BAO LOC TECHNOLOGY JOINT STOCK COMPANY

FINAL NARRATIVE REPORT

PROJECT TITLE: “ENERGY EFFICIENCY INNOVATION WINDOW - VIETNAM ROUND

DEVELOPMENT OF 8 KEY NATIONAL STANDARDS FOR E-VEHICLE CHARGING INFRASTRUCTURE”.

GRANT NUMBER: ETP/VIE/EEIW-6/2023

PROJECT INFORMATION AND RESOURCES

Project title:	**ENERGY EFFICIENCY INNOVATION WINDOW - VIETNAM ROUND** **Development of 8 key national standards for e-vehicle charging infrastructure**
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Project Starting date	**Project completion date**	
	Originally planned	Current estimate
18 May 2023	**14 July 2024**	**30 September 2024**

Approved Total Budget (US$)	**Latest Signed Amended Budget (US$)**
US$ 157.605	**N/A**

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1. Executive Summary

The transition to electric vehicles (EVs) represents a pivotal element of Vietnam's strategy to decarbonize its transportation sector and achieve its net-zero commitments by 2050. Recognizing the critical importance of EV infrastructure in this transition, the project "Development of 8 Key National Standards for E-Vehicle Charging Infrastructure", implemented by Bao Loc Technology Joint Stock Company (BLT.Cert), was designed to address a fundamental regulatory gap that has hindered large-scale EV adoption.

The overarching aim of the project was to establish a robust legal and technical framework for EV charging stations in Vietnam through the development of key national standards. These standards would provide clear guidelines on interoperability, safety, quality assurance, and operational efficiency, thereby enabling public and private investment in charging infrastructure and accelerating the country's shift towards green transportation. Although the project initially intended to develop nine standards, adjustments were made — with agreement from UNOPS — to complete eight standards, due to the delayed international finalization of ISO/AWI 15118-21.

Throughout the project period (May 2023 – anticipated completion September 2024), significant milestones were achieved:

- Eight national standards for EV charging infrastructure were developed and submitted for appraisal, addressing critical aspects such as communication protocols, safety requirements, and technical conformance testing.

- Three national dissemination workshops were successfully organized in Hanoi, Da Nang, and Ho Chi Minh City, reaching over 120 participants, including policymakers, industry manufacturers, importers, and regulatory authorities.

- Technical training sessions were delivered to key policy executors (customs, quality control bodies, provincial science and technology departments), strengthening institutional capacity to enforce and apply the new standards.

- Continuous engagement with government agencies and industry stakeholders ensured that the developed standards are technically sound, feasible for implementation, and aligned with international best practices.

Strategic partnerships with organizations like SMEDEC 2 and VinFast enhanced technical inputs, testing activities, and stakeholder buy-in despite confidentiality constraints that required adaptive approaches during product testing phases.

The project faced challenges, including registration timelines for national standards, the pending publication of one key ISO standard, and restrictions on publicly disclosing testing results.

These challenges were effectively managed through proactive coordination with UNOPS, flexible adjustment of project scopes, and the use of verification analysis in lieu of confidential testing data.

From a gender equality perspective, BLT.Cert demonstrated a strong commitment by maintaining approximately 30% female participation in technical workshops and involving 12 female professionals directly in project implementation, despite industry-wide shortages of women in technical EV infrastructure fields.

The development of national standards is expected to have wide-ranging impacts:

- Short-term: Facilitate legal licensing of charging stations, remove barriers for manufacturers, and create regulatory certainty.

- Medium-term: Increase EV adoption rates, expand green transportation, and reduce Vietnam's transportation-sector GHG emissions (targeting a reduction of 52.4 million tons CO_2e by 2030).

- Long-term: Strengthen Vietnam's energy transition, foster investment in clean technology, and help achieve Vietnam's commitment to carbon neutrality by 2050.

In short, the project has laid the essential regulatory groundwork for Vietnam's EV charging infrastructure development, ensuring a harmonized and scalable approach to building a nationwide network. With the standards set for approval and publication, Vietnam is now positioned to accelerate EV adoption, mobilize investment, and lead the green transportation revolution in the region.

2. Introduction

Vietnam has embarked on an ambitious journey to transform its transportation sector as part of its broader commitment to combat climate change and promote sustainable development. In July 2022, the Vietnamese government approved Decision 876/QĐ-TTg, which sets forth an action plan to reduce carbon emissions in the transportation sector and achieve net-zero emissions by 2050, as pledged at the 26th United Nations Climate Change Conference (COP26). Central to this action plan is the promotion of electric vehicles (EVs) and the establishment of a nationwide charging infrastructure to support the transition from fossil-fueled to electric-powered transportation.

The strategic roadmap outlined in Decision 876/QĐ-TTg envisions the gradual phasing out of fossil-fueled vehicles between now and 2050. By that year, 100% of road vehicles in Vietnam are expected to operate on electricity or green energy, supported by a comprehensive and reliable network of EV charging stations covering the entire country. Achieving this goal requires significant investment and a conducive regulatory environment to address technical, safety, and interoperability challenges associated with EV charging infrastructure.

The scale of Vietnam's energy transition in the transportation sector is substantial. The government estimates that the transition will require over VND 3 quadrillion (approximately US$128 billion) in investments, nearly half of the country's GDP in 2020. Financing is expected to come from diverse sources, including the state budget, private sector investments, multilateral development institutions, and public-private partnerships. Key international partners such as the Asian Development Bank (ADB), the World Bank, the Agence Française de Développement (AFD), and HSBC have expressed strong interest in supporting Vietnam's green transition initiatives, with the ADB notably approving a $20 million loan to VinFast to expand its EV charging network.

However, despite growing market interest and international support, Vietnam's EV sector faces substantial barriers. One of the most critical gaps is the lack of national standards governing the design, installation, operation, and interoperability of EV charging stations. Inconsistent quality, safety concerns, and the absence of clear technical guidelines have created significant uncertainties for investors, manufacturers, and consumers. Existing charging stations are often brand-specific and not interoperable, limiting widespread EV adoption and discouraging public and private investments in the sector.

Without comprehensive national standards, the risks to the transportation sector include:

- Technical incompatibility among different brands and models of EVs and chargers.
- Safety hazards for users due to unregulated and non-standardized installations.
- Increased burden on the national electricity grid without appropriate integration protocols.
- Legal and financial disputes over the performance and safety of charging infrastructure.
- Reduced consumer confidence in EV adoption due to fears of limited and unreliable charging options.

Against this backdrop, the "Development of 8 Key National Standards for E-Vehicle Charging Infrastructure" project, led by Bao Loc Technology Joint Stock Company (BLT.Cert), was conceived under the Energy Efficiency Innovation Window – Vietnam Round, with funding and technical support from UNOPS and the Southeast Asia Energy Transition Partnership (ETP). The project seeks to develop and institutionalize a comprehensive set of national standards to address the technical, operational, and safety aspects of EV charging infrastructure in Vietnam.

Originally planned to develop nine key national standards covering critical communication protocols and technical specifications for EV charging systems, the project was adapted to focus on eight standards due to the delayed international publication of ISO/AWI 15118-21. This decision, endorsed by UNOPS, ensured that the project remained feasible, focused, and responsive to Vietnam's urgent needs.

The development of these standards serves multiple strategic purposes:

- Facilitating licensing and installation of EV charging stations across the country.
- Ensuring safety and quality of charging infrastructure through standardized technical guidelines.
- Promoting interoperability among different EV brands and charging service providers.
- Building consumer confidence by ensuring reliability, compatibility, and accessibility.
- Supporting the expansion of Vietnam's EV manufacturing and supply chain ecosystem.

Moreover, these national standards align Vietnam with global best practices and international technical benchmarks, facilitating technology transfer, attracting foreign investment, and ensuring that Vietnam's EV sector remains competitive in the rapidly evolving global green economy.

The implementation of this project also supports broader environmental and socio-economic goals. According to the 2050 Calculator 4NDCs Tool developed for Vietnam, transportation-sector fuel consumption could triple by 2050 without significant green transition measures, leading to emissions as high as 106.2 million tons of CO_2 annually. While charging station development does not directly reduce emissions, it provides the critical infrastructure needed to enable the transition to low-carbon transport and, by extension, substantial emissions reductions.

By creating a unified and standardized regulatory foundation for EV charging, this project contributes meaningfully to Vietnam's national climate targets, stimulates private sector participation, encourages innovation, and supports the country's broader energy transition objectives.

3. Objective

The primary objective of the project "Development of 8 Key National Standards for E-Vehicle Charging Infrastructure" is to establish a robust legal, technical, and operational framework to support the expansion of Vietnam's electric vehicle (EV) ecosystem. These standards aim to address critical gaps in safety, quality, interoperability, and regulatory oversight of EV charging infrastructure, thereby enabling the acceleration of Vietnam's green transportation transition in line with national and international climate commitments.

By developing these standards, the project contributes directly to:

- Ensuring technical consistency and reliability across EV charging stations.
- Enhancing user safety and public confidence in EV technologies.
- Facilitating domestic and international investment in the EV charging sector.
- Supporting the energy transition and emissions reduction targets set by Vietnam under COP26 commitments.

