



Introduction of Clean Air Technology Assessment



Background

With increasing concerns around China's air pollution, the industry for clean air technologies and products have boomed. The influx of new solutions now raises questions regarding performance differences between various technologies from users, investors and policy makers. Meanwhile, exiting technology holders are expecting to verify their technologies and products with an objective, publically recognized third-party technology assessment, in order to differentiate themselves competitively and gain a larger market share. To address these growing needs, the Clean Air Alliance of China (CAAC) has developed the clean air technology assessment methodology.

What the assessment do

- Scientifically assess clean air technologies and publicize key performance metrics and technical advantages of each technology;
- Guide potential users to find technologies and products that specifically meet their unique demands;
- Support policy makers to locate the best available technologies for implementating policies;
- Help investors recognize technologies with significant investment potential.

Introduction

The clean air technology assessment methodology, developed by the CAAC, is a tool to assess the performance of clean air technologies. To efficiently identify best fitting clean air solutions, this assessment focuses on practical application results, examines the environmental benefits, economic viability and technological performance of the technologies. Assessment procedures involve a series of steps including document review, expert evaluation, on-site investigation and laboratory testing. To reinforce its reliability, the assessment strives for unified data collection and quality assurance/quality control (QA/QC) procedure.

To assess a wide range of technologies around the world, assessment methodology documents will specify main assessment procedures, as well as the operational and quality requirements in all stages. A different assessment procedure will be developed to address each category's unique technical performances.

When the assessment is complete, technical evaluation reports will be composed and published on CAAC's website.

The Clean Air Technology Assessment Methodology is developed by Innovation Centre for Clean-air Solutions (ICCS), supported by the CAAC's network of technology experts and experts from Tsinghua University, Beihang University, China Research Academy of Environmental Sciences, China Association of Environmental

Key characteristics of the methodology

- The real-life effect/result focused;
- Systematically examines technologies for breakthrough potential in terms of environmental impact, technical performance and economic viability;
- Uses a standardized, unified framework, including procedures and data QA/QC requirement;
- Integrates a various methods including document auditing, expert reviews, on-site examinations and laboratory testing;
- Customized assessment protocols for every technology category to fully analyze their unique technical performances;
- The assessment is participated by leading Chinese and international experts in the field of clean air technology.

Protection Industry, Chinese Society for Environmental Sciences, and US EPA.

Execution of Clean Air Technology

The assessment consists of two parts: A primary assessment and an advanced assessment. An assessment report and statement will be generated after each part has been completed

Technology suppliers are required to submit an application to the assessor and provide relevant technical parameters and document sources of the assessed technology. The information is then used to determine whether the technology meets the requirements necessary in order to be assessed. Applications can choose to stop after the primary assessment or proceed to complete the advanced assessment.

The primary assessment is a quick evaluation based on technology or product performance data as provided by the supplier.

