable national and local industrial technology policies and standards such as ultra-low emission, clean production, BAT, etc.
9. Meets environmental management requirements with complete documents (including legal EIA, EIA approval and acceptance inspection documents, and valid pollutant discharge permit), especially:
   * Owns a legal “Land Certificate”;
   * Away from area of high biodiversity / sensitive habitats / with natural protection value / a cultural heritage, and meets the legal requirements for a buffer zone of surrounding communities;
   * The emission from production lines that have been put into operation should meet the GB standard for emissions, and the production lines that have been put into operation for less than two years should meet the ultra-low emission standards;
   * No major environmental violation in the past 3 years[[1]](#footnote-1);
   * The production line that has been put into operation should pass clean production audit of the sector;
   * Having established a certified environmental management system (e.g., ISO14000 certification).
10. Good labor management practices (including legal safety and occupational assessment documents), as demonstrated by:
    * No major labor violation[[2]](#footnote-2) or occupational health and safety (OHS) incidents in the past 3 years;
    * A recognized certified management system is preferred.
11. Good operation status with sufficient fund to complete the ultra-low emission reconstruction and with commitment to provide co-financing for BAT/BEP upgrading and reconstruction.
12. Commits to continuously operating the facility after the demonstration and/or replication phase and conducting periodical monitoring of dioxins to ensure compliance with BAT/BEP standard.
13. Commits to conforming to the World Bank Environmental and Social Framework for the activities to be supported by the grant.

# Objectives

1. In accordance with project activity design, conduct BAT/BEP upgrade targeting 2 demonstration production lines in this round (1 iron ore sintering production line and 1 electric arc furnace steelmaking production line) and 20 replication production lines in order to reduce UPOPs emissions. Expected dioxins emissions from the demonstrated iron ore sintering and electric arc furnace steelmaking production lines should meet standards of <0.05 - 0.2 ng TEQ/m3 (under normal operating conditions) and <0.1 ng TEQ/m3 (under normal operating conditions) respectively, with emissions of other pollutants reaching the ultra-low emission standards in order to facilitate pollution and carbon reduction synergistically.

# Schedule

The main part of the demonstration and replication project should start from the effective date of the Replication Activity Implementation Agreement until the enterprise has achieved all goals (within 24 months, in principle), during which period the enterprise should complete all project activities and submit a summary report.

# Budget

1. Demonstration activity

No more than US$5 million of grant will be provided to support each demonstration production line, and a total of no more than US$8 million of grant will be provided to support the two demonstration production lines selected in this round. Grant funds can be used to develop and implement the implementation plan, including the provision of technical consulting services, goods and equipment reconstruction projects. The enterprise applying for the demonstration needs to provide co-financing of no less than 7 times of the grant to be applied for (including cash and in-kind provision of personnel, venues and equipment related to the ultra-low emission reconstruction invested after August 2019).

1. Replication activity

It’s planned to provide at least US$4 million of grant for 20 production lines (i.e. at least US$200,000 of grant can be applied for each production line). The grant can be used to carry out technical consulting services such as third-party monitoring, social environmental assessment, related training, and improvement of corporate management and operating systems, and part of the grant can be used to support the improvement and optimization of the replication production lines, such as dioxins emission control measures (BAT/BEP technology), dioxins monitoring facilities, etc., and training related management and operating personnel. The enterprise applying for replication activities needs to provide no less than US$5 million in co-financing (including cash and in-kind provision of personnel, venues and equipment related to the ultra-low emission reconstruction invested after August 2019). The remaining budget for demonstration will be reallocated to support the replication activities after the demonstration activity funds are determined.

# Supervision and management

Any enterprise that is guilty of providing false information or intending to obtain the grant by fraud, FECO will, depending on the circumstances, circulate a notice of criticism or reduce or withdraw the grant. For serious circumstances, FECO will cancel the demonstration/replication qualification of the enterprise. Any relevant enterprises and institutions that have issued false reports and certificates will be given a public exposure once the misbehavior has been verified, and corresponding legal investigation will be carried out. For violations of laws or regulations, in accordance with the “Regulations on Penalties for Fiscal Illegal Acts” (State Council Order No. 427) and other applicable provisions, the affair will be submitted to relevant departments and any and all relevant units and personnel will be held accountable in accordance with the law.

# Supplementary provisions

This guide becomes effective as of the date of promulgation.

This guide is to be interpreted by the Foreign Environmental Cooperation Center of the Ministry of Ecology and Environment.

# Appendixes

**Appendix 1: Expression of Interest** [Template]

**Expression of Interest for the Enterprise Demonstration (2nd Round) and Replication Activity of the World Bank GEF Project - Environmentally Sustainable Development of the Iron and Steel Industry in China**

To: the Foreign Environmental Cooperation Center, Ministry of Ecology and Environment

It is hereby acknowledged reception of your **Call for Expression of Interest for the Enterprise Demonstration (2nd Round) and Replication Activity of the World Bank GEF Project - Environmentally Sustainable Development of the Iron and Steel Industry in China** (hereinafter referred to as the Call).