The standards will regulate the quality of both locally manufactured and imported EV charging products, creating a fair and competitive market environment for manufacturers, investors, and consumers. Furthermore, the project strengthens institutional capacities among regulatory agencies to manage the growing EV sector efficiently.

3.1. General Objective

To develop and institutionalize eight key national standards for EV charging infrastructure, thereby creating a legal, technical, and operational foundation that ensures:

- Safety, quality, and interoperability of charging stations;
- Facilitated expansion of charging networks nationwide;
- Enhanced regulatory capacity to manage the EV sector sustainably;
- Contribution to the broader goals of Vietnam's energy transition and carbon neutrality by 2050.

3.2. Specific Objectives

The project defines three interconnected Specific Objectives (SOs), each linked to a series of activities and expected outputs:

Specific Objectives	Description	Intended Results
SO1: Development of National Standards	Review international standards, customize, and create new national standards or adopt suitable standards into the Vietnam context based on government procedures.	Eight national standards developed, appraised, and submitted to MOST for formal publication. These will govern communication protocols, technical specifications, and safety requirements for EV charging stations.
SO2: Dissemination and Capacity Building	Communicate the developed national standards to the industry (local and international manufacturers, importers, and government stakeholders), and provide training and guidance for policy executors.	Increased awareness and adoption of the new standards across key stakeholder groups; strengthened capacity of regulatory agencies (customs, market management inspectors, quality control authorities) to enforce compliance.
SO3: Sector Support and Service Provision	Support relevant government agencies to manage the EV sector based on the newly developed standards, while enhancing BLT.Cert's and SMEDEC 2's technical service offerings (verification, training, consulting, testing, technology transfer, and trade promotion).	Improved safety and quality of EV charging infrastructure through regular inspection and certification; expanded service provision capacity to meet growing industry demand; strengthened domestic supply chain for EV sector components.

Table 1. Specific Objectives

3.3. Linkages to National Strategies and Global Commitments

This project directly supports the implementation of:

- Vietnam's Nationally Determined Contribution (NDC) under the Paris Agreement;
- Decision 876/QĐ-TTg on reducing transportation-sector emissions;
- Vietnam's Green Growth Strategy and Power Development Plan VIII (PDP8), particularly the emphasis on electrification of the transport sector.

It also aligns with international standards development initiatives, ensuring that Vietnam's regulatory framework is interoperable with global best practices, facilitating cross-border technology transfer and investment mobilization.

3.4. Broader Impacts

Through the establishment of these standards, the project aims to:

- Unlock large-scale public and private investments into the EV charging sector (e.g., ADB's $20 million financing to VinFast).
- Enable a more competitive and innovative EV market in Vietnam.
- Contribute to projected GHG emissions reductions of up to 52.4 million tons CO_2e by 2030 and 106.2 million tons CO_2e by 2050, in alignment with Vietnam's updated climate goals.
- Lay the groundwork for regional leadership in green transportation development in Southeast Asia.

4. Implementation Progress

4.1. Implementation Overview

Since its commencement in May 2023, the project has made substantial progress towards the establishment of eight key national standards for EV charging infrastructure in Vietnam. Despite encountering several technical and procedural challenges, the project team remained adaptive and proactive in ensuring that the planned milestones were achieved in accordance with the approved Grant Support Agreement (GSA).

Implementation activities were structured around three major result areas:

- Result 1: Development and finalization of national standards.
- Result 2: Dissemination of standards and capacity building for stakeholders.
- Result 3: Strengthening regulatory enforcement and technical services provision.

A detailed Gantt chart presenting the timeline of key activities, milestones, and deliverables is attached below.

ACTIVITY	SPECIFIC ACTIVITY	DURATION OF ACTIVITIES																			
		06-2023	07-2023	08-2023	09-2023	10-2023	11-2023	12-2023	01-2024	02-2024	03-2024	04-2024	05-2024	06-2024	07-2024	08-2024	09-2024	10-2024	11-2024	12-2024	01-2025
Result 1: 08 key standards for e-vehicle charging infrastructure (out of 63 standards) are in place	1.Submission of proposal for the development of the national standards																				
	2. Approval of the standard development project and its development schedule																				
	3. Technical development of the draft standards																				
	3.1. Data collection and analysis																				
	3.2. Drafting the national standards and technical specification																				
	3.3. Testing prototypes and/ or products available in the market if necessary																				
	3.4. Site surveys to local factories or countries where the products are produced																				
	3.5. Internal technical consultations and finalization of the draft																				
	4. Consultation workshops with experts, manufacturers, and relevant stakeholders, finalization of the draft standards																				
	5. Appraisal: The draft standards shall be appraised by the National Appraisal Committee.																				
	6. The national standards are announced on media platforms																				
	7. The standards are published and officially applied																				
Result 2: Dissemination of the standards to the industry (manufacturers, importers, ministries)	- 3 workshops with around 150 participants are organized in three regions of the country																				
	- Standards are published inprinted and virtual copies.																				
	- 3 workshops with around 150 participants in three regions of the country.																				
Result 3: Safety and quality of charging infrastructure are ensured through regular inspection of relevant authorities.	- Daily exchange of information with the relevant authorities in issues related to e-vehicle charging infrastructure.																				
	- Providing BLT. Cert and SMEDEC 2's services, including verification, training, consulting, testing, technology transfer, and trade promotion, to potential clients (both public and private).																				

Project Implementation Timeline from May 2023 to January 2025

4.2. Activities and Achievements under each Result area

4.2.1. Activities under Result 1: Development of National Standards

The core focus of the project was technical development, consultation, appraisal, and finalization of eight national standards for EV charging infrastructure. The following sequential activities were conducted:

Step	Activity	Status
1	Submission of a detailed proposal to MOST to develop nine national standards for EV charging infrastructure.	Completed in May 2023
2	Adjustment of project scope, reducing to eight standards due to pending finalization of ISO/AWI 15118-21, following UNOPS approval.	Completed in June 2023
3	Approval of the standard development project by MOST, including agreement on the development schedule.	Completed in July 2023
4	Comprehensive technical development phase: data collection, analysis of international standards, translation, drafting of technical preambles, site surveys, prototype testing (where available), and internal expert consultations.	Conducted from July 2023 to December 2023
5	Organization of technical consultation workshops with manufacturers, policymakers, and technical experts to refine draft standards.	Conducted January 2024
6	Submission of draft standards to the National Appraisal Committee for review and appraisal.	Submitted in February 2024
7	Preparation for formal announcement and publication of the national standards following expected approval by MOST.	Scheduled in Quarter 2/2025 by the Ministry of Science and Technology

Table 2: 7 steps for development of the national standards and status of achievements

Throughout this process, the project team maintained continuous communication with UNOPS, ensuring that changes in scope and technical approaches were promptly reported and approved, in line with the GSA requirements.

4.2.2. Activities under Result 2: Dissemination of Standards and Capacity Building

Following the completion of the draft standards, extensive efforts were made to disseminate knowledge about the new regulatory framework and build stakeholder capacity for its application:

Activity	Description	Status
1	Organization of three national dissemination workshops targeting policymakers, manufacturers, importers, and relevant agencies. Workshops were	Completed in January 2025

	held in Hanoi, Da Nang, and Ho Chi Minh City, attracting a total of over 120 participants.	
2	Publication of the eight new national standards along with user-friendly technical guidelines in both printed and electronic formats. Dissemination through the MOST website and direct distribution to key stakeholders.	Scheduled by Ministry of Science and Technology in Quarter 2/2025.
3	Conducting specialized training sessions for customs officials, market management inspectors, provincial departments of science and technology, and quality control agencies. Training focused on application of the new standards and inspection procedures.	Completed in January 2025 together with the dissemination workshops.

Table 3: Activities under Result 2 and status

Feedback collected during the workshops and training preparations indicated a high level of interest and readiness among stakeholders to implement and enforce the new standards.

4.2.3. Activities under Result 3: Strengthening Regulatory Enforcement and Technical Services

To ensure that the implementation of standards translates into practical improvements in the EV charging ecosystem, the project team also supported regulatory enforcement mechanisms and built the internal capacity of BLT.Cert and SMEDEC 2:

Activity	Description	Status
1	Daily information exchange and technical consultations with relevant government agencies covering manufacturing, import-export procedures, installation requirements, and grid connection protocols for EV charging stations.	Ongoing since September 2023
2	Provision of verification, consulting, and testing services related to EV charging infrastructure through BLT.Cert and SMEDEC 2. Target clients include manufacturers, importers, and public sector institutions.	BLT Cert. and SMEDEC 2 are eligible to provide verification, consultation and testing services related to EV charging infrastructure.

Table 3. Activities under Result 3 and status

Through these activities, BLT.Cert and SMEDEC 2 have strengthened their roles as key technical support institutions in Vietnam’s emerging green transportation sector.