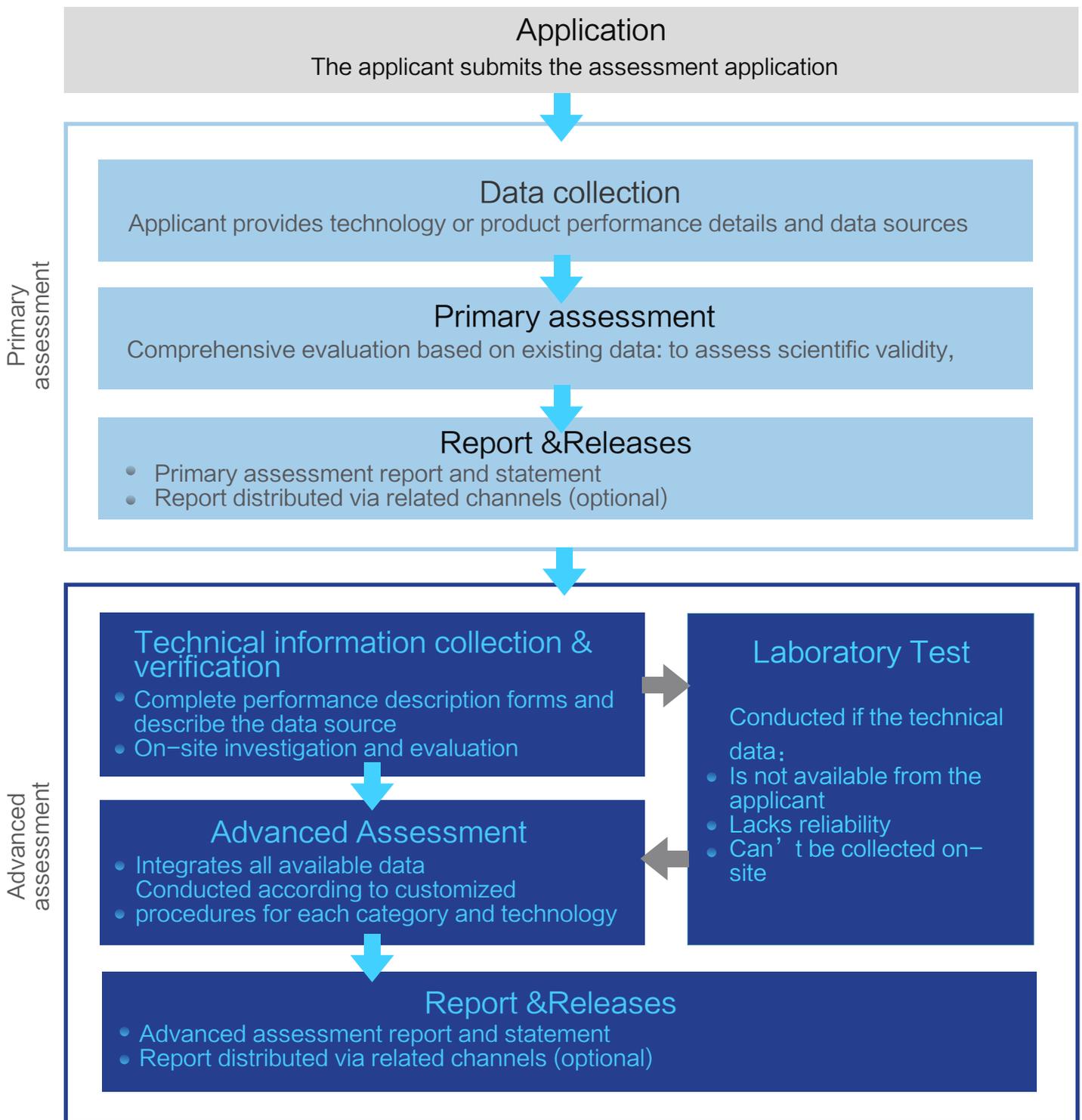
The primary assessment includes:

- Document review: to check existing data according to our technical quality control standards;
- Expert evaluation: to evaluate the scientific validity of existing data, including its principle mechanisms and level of innovation;
- Comprehensive assessment: to examine breakthrough potential in terms of environmental impact, technical performance and financial viability.
- Primary assessment report: to formally record results of the primary assessment. The applicant can decide whether to publicize the information via a simplified assessment statement.

The advanced assessment will use a customized procedure that includes an on-site investigation and laboratory testing to complement and verify the initial evaluation.

The advanced assessment includes:

- Document review: to ensure all technical parameters are traceable, determine the scientific validity and reliability of existing sources;
- On-site investigation: a group of technical and industry experts will be gathered for an on-site to examine performance metrics;
- Laboratory test: to evaluate the necessary performance data, if necessary;
- Comprehensive evaluation: to further integrate and methodically analyze all available information that are provided and gathered from the steps above.
- Advanced assessment report: to formally record the detailed results of the advanced assessment. The applicant can decide whether to publicize the information by a simplified statement of assessment according to the results of the assessment.



Expected Outputs of Technology Assessment

- Assessment Reports: Analysis and summary of technological performances. Please note that these reports are not quality certification documents.
- Information disclosure: All assessed projects will be recorded and the assessment results and reports will be published according to the applicants' preferences.
- Outstanding assessment cases will be recorded in the online CAAC Clean Air Technologies Database.