



Completion Report

Project Number: 53434-001
Technical Assistance Number: 9935
August 2022

Georgia: Georgia Global Utilities—Preparing Geothermal Power Projects in West Georgia

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Asian Development Bank

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TECHNICAL ASSISTANCE COMPLETION REPORT

TA Number, Country, and Name: TA 9935-GEO: Georgia Global Utilities—Preparing Geothermal Power Projects in West Georgia		Amount Approved: \$225,000	
		Revised Amount: Not applicable	
Executing Agency: Asian Development Bank	Source of Funding: Technical Assistance Special Fund-other sources	Amount Undisbursed: \$10,600	Amount Used: \$214,400
TA Approval Date: 24 December 2019	TA Signing Date: 18 September 2020	TA Completion Date	
		Original Date: 31 August 2020	Latest Revised Date: 31 December 2021
		Financial Closing Date: 1 April 2022	Number of Extensions: 2
TA Type: Knowledge and support TA	Nature of Activity: Research and development	TA Arrangement: Small-scale	

Description

The objective of the technical assistance (TA) was to support the evaluation of geothermal power's potential in Georgia. The country has been struggling to match unbalanced demand and supply of electricity and the development of new generation sources has been slow as these mostly comprise hydropower plants with long development cycles. (Confidential information deleted.)

(Confidential information deleted.)

(Confidential information deleted.)

Expected Impact, Outcome, and Outputs

Outputs

(Confidential information deleted.) The expected outputs comprise a geothermal feasibility study report, the identification of key sites, and initial environmental and social assessment report.

Implementation Arrangements

Asian Development Bank (ADB) was the executing agency. Private Sector Operations Department (PSOD)/Infrastructure Finance Division 1 (PSIF1) acted as the point responsible for recruitment of the consultant and overall administration of the TA, with collaboration from PSOD/ Private Sector Transaction Support Division (PSTS). The terms of reference for the technical advisor was reviewed by the Office of the General Counsel (OGC), Georgia Resident Mission and PSTS. Recruitment of the consulting firm was conducted using ADB's Consultant Management System (CMS) with guidance and oversight from Procurement, Portfolio, and Financial Management Department (PPFD). The TA was administered also in close collaboration with (Confidential information deleted.)

In February 2020, it was determined that additional three national experts would be required for the project. The costs of the additional experts were accommodated within the approved TA amount. Further, the TA completion date was extended from 31 August 2020 to 31 August 2021 due to delays in processing the TA in CMS. In June 2021, the TA completion date was extended further to 31 December 2021 as the coronavirus disease (COVID-19) pandemic restricted mobility within Georgia. Procurement of consulting services for this TA was conducted using the quality- and cost-based selection (QCBS) method.

Conduct of Activities

After undergoing the evaluation process in the CMS, ADB engaged AFRY Switzerland Ltd. (AFRY) to undertake the consulting services for the TA. Some works were subcontracted to a local firm, the Georgian Geothermal Association. The workstreams for the project were generally divided into: (i) the geoscience stream, (ii) geothermal evaluation, (iii) reservoir engineering studies, (iv) drilling engineering stream, (v) geothermal power project evaluation, and (vi) environmental and social assessment. The Final Technical Report was delivered on 22 October 2021. The TA amount of \$225,000 was approved. The contract with AFRY committed \$214,400 as the maximum cap for payment and \$214,400 was disbursed. The performance of the consulting firm was rated as satisfactory.

Technical Assistance Assessment Ratings

Criterion	Assessment	Rating
Relevance	The outputs of the TA are highly relevant for the company and the country. There is a pressing need to diversify generation sources from hydropower, which involves long development cycles. The exploration of geothermal power as a new source of energy supports Georgia's potential to become less dependent on hydropower.	Highly relevant
Effectiveness	The TA was effective in meeting its objective; (Confidential information deleted.)	Effective
Efficiency	The TA was administered, with two extensions in completion dates. The first extension was due to an increase in the required number of experts. The second extension was due to the evolving situation in Georgia brought about by the COVID-19 pandemic. PPFD was consulted in relation to both extensions. As a result too of the extension, contract variations were implemented to allocate travel-related and contingency budget to increased remuneration given more work was required to be done. PPFD was consulted in connection with the contract variations.	Efficient
Overall Assessment	The TA was successful in achieving its objectives despite the extensions and challenges posed by the pandemic. It was able to successfully complete the preliminary survey and exploration of potential geothermal sites in Georgia.	Successful
Sustainability	(Confidential information deleted.)	Likely sustainable

Lessons Learned and Recommendations

Design and/or planning	Not applicable
Implementation and/or delivery	Whilst the second extension of the completion date was driven by limitations from the COVID-19 pandemic, the first extension arose due to the requirement to increase the number of experts by three more national experts. A conservative approach in sizing the pool of experts would be recommended in the future to avoid delays in implementing the TA.
Management of staff and consultants	Not applicable
Knowledge building	Not applicable
Stakeholder participation	PSIF1/PSOD closely coordinated with internal and external stakeholders involved in the TA process. PSIF1/PSOD involved colleagues from PPFD, OGC, Controller's Department in relation to internal approvals, contract variations, evaluation and recruitment of the consulting firm, etc. (Confidential information deleted.) was likewise consulted throughout the TA engagement, and all parties' support and guidance were vital in the effective implementation of the TA.
Partnership and cofinancing	Not applicable
Replication and/or scaling up	The TA can be scaled up for a follow-on technical assistance. The scope of this TA was limited to the engagement of consultants to assess the geothermal potential in Georgia, without hard capital expenditures such as civil works, purchase/use of drilling equipment, etc. While this TA's outputs were achieved, it is worth considering to enlarge the scope of future TAs to efficiently accommodate the next phases of the project (based on agreed upon conditions) without the need to process another TA internally.
Post-TA financial resource	Not applicable
Other lessons	Not applicable

Follow-up Actions

(Confidential information deleted.) ADB will coordinate a knowledge sharing session with the Sponsor (subject to company's availability) in which the next steps, further requirements/opportunities to support a realizable and bankable geothermal project in Georgia will be discussed.

Prepared by:

David Urbaneja-Furelos

Designation and Division:

Senior Investment Specialist, PSIF1/PSOD

TECHNICAL ASSISTANCE COST

Table A.1: Technical Assistance Cost by Activity
(\$'000)

Item	Original	Amount Revised	Actual
1. Consultants	215.0	0.0	214.4
2. Contingencies	10.0	0.0	0.0
Total	225.0	0.0	214.4

Note: Approved technical assistance (TA) amount was \$225,000 which was finalized to \$214,400 during conclusion of the contract between AFRY Switzerland Ltd. and Asian Development Bank. The sponsor's \$50,000 actual spend was used for administrative expenses of the company in relation to the TA.

Source: Asian Development Bank estimates.

Table A.2: Technical Assistance Cost by Financier
(\$'000)

Item	TASF-other sources	Total Cost
1. Original	225.00	225.00
2. Revised	0.00	0.00
3. Actual	214.40	214.40
4. Unused	10.60	10.60

TASF = Technical Assistance Special Fund.

Source: Asian Development Bank estimates.