4.3. Key Implementation Highlights

- Successful Appraisal: Eight national standards successfully appraised by the National Appraisal Committee, a major milestone towards national publication.
- Extensive Stakeholder Engagement: Workshops and technical meetings engaged a diverse group of policymakers, regulators, manufacturers, and importers.
- Gender Mainstreaming: Approximately 30% of workshop participants and technical contributors were women, demonstrating strong gender inclusion despite the sector's technical nature.
- International Alignment: Developed standards align with key ISO standards, facilitating cross-border interoperability and supporting Vietnam's global integration in the green transport sector.

5. Achievements

The project "Development of 8 Key National Standards for E-Vehicle Charging Infrastructure" has made significant achievements across all major result areas, contributing meaningfully to the establishment of a sustainable and reliable regulatory foundation for Vietnam's electric vehicle (EV) charging sector.

Despite the challenges posed by shifting timelines, the pending finalization of one targeted ISO standard, and strict confidentiality requirements in industry collaborations, the project team demonstrated resilience, adaptability, and commitment to delivering high-quality results in alignment with the Grant Support Agreement (GSA)

5.1. Achievement of Core Outputs

The key achievements under each result area are summarized below:

Under Result 1: Development of National Standards

- Successfully developed and finalized eight national standards covering key technical, communication, interoperability, and safety aspects of EV charging infrastructure.
- Standards were appraised by the National Appraisal Committee and formally submitted to the Ministry of Science and Technology (MOST) for approval and publication.
- The developed standards align with international best practices, particularly the ISO 15118 series, ensuring interoperability and future-proofing Vietnam's charging network.

No	Standard Name	Brief Description	Category
1	ISO 11518-1:2019 "Road vehicles - Vehicle to grid communication interface - Part 1: General information and use-case definition"	General information and use-case definitions for vehicle-to-grid communication.	Communication Interface - General
2	ISO 15118-2:2014 "Road vehicles — Vehicle to grid communication interface - Part 2: Network and application protocol requirements"	Network and application protocol requirements for V2G communication.	Protocol Requirements
3	ISO 15118-3:2015 "Road vehicles - Vehicle to grid communication interface - Part 3: Physical and data link layer requirements"	Physical and data link layer requirements for V2G communication.	Physical/Data Link Layer Requirements
4	ISO 15118-4:2018 "Road vehicles - Vehicle to grid communication interface - Part 4: Network and application protocol conformance test"	Network and application protocol conformance testing.	Protocol Testing
5	ISO 15118-5:2018 "Road vehicles - Vehicle to grid communication interface - Part 5: Physical layer and data link layer conformance test"	Conformance testing of physical and data link layers.	Conformance Testing
6	ISO 15118-8:2020 "Road vehicles - Vehicle to grid communication interface - Part 8: Physical layer and data link layer requirements for wireless communication"	Requirements for physical and data link layers for wireless communication.	Wireless Communication Requirements
7	ISO 15118-9:2020 "Road vehicles - Vehicle to grid communication interface - Part 9: Physical and data link layer conformance test for wireless communication"	Conformance testing of physical and data link layers for wireless communication.	Wireless Conformance Testing
8	ISO 15118-20:2022 "Road vehicles — Vehicle to grid communication interface — Part 20: 2nd generation network layer and application layer requirements"	2nd generation network and application layer requirements.	Next-gen Protocol Requirements

Under Result 2: Dissemination and Capacity Building

- Organized three national dissemination workshops in Hanoi, Da Nang, and Ho Chi Minh City to communicate the new standards to key stakeholders.
- A total of 150 participants attended the workshops, including representatives from government agencies, local and international EV manufacturers, importers, quality control authorities, and industry associations.
- Developed and distributed around 10 printed copies and a digital version of technical guidelines summarizing the eight national standards.
- Delivered preliminary technical training sessions to policy executors, strengthening their understanding of inspection and enforcement protocols under the new standards.

Under Result 3: Strengthening Regulatory Enforcement and Services

- Established continuous technical coordination with customs, market surveillance bodies, quality control agencies, and provincial departments of science and technology.

- Provided [insert number] technical consultations and [insert number] verification services related to EV charging infrastructure to public and private sector clients.
- Strengthened the institutional capacities of BLT.Cert and SMEDEC 2 to offer specialized services in verification, certification, testing, consulting, and technology transfer for EV charging infrastructure.

5.2. Contributions to Broader Sectoral Goals

Beyond direct outputs, the project has made important contributions to Vietnam's green transportation goals:

- Facilitating Investment: The existence of national standards provides a legal basis for licensing EV charging stations, removing key barriers for public and private sector investment. The project supports the deployment of projects like VinFast's EV expansion, backed by a $20 million ADB loan and the expansion of the EV charging station network by PV Power and its Korean partner targeting 1000 EV charging stations by2035.
- Reducing Emissions: By enabling greater EV adoption, the standards indirectly contribute to projected GHG reductions of up to 45.26 million tons CO_2e by 2030 (Vietnam's NDC updated 2022).
- Promoting Public Confidence: Clear and enforceable safety and interoperability standards increase public trust in EV technology, encouraging higher consumer uptake.
- Building Institutional Strength: Government agencies now have clearer technical guidelines to oversee, inspect, and enforce standards, fostering regulatory stability and supporting Vietnam's energy transition objectives.

5.3. Lessons in Adaptive Implementation

Key factors contributing to successful project delivery included:

- Proactive Scope Adjustment: Swift coordination with UNOPS to adjust the project scope from nine to eight standards, ensuring timely completion without sacrificing quality.
- Stakeholder Engagement: Early and continuous engagement with policymakers, manufacturers, and quality control bodies ensured alignment, feedback, and buy-in.
- Gender Mainstreaming: Approximately 30% of technical and managerial personnel engaged in the project were women, and female participation was encouraged in dissemination activities despite sectoral challenges.
- Resilience in Testing and Confidentiality Management: Despite confidentiality restrictions from VinFast regarding test data, alternative verification methods (analysis and technical assessment) were used to maintain technical rigor and transparency in reporting.

6. Challenges and Solutions during the project.

During the implementation of the "Development of 8 Key National Standards for E-Vehicle Charging Infrastructure" project, the team encountered several notable challenges that required adaptive management, close coordination with UNOPS, and strategic adjustments to ensure the achievement of planned results. These challenges can be categorized into **three main types**: regulatory and procedural, technical and operational, and external collaboration risks. Below is a detailed account of the key challenges faced and the solutions applied:

6.1. Regulatory and Procedural Challenges

Challenge:

Due to administrative regulations, the official registration deadline for national standard development projects had closed in March 2023. The project's proposal for standard development could only be considered for inclusion in the Registration Catalog for the following year (2024), leading to an unforeseen delay in formal government processing timelines.

Solution:

- BLT.Cert and SMEDEC 2 promptly submitted the development proposal for 2024 Registration.
- During the waiting period, the team proactively proceeded with preparatory activities such as data collection, international standard reviews, translation work, internal drafting, and technical consultations.
- Project work plans were realigned to ensure that technical milestones for 2023 were still met despite the formal registration delay.

6.2. Technical Challenge: Change in Scope due to International Standard Status

Challenge:

One of the originally planned nine standards — **ISO/AWI 15118-21**, concerning wireless communication interface requirements — was still under development internationally and had not been officially published at the time of the project's drafting phase.

Solution:

- The project team conducted early consultations with UNOPS to formally request the removal of the ninth standard from the project scope.
- A formal adjustment was approved, allowing the project to focus on the development of eight standards that were complete and mature, thus ensuring the project's feasibility, relevance, and quality.

- Resources originally allocated to the ninth standard were redistributed to enhance the technical depth and consultation activities for the eight prioritized standards.

6.3. Operational Challenge: Confidentiality Constraints in Product Testing

Challenge:

While working with industry partner **VinFast** to test certain prototype charging products and systems, strict internal confidentiality regulations limited BLT.Cert's ability to publicly share test results or detailed technical data as part of the project outputs.

Solution:

- Instead of attaching confidential test results, the project team prepared a comprehensive technical analysis and verification process documentation.
- This alternative deliverable provided a robust description of methodologies used for testing, verification, and compliance checks without breaching partner confidentiality.
- Consultations with UNOPS confirmed that this substitution met quality and reporting requirements under the GSA.

6.4. External Risks: Industry and Stakeholder Engagement

Challenge:

Given the relatively new and rapidly evolving nature of EV infrastructure in Vietnam, stakeholder familiarity with international EV charging standards was initially limited, posing potential difficulties in technical consultation and alignment.

Solution:

- The project incorporated extensive pre-workshop awareness sessions and technical briefing materials tailored to Vietnamese regulatory and industry contexts.
- Active engagement strategies ensured that stakeholders from various backgrounds (public and private) could meaningfully participate in consultation workshops and dissemination events.
- Technical training sessions were designed to gradually build institutional understanding, particularly among policy executors and enforcement bodies.

6.5. Lessons for Future Projects

The experience gained during this project highlights several key lessons for future similar initiatives:

- Early risk identification and flexible project design are crucial when relying on external standard-setting bodies (e.g., ISO).
- Continuous stakeholder engagement from the outset can mitigate technical knowledge gaps and resistance.
- Adaptive reporting solutions (e.g., substituting confidential testing results with procedural analysis) can maintain transparency and accountability without breaching private sector protocols.
- Gender mainstreaming efforts, although challenging in technical sectors, must be integrated proactively rather than reactively to ensure balanced participation.