(Enterprise name) is legally registered in the People’s Republic of China with independent legal entity and meets the qualification requirements specified in the Call for the demonstration and/or replication enterprise. The interest is hereby expressed in participating in the project. Our preference will be [prioritized participation in demonstration activities or voluntary participation in replication activities if the project runs out of the demonstration quota][only participation in demonstration activities][only participation in replication activities] (select one out of three options), and the promise is made to work with the World Bank and FECO, take part in project preparation according to project progress, provide information and materials as required, and conduct activities in PPG. It is planned to begin the ultra-low emission reconstruction/construction and at the same time conduct BAT/BEP upgrading and reconstruction with total expected input of co-financing of RMB XXX. We are committed to continuously operating the facility after the demonstration and/or replication phase and conducting periodical monitoring of dioxins to ensure compliance with BAT/BEP standard, and to conforming to the World Bank Environmental and Social Framework for all project activities.

Our enterprise hereby declares and promises that the materials submitted are true and authentic. We have committed no major violations of laws and regulations, and we are not being sanctioned by the World Bank.

Enterprise name: (Seal)

Legal representative signature:

Date:

**Appendix 2: Letter of Commitment for Co-financing** [Template]

**Letter of Commitment for Co-financing**

**To: the Foreign Environmental Cooperation Center, Ministry of Ecology and Environment**

To ensure the successful implementation of the World Bank GEF Project - Environmentally Sustainable Development of the Iron and Steel Industry in China, if our enterprise is selected as a project demonstration/replication enterprise, we promise, within 5 years of the project implementation, in the form of cash investment and in-kind provision such as personnel and venues, to provide no less than US$ X million as co-financing.

Notice is hereby given.

Enterprise name: (seal)

Date:

**Appendix 3: Implementation plan (or concept)**

The enterprise should develop an implementation plan based on its actual condition. The implementation plan should include:

1. Enterprise introduction (A comprehensive summary of enterprise information, no more than 1,000 words).
2. Reconstruction technology scheme (with focus on conducting BAT/BEP upgrading and reconstruction on the basis of ultra-low emission reconstruction (if not completed yet) technology scheme in order to realize the target of dioxins emission reduction; if production line is to be built, then the focus will be on how to modify current construction scheme and the management measures to be carried out after the construction completes, in order to realize the target of dioxins emission reduction) and main technology roadmap.
3. Technology feasibility of dioxins reduction target and analysis of target reachability (with focus on comparison of technology policies related to BAT in the iron and steel sector between China and other countries, and reasonably designing and specifying technology combination).
4. Timeline and budget breakdown (Enterprises applying for demonstration activities should specify the specific amount and proportion of grant funds they intend to apply for, the activities they intend to apply for support, and co-financing (cash and in-kind included )).
5. Relevant supporting documents of the enterprise.

**Appendix 4: Enterprise information**

Enterprise information should at least include:

1. Enterprise name; organization code; location; contact; address (coordinates); industry category and code; enterprise scale; form of ownership; and staff information;
2. Whether the enterprise has obtained relevant certificates (quality management system, environmental management system, occupational health and safety management system, etc.), if yes, please indicate the certificate’s serial number, validity period, relevant standards and other information; and whether the enterprise has passed the clean production audit, if yes, relevant materials should be provided;
3. The existing production capacity and the actual output of the previous year (in principle, the applied production lines and supporting facilities, or the new production lines planning to build if applicable, the same below); main equipment specifications and number of units, raw material pretreatment conditions, main smelting production processes, flue gas terminal treatment facilities, and main technical parameters; installation and operation of automatic monitoring equipment, and networking with the monitoring system of environmental protection authorities; consumption and comprehensive utilization of resources, such as energy consumption, water recycling efficiency, etc.;
4. Pollutant discharge permit (certificate number, issuing authority, issuance date); latest monitoring data of water, air and noise and whether the data meet the standards, and solid waste generation and treatment;
5. Whether there has been major violation of environmental protection laws in the past three years, whether there has been major labor violation or occupational health and safety incidents (for specific requirements, refer to the Guide for Application);
6. Relevant materials should be submitted to indicate the completion and acceptance inspection date of the existing production line to be applied for reconstruction and upgrading, the production situation in the past two years, legal documents on safety and occupational health assessment, and complete set of documents on EIA procedure (EIA approval and acceptance inspection documents);
7. Operating status, taxation and payment of social insurance in the past two years.
8. Statement of no major law-violation.

**Appendix 5: Enterprise qualifications**

List of relevant certificates (1-8: hard copies):

1. Business license of corporate legal person
2. Organization code certificate
3. Tax registration certificate
4. Land certificate
5. EIA approval and acceptance inspection documents
6. Certificates of quality management system, environmental management system, occupational health and safety management system and other certification (if any); clean production audit materials, etc.
7. Pollutant discharge permit
8. Relevant environmental monitoring report (at least one routine pollutant monitoring report and dioxin monitoring report)
9. Reference letter (if applicable. The letter should indicate basic information of the enterprise as well as justification for recommendation. The letter could be issued by such authorities as provincial government department or government of or above prefectural level)

The enterprise is requested to submit the above materials according to the actual situation, the application materials should be sorted in the order mentioned above, and the binding should be standardized. Hard copies should be clear enough to identify the stamping unit and the signatures.

1. Major environmental violation means with criminal penalty or penalty to be fined continuously on a daily basis for environmental pollutions; with penalty to be suspended/stopped or restricted production and not economically and/or technically viable to be resolved within a reasonable timeframe; enterprise’s personnel transferred to public security authorities for environmental violations. [↑](#footnote-ref-1)
2. Major labor violation means with criminal penalty from safety and occupational health authorities for violation of laws; Accidents in which fatality is caused or more than 10 people are seriously injured or more than 10 million yuan of direct economic losses are caused; Major occupational hazard accidents identified per Chinese occupational health regulations. [↑](#footnote-ref-2)