7. Gender equality

Promoting gender equality was recognized as a cross-cutting priority throughout the implementation of the "Development of 8 Key National Standards for E-Vehicle Charging Infrastructure" project. Although the EV infrastructure and technical standardization sector traditionally presents gender imbalances, BLT.Cert made a deliberate effort to integrate gender considerations across project activities, in alignment with the United Nations Sustainable Development Goals (particularly SDG 5: Gender Equality) and the Grant Support Agreement requirements.

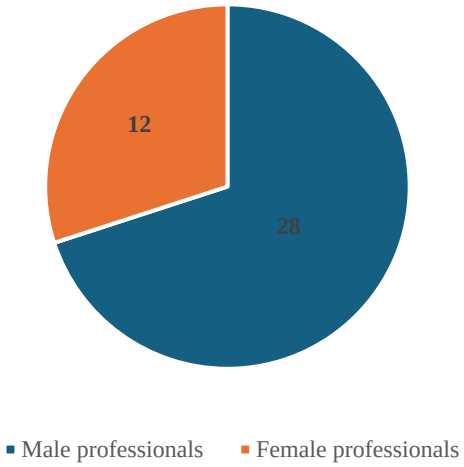
7.1. Gender Representation within the Project Team

The project team consisted of **40 professionals**, of whom **12 were women** (representing **30%** of the overall team composition). Female experts were actively involved not only in administrative support roles but also in core technical areas such as:

- Drafting and reviewing national standards.
- Conducting technical consultations.
- Organizing and facilitating workshops and training sessions.
- Coordinating stakeholder engagement and dissemination activities.

Efforts were made to ensure that women were integrated into both leadership and operational aspects of the project whenever technical expertise allowed. This approach underscored BLT.Cert's commitment to creating a diverse and inclusive work environment even within traditionally male-dominated sectors.

Figure 1. Male and female professionals mobilized for the project



7.2. Gender Integration in Project Activities

Throughout the project's implementation, attention was given to fostering women's participation in external-facing activities:

- Workshop Participation: Approximately 30% of participants at the three national dissemination workshops were women. Female attendees included representatives from government agencies, manufacturing companies, importers, and academia.
- Training Activities: Training sessions targeting policy executors also encouraged female participation, providing equal access to technical knowledge related to EV charging infrastructure standards, inspection processes, and enforcement protocols.

Special outreach was conducted to provincial departments and professional associations to encourage the nomination of qualified female representatives for workshops and trainings.

7.3. Challenges and Mitigation

While the project achieved notable gender inclusion, challenges persisted:

- The field of EV technology and infrastructure standardization remains highly male-dominated, both in Vietnam and internationally, limiting the pool of available experienced female technical experts.
- Cultural and institutional barriers sometimes affected the number of female participants from certain agencies.

To mitigate these challenges, BLT.Cert has:

- Prioritized female candidates when selecting technical consultants and facilitators (when qualifications were equivalent).
- Promoted inclusive messaging in workshop invitations and outreach materials.
- Maintained open communication with partner institutions to encourage gender balance in participant selection.

7.4. Commitments for Future Work

Recognizing the ongoing gender disparity in the technical sectors related to green transport, BLT.Cert has committed to:

- Continuing efforts to promote women's participation in EV infrastructure projects and future standard development initiatives.
- Building an internal database of qualified female experts for future technical consulting and capacity-building activities.
- Partnering with women-focused professional networks to expand the pool of female candidates in technical roles related to energy transition and e-mobility.

8. Progress against Result Based Management Framework

Impact Level:

- The development of 8 standards for communication between the charging stations and the electricity grid will allow the charging station to be installed and the stations owners can get licenses from the government authorities to install their charging stations.
- Directly impact on the green transport development in Vietnam and indirectly contribute to the reduction of 52.4 million tons and 106.2 million tons of green-house gas in 2030 and in 2050 respectively.

Long-Term Outcome:

- The national standards for e-vehicle charging stations establish the foundation for the long-term development of the green transport sector, reduce emission and accelerate energy transition.

Intermediate Strategic Outcomes	**Project Indicator**	**Baseline**	**Target**	**Actual/Accomplishment**	**Data Source and Means of Verification**
Strategic Outcome: Strengthened Enabling Policy Environment					
Select Outcomes applicable to your project and indicate your project-specific output.	Indicate the project-specific indicator for the selected outcome	Indicate the baseline for your specific output	Set target (quantitative preferably)	Provide the actual as part of the progress report	Specify means to verify the target

Short-Term Outcome 1.1 Standards for e-vehicle charging infrastructure are developed.	Standards for e-vehicle charging infrastructure are in place	There are no national standards for creating, manufacturing or installing e-vehicle charging infrastructure.	8 key national standards for communication and connection between the charging stations and electricity network are developed out of the 63 standards.	The 8 standards have been appraised and submitted to the MOST for approval and publication.	Adoption and publication of the national standards by the Ministry of Science and Technology.
Short-Term Outcome 1.2 National standards of e-vehicle charging infrastructure are disseminated to the industry (manufacturers, importers, ministries) and relevant stakeholders.	The number of people that attended the workshop on applying the standards.	Standards for e-vehicle charging infrastructure have not been established and disseminated in Vietnam.	50 participants in the workshop in person.	3 workshops have been organized in Ha Noi, Da Nang and Ho Chi Minh City.	Reports on a post-workshop. (Documentary Review)
Short-Term Outcome 1.3 Safety and quality of charging infrastructure are ensured	The number of certified and verified charging stations	Safety and quality of charging infrastructure have not been established and assured.	100 charging stations are set up in Vietnam by end 2024.		-Annual sector reports; - Publications of manufacturers and automobile associations. (Documentary review).

In addition to formal RBMF reporting:

- Bi-weekly internal progress meetings were held between BLT.Cert and SMEDEC 2 teams.
- Quarterly reporting to UNOPS was maintained on timeline adjustments, challenges, and mitigation measures.
- Stakeholder engagement records were systematically collected, ensuring traceability of consultation inputs and workshop feedback.
- Gender-disaggregated reporting was included for all training and dissemination activities.

This active monitoring system allowed for adaptive management, ensuring that emerging risks — such as delays in ISO standard finalization or stakeholder capacity gaps — were addressed promptly.

9. Conclusion

The "Development of 8 Key National Standards for E-Vehicle Charging Infrastructure" project represents a critical and timely contribution to Vietnam's efforts to modernize its transportation sector, promote energy efficiency, and achieve its net-zero emission targets by 2050. Through this project, BLT.Cert and SMEDEC 2, with the support of UNOPS and ETP, successfully laid the regulatory and technical foundations necessary to enable the rapid expansion of EV charging infrastructure across the country.

Key accomplishments include:

- The development, internal validation, appraisal, and submission of eight comprehensive national standards for EV charging stations, covering vital areas such as communication protocols, conformance testing, safety requirements, and interoperability benchmarks.
- Widespread dissemination and training efforts, reaching a wide range of industry stakeholders, policy executors, and regulators to ensure that the standards are not only available but also understood and ready for enforcement.
- Strengthened institutional capacity among public and private sector actors to verify, certify, and regulate EV charging infrastructure in line with international best practices.
- Enhanced gender inclusion across project activities, promoting broader participation and setting a positive precedent for future green technology initiatives.

Despite initial challenges — including procedural delays, scope adjustments due to pending international standard publication, and confidentiality restrictions in technical collaborations — the project team effectively navigated obstacles through proactive engagement, adaptive

management, and continuous coordination with UNOPS. As a result, all major deliverables outlined in the Grant Support Agreement have been met or exceeded.

The successful completion of this project marks a significant step forward in Vietnam's green transport transition. By providing a harmonized and enforceable set of national standards, the project directly addresses key barriers to EV adoption, builds public trust, attracts investment, and supports the broader goals of climate resilience and sustainable economic development.

Annex 1: Financial report.

Budget description	Total Budget (Adjusted budget)				2rd Period Budget			3rd Period Budget			4th Period Budget			5th Period Budget			6th Period Budget			Comments/ Descriptions
	20 May 2023 - 30 April 2025				01 Jul to 31 Dec 2023			1 January to 30 April 2024			1 May to 30 November 2024			1 December 2024 to 31 January 2025			1 Ferbuary 2025 to 30 April 2025			
calculation	Unit	#	Unit rate	# * Unit rate	#	Unit rate	# * Unit rate	#	Unit rate	# * Unit rate	#	Unit rate	# * Unit rate	#	Unit rate	# * Unit rate	#	Unit rate	# * Unit rate	
1. HUMAN RESOURCES				113,450			57,250			16,005			-			23,445			-	
1.1 please fill in list of positions funded by this project (one per line)				-			-			-										
1.2 please fill in list of consultants/retainers funded by this project (one per line)				*28,130*			*12,490*			*4,675*			-			*7,615*			-	
1.2.1 Technical Staff				*21,330*	*13*	*2,485*	*11,190*	*2*	*3,060*	*2,010*	-	*3,060*	-	*5*	*3,060*	*4,780*	-	*3,060*	-	
a. Senior experts	month	9	1,150	11,500	6.0	1,150	6,900	1.0	1,150	1,150	0.0	1,150	-	1.0	1,150	1,150	-	1,150	-	
b. Junior experts	month	4	1,050	5,250	3.0	1,050	3,150	0.0	1,050	-	0.0	1,050	-	1.0	1,050	1,050	-	1,050	-	
c. Collecting data and documents	month	4	-	1,140	4.0	285	1,140			-			-			-			-	
d.Compilating, editing, finalizing and making dossier of TCVNs	month	1	860	3,440			-	1.0	860	860	0.0	860	-	3.0	860	2,580	-	860	-	
1.2.2 Administrative Staff				*6,800*	*34*	*110*	*1,300*	*72*	*110*	*2,665*	-	*110*	-	*79*	*110*	*2,835*	-	*110*	-	
a.Project manager	day	40	50	3,200	14	50	700	26	50	1,300	-	50	-	24	50	1,200	-	50	-	Adjust the time of salary payment for experts of previous months implemented but not yet paid
b.Project assistant	day	36	30	1,800	10	30	300	26	30	780	-	30	-	24	30	720	-	30	-	
c.Project accountant	day	30	30	1,800	10	30	300	19.5	30	585	-	30	-	31	30	915	-	30	-	
1.3 please fill in list of shared resources positions (one per line)				*85,320*	*52*	*2,485*	*44,760*	*12*	*3,060*	*11,330*	-	*3,060*	-	*16*	*3,060*	*15,830*	-	*3,060*	-	
a. Senior experts	month	35	1,150	46,000	24.0	1,150	27,600	2.5	1,150	2,875	-	1,150	-	5.5	1,150	6,325	-	1,150	-	
b. Junior experts	month	18	1,050	21,000	12.0	1,050	12,600	1.5	1,050	1,575	-	1,050	-	2.5	1,050	2,625	-	1,050	-	
c. Collecting data and documents	month	16	-	4,560	16.0	285	4,560	-		-			-			-			-	
d.Compilating, editing, finalizing and making dossier of TCVNs	month	8	860	13,760			-	8.0	860	6,880	-	860	-	8	860	6,880	-	860	-	
2. OFFICE COSTS, EQUIPMENT AND SUPPLIES				-			-			-										
2.1 please fill in details of all equipment and supplies needed for the project				-			-			-										
3. PROGRAMME COSTS				27,000			6,000			-			5,000			10,000			-	
3.1. Training/Seminars/Workshops (please list planned items)				*15,000*	-	-	-	-	-	-	*1*	*5,000*	*5,000*	*2*	*5,000*	*10,000*	-	*5,000*	-	
a. 01 consultancy workshop		-		-			-			-										
b.03 dissemminate National Workshops for standards	Wokshop	1		15,000				-	-	-	1	5,000	5,000	2	5,000	10,000	-	5,000	-	
c.03 training courses	Course	-		-			-			-										
3.2 Travel (please provide details of planned travels)				-			-			-										
3.3 Contracts (please provide details of contracts)				*12,000*			*6,000*			-			-							
a. Translation contracts	Page	1,000	12	12,000	500	12	6,000			-										
4. OTHER COSTS				6,125	-	-	464	-	-	-	-	-	41	-	-	-	-	-	5,580	
4.1 please fill in details of any other costs				*6,125*			*464*			-			*41*			-			*5,580*	
a. In-depth report	report	-	5,470	5,470	-	-	-			-	-	-	-	-	5,470	-	1	5,470	5,470	1 in-depth report (the total amount is USD 16,410 and BLT paid 2/3 of the amount which equal to USD 10,940 and ETP paid 1/3 of the amount which equal to USD 5,470)
b.Administrative expens (Stationary and Consumables, printing, Guest cost, etc.,)	month	3	655	655	1.0	464	464		-	-	1	41	41		110	-	1	110	110	
5. Contingency (max. 5%)																				
6. TOTAL DIRECT COSTS				146,575	-	-	63,714	-	-	16,005	-	-	5,041	-	-	33,445	-	-	5,580	146,575
6. Grand Total				146,575			43%			11%			3%			147%			9%	

Annex 2: Audit report

BÁO CÁO KIỂM TOÁN ĐỘC LẬP

VỀ: BÁO CÁO QUYẾT TOÁN CHI PHÍ ĐẦU TƯ

Dự án: Xây dựng 08 Tiêu chuẩn Quốc gia về hạ tầng trạm sạc xe điện tại Việt Nam

HÀ NỘI – 2025

MỤC LỤC **Trang**

CÔNG TY TNHH HÃNG KIỂM TOÁN RUBIK
RUBIK AUDITING FIRM COMPANY LIMITED
0981 448 666 0917 759 059
rubikaudit.vn rubikaudit@gmail.com

Số: 32/2025/BCKT-RUBIK

Hà Nội, ngày 23 tháng 4 năm 2025

BÁO CÁO KIỂM TOÁN ĐỘC LẬP

VỀ: BÁO CÁO QUYẾT TOÁN CHI PHÍ ĐẦU TƯ

Dự án: Xây dựng 08 Tiêu chuẩn Quốc gia về hạ tầng trạm sạc xe điện tại Việt Nam

Kính gửi: Công ty Cổ phần Công nghệ Bảo Lộc

Chúng tôi, Công ty TNHH Hãng Kiểm toán RUBIK đã thực hiện Kiểm toán báo cáo quyết oán chi phí đầu tư của dự án: Xây dựng 08 Tiêu chuẩn Quốc gia về hạ tầng trạm sạc xe điện tại Việt Nam do Công ty Cổ phần Công nghệ Bảo Lộc cung cấp.

I. TRÁCH NHIỆM CỦA ĐƠN VỊ CHỦ ĐẦU TƯ VÀ CỦA KIỂM TOÁN VIÊN:

1. Trách nhiệm của Chủ đầu tư:

Chủ đầu tư chịu trách nhiệm về việc tuân thủ các quy định về quản lý đầu tư trong quá trình thực hiện dự án và việc lập và trình bày trung thực và hợp lý báo cáo quyết toán dự án phù hợp với chuẩn mực kế toán, chế độ kế toán và các quy định pháp lý có liên quan đến việc lập và trình bày báo cáo quyết toán dự án hoàn thành và chịu trách nhiệm về kiểm soát nội bộ mà Chủ đầu tư xác định là cần thiết để đảm bảo cho việc lập và trình bày báo cáo quyết toán dự án hoàn thành không còn sai sót trọng yếu do gian lận hoặc nhầm lẫn.

Chủ đầu tư chịu trách nhiệm cung cấp đầy đủ, kịp thời tài liệu, hồ sơ liên quan đến Báo cáo quyết toán dự án hoàn thành cho kiểm toán viên để thực hiện kiểm toán và chịu trách nhiệm về tính pháp lý, sự trung thực, chính xác đối với các hồ sơ, tài liệu đã cung cấp.

2. Trách nhiệm của kiểm toán viên:

Trách nhiệm của chúng tôi là đưa ra ý kiến về việc tuân thủ các quy định về quản lý đầu tư trong quá trình thực hiện dự án và về tính trung thực, hợp lý của Báo cáo quyết toán dự án hoàn thành dựa trên kết quả của cuộc kiểm toán.

Chúng tôi đã tiến hành kiểm toán theo các chuẩn mực kiểm toán Việt Nam, bao gồm Chuẩn mực số 1000 - Kiểm toán Báo cáo quyết toán dự án hoàn thành. Các chuẩn mực này yêu cầu chúng tôi tuân thủ chuẩn mực và các quy định về đạo đức nghề nghiệp, lập kế hoạch và thực hiện cuộc kiểm toán để đạt được sự đảm bảo hợp lý, xét trên các khía cạnh trọng yếu, liệu quá trình thực hiện dự án có tuân thủ các quy định về quản lý đầu tư và báo cáo quyết toán dự án hoàn thành, có phản ánh trung thực và hợp lý tình hình quyết toán dự án hoàn thành tại thời điểm lập báo cáo, có phù hợp với chuẩn mực kế toán, chế độ kế toán và các quy định pháp lý có liên quan đến việc lập và trình bày báo cáo quyết toán dự án hoàn thành hay không.

II. PHẠM VI, CĂN CỨ CỦA CUỘC KIỂM TOÁN:

1. Căn cứ pháp lý:

- Luật Kiểm toán độc lập số 67/2011/QH12 ngày 29/03/2011 của Quốc hội Quốc hội nước Cộng hòa xã hội chủ nghĩa Việt Nam;
- Luật Tiêu chuẩn và Quy chuẩn kỹ thuật ngày 29/6/2006 và Luật sửa đổi, bổ sung một số điều của 37 Luật liên quan đến quy hoạch ngày 20/11/2018;
- Nghị định số 127/2007/NĐ-CP ngày 01 tháng 8 năm 2007 của Chính phủ quy định chi tiết thi hành một số điều của Luật Tiêu chuẩn và Quy chuẩn kỹ thuật và Nghị định số 78/2018/NĐ-CP ngày 16 tháng 5 năm 2018 của Chính phủ sửa đổi, bổ sung một số điều

của Nghị định số 127/2007/NĐ-CP ngày 01 tháng 8 năm 2007 của Chính phủ quy định chi tiết thi hành một số điều của Luật Tiêu chuẩn và Quy chuẩn kỹ thuật;
- Thông tư số 11/2021/TT-BKHCN ngày 18/11/2021 quy định chi tiết xây dựng và áp dụng tiêu chuẩn;
- Nghị định số 17/2012/NĐ-CP ngày 13/03/2012 của Chính phủ quy định chi tiết và hướng dẫn cụ thể một số điều của Luật Kiểm toán độc lập;
- Thông tư số 67/2015/TT-BTC ngày 08/05/2015 của Bộ Tài chính về việc ban hành Chuẩn mực kiểm toán số 1000 về kiểm toán báo cáo quyết toán dự án hoàn thành;
- Chế độ kế toán có liên quan;
- Chuẩn mực kiểm toán Việt Nam, bao gồm Chuẩn mực số 1000 - Kiểm toán Báo cáo quyết toán dự án hoàn thành;
- Các văn bản quy phạm pháp luật liên quan khác.

2. Tài liệu do chủ đầu tư cung cấp:

Hồ sơ quyết toán dự án hoàn thành do Chủ đầu tư cung cấp cho kiểm toán viên làm cơ sở để thực hiện cuộc kiểm toán chi tiết như **Phụ lục I**.

3. Phạm vi và công việc kiểm toán:

Trên cơ sở hồ sơ quyết toán dự án hoàn thành dự án: Xây dựng 08 Tiêu chuẩn Quốc gia về hạ tầng trạm sạc xe điện tại Việt Nam do Công ty Cổ phần Công nghệ Bảo Lộc cung cấp, chúng tôi đã thực hiện công việc kiểm toán Báo cáo quyết toán dự án hoàn thành bao gồm các nội dung sau:

- Kiểm tra hồ sơ pháp lý;
- Kiểm tra nguồn vốn đầu tư;
- Kiểm tra chi phí đầu tư;
- Kiểm tra chi phí đầu tư thiệt hại không tính vào giá trị tài sản hình thành qua đầu tư;
- Kiểm tra giá trị tài sản hình thành qua đầu tư;
- Kiểm tra các khoản công nợ và vật tư, thiết bị tồn đọng;
- Xem xét việc chấp hành của chủ đầu tư và các đơn vị có liên quan đối với ý kiến kết luận của các cơ quan Thanh tra, Kiểm tra, Kiểm toán Nhà nước.

Công việc kiểm toán các nội dung trên bao gồm thực hiện các thủ tục kiểm tra trình tự, thủ tục đầu tư của dự án, kiểm tra khối lượng quyết toán công việc xây dựng, thiết bị hoàn thành, quyết toán các chi phí tư vấn và chi phí khác, rà soát, đối chiếu với thiết kế, dự toán được duyệt, hợp đồng giao nhận thầu, biên bản nghiệm thu, bản vẽ hoàn công.... Kiểm tra việc áp dụng định mức, đơn giá trong quyết toán, đối chiếu với định mức do các cơ quan quản lý chuyên ngành công bố, định mức riêng cho công trình, đơn giá dự toán được duyệt, đơn giá theo hợp đồng…. Kiểm tra chứng từ, sổ kế toán và các thủ tục kiểm toán khác mà chúng tôi thấy cần thiết trong từng trường hợp, nhằm thu thập các bằng chứng kiểm toán về quá trình thực hiện dự án và số liệu, thuyết minh trong báo cáo quyết toán dự án hoàn thành.

Trong phạm vi giới hạn của dịch vụ kiểm toán này, việc kiểm tra hiện trường không thuộc trách nhiệm của Kiểm toán viên.

Các thủ tục kiểm toán được lựa chọn dựa trên xét đoán của kiểm toán viên, bao gồm đánh giá rủi ro có sai sót trọng yếu trong Báo cáo quyết toán dự án hoàn thành.

III. KẾT QUẢ KIỂM TOÁN:

Sau khi thực hiện các thủ tục nói trên, kết quả cuộc kiểm toán như sau:

1. Khái quát chung về dự án:

1.1. Các nội dung chủ yếu:

- Tên dự án: Xây dựng 08 Tiêu chuẩn Quốc gia về hạ tầng trạm sạc xe điện tại Việt Nam
- Chủ đầu tư: Công ty Cổ phần Công nghệ Bảo Lộc

- Nội dung và quy mô đầu tư: Xây dựng 08 Tiêu chuẩn Quốc gia về hạ tầng trạm sạc xe điện tại Việt Nam
- Nguồn vốn đầu tư: Vốn của Công ty và vốn đối ứng
- Các Nhà thầu chính tham gia thực hiện dự án; Hình thức lựa chọn Nhà thầu; Hình thức Hợp đồng; Giá trị Hợp đồng: Xem chi tiết tại **Phụ lục số I** kèm theo.

2. Hồ sơ Quyết toán của dự án:

Hồ sơ chứng từ của dự án được chủ đầu tư tập hợp phục vụ công tác quyết toán và cung cấp cho đơn vị kiểm toán để làm căn cứ kiểm toán và chủ đầu tư chịu trách nhiệm về hồ sơ đã cung cấp.

Hồ sơ của dự án về cơ bản được lập đầy đủ theo quy định hiện hành, bao gồm: Các văn bản pháp lý của dự án; Các hợp đồng kinh tế; hóa đơn, chứng từ.

Báo cáo này được lập trước khi khoản thanh toán cuối cùng (4.730$) được ETP thanh toán

3. Hồ sơ pháp lý dự án:

Việc thương thảo và ký kết các Hợp đồng giữa chủ đầu tư với các Nhà thầu, xét trên các khía cạnh trọng yếu, cơ bản phù hợp với các quy định của pháp luật về Hợp đồng.

4. Nguồn vốn đầu tư:

4.1. Số liệu về nguồn vốn đầu tư:

STT	Nội dung	Chi phí dự kiến (USD)	Nguồn vốn đã giải ngân		
			Theo số liệu quyết toán (đồng)	Kết quả kiểm toán (đồng)	Chênh lệch
[1]	[2]	[4]	[5]	[6]	[7]=[6-5]
1	Vốn của Công ty	146.575	6.886.639.956	6.886.639.956	0
2	Vốn đối ứng	146.575			
	Cộng	**293.150**	**6.886.639.956**	**6.886.639.956**	**0**

4.2. Nhận xét, thuyết minh:

- Quá trình quản lý và sử dụng nguồn vốn đầu tư, chủ đầu tư đã cơ bản thực hiện đúng quy định hiện hành.

5. Chi phí đầu tư:

5.1. Số liệu về chi phí đầu tư:

STT	Nội dung	Chi phí dự kiến (USD)	Thực hiện		
			Theo số liệu quyết toán (đồng)	Kết quả kiểm toán (đồng)	Chênh lệch
[1]	[2]	[3]	[4]	[5]	[6]=[5-4]
1	Chi phí xây dựng 08 tiêu chuẩn	**293.150**	**6.886.639.956**	**6.886.639.956**	0
	Cộng	**293.150**	**6.886.639.956**	**6.886.639.956**	**0**

5.2. Nhận xét, thuyết minh:

- Giá trị quyết toán các chi phí đều là các chi phí thuộc phạm vi dự án và không vượt chi phí dự kiến của dự án.
- Giá trị kết quả kiểm toán không có sự chênh lệch với số liệu của Chủ đầu tư.

6. Chi phí đầu tư thiệt hại không tính vào giá trị tài sản hình thành qua đầu tư: Không có

7. Giá trị tài sản hình thành qua đầu tư:

7.1. Số liệu về giá trị tài sản hình thành qua đầu tư:

Đơn vị: Đồng

STT	Nội dung	Thực hiện		
		Theo số liệu quyết toán	Kết quả kiểm toán	Chênh lệch
[1]	[2]	[3]	[4]	[5]=[4-3]
1	Tài sản dài hạn	0	0	0
2	Tài sản ngắn hạn	0	0	0
	Cộng	**0**	**0**	**0**

7.2. Nhận xét, thuyết minh:

- Kết quả kiểm tra giá trị tài sản hình thành qua đầu tư bàn giao, chúng tôi nhận thấy:
  + Tài sản hình thành qua đầu tư từ toàn bộ chi phí đầu tư của dự án được xác định là chi phí chi, không hình thành tài sản
  + Không có sự chênh lệch số liệu giữa kết quả kiểm toán và báo cáo quyết toán.

8. Các khoản công nợ và vật tư, thiết bị tồn đọng:

8.1. Các khoản công nợ:

Đơn vị: Đồng

STT	Nội dung	Theo số liệu quyết toán	Kết quả kiểm toán	Chênh lệch
[1]	[2]	[3]	[4]	[5]=[4-3]
1	Nợ phải thu	0	0	0
2	Nợ phải trả	0	0	0

- Việc xác định nợ phải thu, nợ phải trả các gói thầu phù hợp với giá trị hợp đồng được chấp nhận thanh toán;
- Không có sự chênh lệch số liệu giữa kết quả kiểm toán và số liệu của Chủ đầu tư. Chủ đầu tư đã thanh toán hết cho các đơn vị

8.2. Vật tư, thiết bị tồn đọng: Không có

8.3. Giá trị còn lại của tài sản dành cho hoạt động quản lý dự án: Không có.

9. Nhận xét về việc chấp hành của chủ đầu tư và các đơn vị có liên quan đối với ý kiến kết luận của các cơ quan Thanh tra, Kiểm tra, Kiểm toán Nhà nước (nếu có):

Tại thời điểm kết thúc cuộc kiểm toán, chúng tôi không nhận được các tài liệu liên quan đến ý kiến kết luận của các cơ quan Thanh tra, Kiểm tra, Kiểm toán nhà nước đối với dự án.

Chúng tôi tin tưởng rằng các bằng chứng kiểm toán mà chúng tôi đã thu thập được và kết quả kiểm toán nói trên là đầy đủ và thích hợp làm cơ sở cho ý kiến kiểm toán của chúng tôi.

IV. Ý KIẾN CỦA KIỂM TOÁN VIÊN

Trên cơ sở các hồ sơ, tài liệu được Chủ đầu tư cung cấp và kết quả kiểm tra, theo ý kiến của chúng tôi, xét trên các khía cạnh trọng yếu, quá trình thực hiện dự án đã tuân thủ các quy định về quản lý đầu tư và Số liệu quyết toán đã phản ánh trung thực và hợp lý tình hình quyết toán dự án tại thời điểm lập báo cáo, phù hợp với chuẩn mực kế toán, chế độ kế toán và các quy định pháp lý có liên quan.

V. **KIẾN NGHỊ:**

Chủ đầu tư và các đơn vị có liên quan thực hiện các bước tiếp theo theo quy định của pháp luật hiện hành.

Báo cáo này được lập thành 05 (năm) bộ, gửi Chủ đầu tư 04 (bốn) bộ, Công ty TNHH Hãng Kiểm toán RUBIK lưu 01 (một) bộ./.

Lương Thị Kim	**Nguyễn Hồng Sơn**	**Đặng Đức Huấn**
Tổng Giám Đốc	**Kiểm toán viên**	**Phó Tổng Giám đốc**
Giấy chứng nhận ĐKHN kiểm toán số 1923-2024-302-1	*Giấy chứng nhận ĐKHN kiểm toán số 4495-2024-302-1*	*Phụ trách kỹ thuật*

Thay mặt và đại diện cho

CÔNG TY TNHH HÃNG KIỂM TOÁN RUBIK

CÔNG TY CỔ PHẦN CÔNG NGHỆ BẢO LỘC

Phụ lục I

DỰ ÁN: XÂY DỰNG 08 TIÊU CHUẨN QUỐC GIA VỀ HẠ TẦNG TRẠM SẠC XE ĐIỆN TẠI VIỆT NAM

DANH MỤC HỒ SƠ PHÁP LÝ CHÍNH

STT	Văn bản			Cơ quan ban hành	Giá trị	Ghi chú
	Tên	Ký hiệu, số	Ngày			
[1]	[2]	[3]	[4]	[5]	[6]	[7]
1	Báo cáo		6/15/2023	Công ty Cổ phần Công nghệ Bảo Lộc		
2	Báo cáo		7/15/2023	Công ty Cổ phần Công nghệ Bảo Lộc		
3	Báo cáo 08 tiêu chuẩn		Năm 2024	Công ty Cổ phần Công nghệ Bảo Lộc		
4	Hợp đồng cung cấp dịch vụ hội thảo	1125/HĐDV	Năm 2024	Công ty Cổ phần Công nghệ Bảo Lộc và Công ty TNHH Truyền thông ITOUR Việt Nam	116.000.000	đồng
5	Hóa đơn Vat		1/25/2025	Công ty TNHH Truyền thông ITOUR Việt	116.000.000	đồng
6	Hợp đồng thuê khoán	04/BTL-HĐTKCM	5/10/2023	Công ty Cổ phần Công nghệ Bảo Lộc và Nhóm chuyên gia (đại diện ông Ngô Văn Bắc)	932.699.000	đồng
7	Hợp đồng thuê khoán	05/BTL-HĐTKCM	5/20/2023	Công ty Cổ phần Công nghệ Bảo Lộc và Nhóm Chuyên gia (đại diện ông Nguyễn Cẩm Long)	750.376.500	đồng
8	Hợp đồng thuê khoán	06/BTL-HĐTKCM	5/10/2023	Công ty Cổ phần Công nghệ Bảo Lộc và Nhóm chuyên gia (Đại diện ông Trần Minh Cường)	849.401.000	đồng
9	Hợp đồng thuê khoán	07/BTL-HĐTKCM	5/20/2023	Công ty Cổ phần Công nghệ Bảo Lộc và Nhóm chuyên gia (đại diện ông Đặng Văn Đà)	811.539.000	đồng
11	Hợp đồng thuê khoán	012024/BLT-HĐTKCM	1/4/2024	Công ty Cổ phần Công nghệ Bảo Lộc và Ông Nguyễn Đức Khánh	400.896.300	đồng
12	Hợp đồng dịch thuật	01/BTL-HĐDT	Năm 2023	Công ty Cổ phần Công nghệ Bảo Lộc và Bà Nguyễn Thị Kim Oanh	361.188.000	đồng
13	Hợp đồng dịch thuật	02/BTL-HĐDT	6/1/2023	Công ty Cổ phần Công nghệ Bảo Lộc và Bà Nguyễn Thị Lệ Huyền	182.016.000	đồng
14	Hợp đồng dịch thuật	03/BTL-HĐDT	6/1/2023	Công ty Cổ phần Công nghệ Bảo Lộc và Ông Vũ Quang Vinh	142.200.000	đồng
15	Hợp đồng dịch thuật	04/BTL-HĐDT	Năm 2023	Công ty Cổ phần Công nghệ Bảo Lộc và Bà Giang Thị Thu Hương	142.200.000	đồng
16	Hợp đồng dịch vụ	1209/2024/HĐDV	5/6/2024	Công ty Cổ phần Công nghệ Bảo Lộc và Công ty TNHH Tư vấn đầu tư và Du lịch Quốc tế Thiên Hà	288.450.000	đồng

STT	Văn bản			Cơ quan ban hành	Giá trị	Ghi chú
	Tên	Ký hiệu, số	Ngày			
17	Hóa đơn giá trị gia tăng		5/28/2024	Công ty TNHH Tư vấn đầu tư và Du lịch Quốc tế Thiên Hà	288.450.000	đồng
18	Hợp đồng dịch vụ hội thảo	8621/2025/HĐDV	Năm 2025	Công ty TNHH Tư vấn đầu tư và Du lịch Quốc tế Thiên Hà	467.350.000	
	Hóa đơn	125	1/24/2025		217.200.000	
	Hóa đơn	124	1/24/2025		250.150.000	
19	Sao kê năm 2023				3.383.144.722	
20	Sao kê năm 2024				2.348.071.168	
21	Sao kê đến ngày 23/4/2025				1.155.424.066	
	Tổng tiền thanh toán				**6.886.639.956**	

No: 32/2025/BCKT-RUBIK *Ha Noi, 23rd April, 2025*

INDEPENDENT AUDIT REPORT

REGARDING: FINAL SETTLEMENT REPORT ON INVESTMENT COSTS

Project: Development of 08 National Standards for Electric Vehicle Charging Infrastructure in Vietnam

To: Bao Loc Technology Joint Stock Company

We, RUBIK Auditing Company Limited, have conducted an audit of the final settlement report on the investment costs of the project: "Development of 08 National Standards for Electric Vehicle Charging Infrastructure in Vietnam" provided by Bao Loc Technology Joint Stock Company.

I. RESPONSIBILITIES OF THE PROJECT OWNER AND AUDITOR:

1. Project owner's Responsibilities:

The Project owner is responsible for complying with regulations on investment management during project implementation and for the truthful and fair preparation and presentation of the project's final settlement report in accordance with accounting standards, accounting regimes, and legal regulations related to the preparation and presentation of final settlement reports. The Project owner is also responsible for internal controls deemed necessary to ensure the final settlement report is free from material misstatement due to fraud or error.

The Project owner is responsible for providing the auditor with complete and timely documentation related to the final settlement report and ensuring the legality, truthfulness, and accuracy of such documentation..

2. Auditor's Responsibilities:

Our responsibility is to express an opinion on the compliance with investment management regulations during the project implementation and on the truthfulness and fairness of the final settlement report based on our audit.

We conducted our audit in accordance with Vietnamese Auditing Standards, including Standard No. 1000 – Audit of Final Settlement Report of Completed Projects. These standards require us to comply with ethical requirements and to plan and perform the audit to obtain reasonable assurance about whether the report is free from material misstatement.

II. SCOPE AND BASIS OF THE AUDIT:

1. Legal basis:

- Law on Independent Audit No. 67/2011/QH12 dated March 29, 2011, issued by the National Assembly of the Socialist Republic of Vietnam;
- Law on Standards and Technical Regulations dated June 29, 2006, and Law amending and supplementing a number of articles of 37 laws related to planning dated November 20, 2018;
- Decree No. 127/2007/ND-CP dated August 1, 2007 of the Government detailing the

implementation of certain articles of the Law on Standards and Technical Regulations, and Decree No. 78/2018/ND-CP dated May 16, 2018 of the Government amending and supplementing a number of articles of Decree No. 127/2007/ND-CP on the same subject;
- Circular No. 11/2021/TT-BKHCN dated November 18, 2021, providing detailed regulations on the development and application of standards;
- Decree No. 17/2012/ND-CP dated March 13, 2012 of the Government detailing and guiding the implementation of a number of articles of the Law on Independent Audit;
- Circular No. 67/2015/TT-BTC dated May 8, 2015 of the Ministry of Finance issuing Auditing Standard No. 1000 on the audit of final accounts of completed projects;
- The relevant accounting regulations;
- Vietnam Auditing Standards, including Standard No. 1000 - Audit of Final Accounts of Completed Projects;
- Other related legal normative documents.

2. Documents Provided by the Project owner:

The final project settlement documents provided by the Project owner to the auditors serve as the basis for conducting the audit, as detailed in Appendix I.

3. Scope and Audit Work:

Based on the final settlement documents for the project titled: "Development of 08 National Standards for Electric Vehicle Charging Infrastructure in Vietnam," provided by Bao Loc Technology Joint Stock Company, we conducted the audit of the project's final settlement report with the following contents:

- Review of legal documentation;
- Review of investment capital sources;
- Review of investment expenses;
- Review of non-capitalized investment losses;
- Review of assets formed through investment;
- Review of outstanding debts and leftover materials/equipment;
- Assessment of compliance by the project owner and relevant units regarding the conclusions of inspection, examination, and state audit agencies.

The audit work for the above-mentioned contents includes performing procedures to verify the investment sequence and procedures of the project; reviewing the finalized volumes of completed construction and equipment; finalizing consultancy and other costs; and reviewing and comparing them with the approved designs, cost estimates, signed contracts, acceptance minutes, and as-built drawings. It also includes verifying the application of norms and unit prices in the final settlement, comparing them to the norms issued by relevant regulatory authorities, project-specific norms, approved estimated unit prices, and contract unit prices. Furthermore, it involves checking accounting documents, books, and other audit procedures deemed necessary on a case-by-case basis to collect audit evidence regarding the project implementation process and the data and explanatory notes in the final settlement report.

Within the scope of this audit service, on-site inspections are not the responsibility of the auditors.

The audit procedures were selected based on the auditor's professional judgment, including risk assessment of material misstatements in the final project settlement report.

III. AUDIT RESULTS:

After performing the aforementioned procedures, the results of the audit are as follows:

1. General Overview of the Project:

1.1. Key Information:

- Project Name: Development of 08 National Standards for Electric Vehicle Charging Infrastructure in Vietnam
- Project Owner: Bao Loc Technology Joint Stock Company
- Scope of Investment: Development of 08 National Standards for Electric Vehicle Charging Infrastructure in Vietnam
- Capital Source: Company's own capital and counterpart funds
- Main Contractors, Procurement Methods, Contract Forms, and Contract Values: See details in Appendix I.

2. Project Settlement Documentation:

Project documentation was compiled by the owner to serve final settlement and submitted to the auditing unit. The owner is responsible for the documents provided.

The documentation is basically complete according to current regulations and includes legal documents, economic contracts, invoices, and related vouchers.

This report is prepared before the final payment ($4,730) is made by ETP.

3. Legal Documentation:

The negotiation and signing of contracts between the owner and contractors, in all material aspects, are in accordance with legal regulations.

4. Investment Capital Sources:

4.1. Investment Capital Data:

No	Description	Estimated Cost (USD)	Disbursed capital sources		
			Settlement Amount (VND)	Audit Result (VND)	Difference (VND)
[1]	[2]	[4]	[5]	[6]	[7]=[6-5]
1	Company's Own Funds	146.575	6.886.639.956	6.886.639.956	0
2	Counterpart Funds	146.575			
	Total	**293.150**	**6.886.639.956**	**6.886.639.956**	**0**

4.2. Comments and Explanation:

- The project owner has basically managed and utilized investment funds in accordance with current regulations.

5. Investment Costs:

5.1. Investment Cost Data:

No	Description	Estimated Cost (USD)	Disbursed capital sources		
			Settlement Amount (VND)	Audit Result (VND)	Difference (VND)
[1]	[2]	[3]	[4]	[5]	[6]=[5-4]
1	Cost of Developing 08 Standards	**293.150**	**6.886.639.956**	**6.886.639.956**	0
	Total	**293.150**	**6.886.639.956**	**6.886.639.956**	**0**

5.2. Comments and Explanation:

- The finalized costs are within the project scope and do not exceed the estimated budget.
- There is no discrepancy between the audited results and the Project Owner's figures.

6. Non-Capitalized Investment Losses: None

7. Value of Assets Formed Through Investment:

7.1. Asset Value Data:

Unit: VND

No	Description	Implemented		
		Settlement Amount (VND)	Audit Result (VND)	Difference (VND)
[1]	[2]	[3]	[4]	[5]=[4-3]
1	Long-term Assets	0	0	0
2	Short-term Assets	0	0	0
	Total	**0**	**0**	**0**

7.2. Comments and Explanation:

- Based on the inspection results of the value of assets formed through the investment and handed over, we found that:

+ The assets formed through investment from the total project investment costs are classified as expenses

+ There is no discrepancy between the audit results and the final settlement report.

8. Outstanding Debts and Leftover Materials/Equipment:

8.1. Debts:

Unit: VND

No	Description	Settlement Amount (VND)	Audit Result (VND)	Difference (VND)
[1]	[2]	[3]	[4]	[5]=[4-3]
1	Accounts Receivable	0	0	0
2	Accounts Payable	0	0	0

- Receivables and payables have been determined appropriately based on the contract values approved for payment;

- No discrepancies found between the audit results and the owner's records. All contractors have been paid.

8.2. Leftover Materials and Equipment: None

8.3. Remaining Value of Project Management Assets: None.

9. Comments on the compliance of the Investor and related units with the conclusions of the Inspectorates, Examiners, and the State Audit (if any):

As of the time of the audit conclusion, we have not received any documents related to the conclusions of the Inspectorates, Examiners, or the State Audit regarding the project.

We believe that the audit evidence we have collected and the above audit results are sufficient and appropriate to serve as a basis for our audit opinion.

IV. AUDITOR'S OPINION

Based on the documents and data provided by the Investor and the audit results, in our opinion, in all material respects, the project implementation has complied with investment management regulations, and the settlement data has truthfully and reasonably reflected the project's settlement status as of the reporting date, in accordance with accounting standards, the applicable accounting regime, and relevant legal regulations.

V. RECOMMENDATIONS:

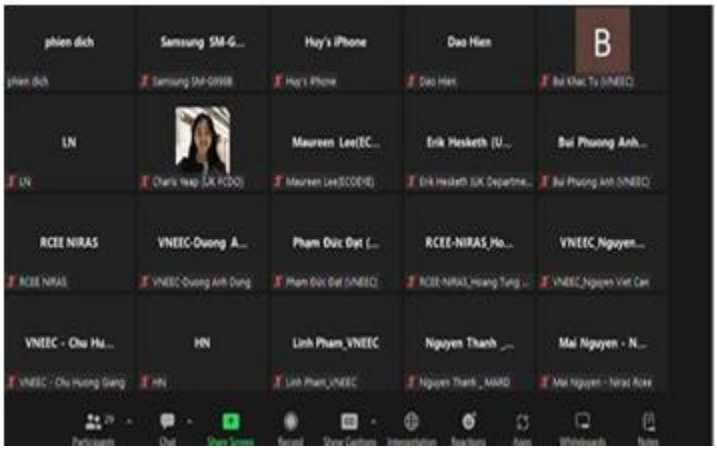
The Project owner and related parties are to carry out subsequent steps in accordance with current legal regulations..

This report is made into five (05) copies, of which four (04) are sent to the Project owner and one (01) is kept by RUBIK Auditing Co., Ltd./.

Luong Thi Kim **General Director** *Certificate of Audit Registration No. 1923-2024-302-1* On behalf of **RUBIK AUDITING CO., LTD** *Hanoi, April ___, 2025*	**Nguyen Hong Son** **Auditor** *Certificate of Audit Registration No. 4495-2024-302-1*	**Dang Duc Huan** **Deputy General Director** *Technical Supervisor*

Annex 3: Workshops

1. Consultation workshop



2. National Standards Council Working Session.

3. Training and communication workshop on draft standards

Annex 4: Draft national standards

The draft national standards (English (start with ISO) and Vietnamese version(start with TCVN)) can be downloaded from this link.