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Report Number : ICRR0021242

1. Project Data

Project ID P131921	**Project Name** EU/IPA Energy Sector TA Project	
Country Turkey	**Practice Area(Lead)** Energy & Extractives	
L/C/TF Number(s) TF-16532	**Closing Date (Original)** 31-Mar-2017	**Total Project Cost (USD)** 14,870,399.60
Bank Approval Date 30-May-2014	**Closing Date (Actual)** 28-Sep-2017	

	IBRD/IDA (USD)	Grants (USD)
Original Commitment	7,247,612.55	7,247,612.55
Revised Commitment	12,749,309.36	6,903,203.41
Actual	11,886,316.85	11,874,098.35

Prepared by	Reviewed by	ICR Review Coordinator	Group
Natsuko Toba	Fernando Manibog	Christopher David Nelson	IEGSD (Unit 4)

2. Project Objectives and Components

a. Objectives

The Project Development Objectives (PDOs) were the enhancement of the Turkish energy sector in line with the European Union (EU) energy priorities and strategies in energy efficiency, renewable energy, and the natural gas market (Grant Agreement, May 30, 2014, page 6).

The PAD did not explicitly specify the EU energy priorities and strategies that were expressed in the PDOs. The Bank task team explained that the PDO's reference to "the EU energy priorities and strategies" corresponded with the 2011–2013 Multi Annual Indicative Planning Document (MIPD) adopted by European Commission (EC) in June 2011, where the energy sector was highlighted for EU support (ICR, page 7 and

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PAD, page 2), as follows: “By completing the energy sector liberalization process Turkey hopes to establish a well-functioning, free and competitive energy market. This requires sustainable private sector investments and a well-functioning and regulated energy market, while limiting environmental damage, reducing greenhouse gas emissions, and increasing energy efficiency”. However, the project was approved on May 30, 2014, i.e., after the period of 2011–2013 MIPD.

Consequently, this ICR review will be guided by the PAD’s statement (para 15, page 4) that the achievement of the PDO will be based on an “…assessment of the alignment of Turkey’s legal and institutional framework for electricity, natural gas, energy efficiency, and renewable energy with the EU’s energy acquis.” The PAD further specifies PDO-level indicators that would be measured in 3 specific outcome areas: natural gas market development, renewable energy development, and energy efficiency promotion. The Efficacy section of this ICR Review has been organized accordingly.

b. Were the project objectives/key associated outcome targets revised during implementation?

No

c. Will a split evaluation be undertaken?

No

d. Components

The project supported following five components. Although the ICR reported actual and appraisal costs as equal, there was actually a cancelled amount of EUR 0.8 million. This ICR Review uses the final, contract-based cost figures in the last Interim Financial Report (IFR) of December 31, 2017.

1 . Ministry of Energy and Natural Resources (MENR) (Appraisal: EUR 0.925 million, Actual: EUR 2.49 million): (i) institutional review and capacity building of the MENR and (ii) review of alignment of Turkey’s legal and institutional framework for electricity, natural gas, energy efficiency and renewable energy with the EU’s energy acquis.
2 . Natural Gas Market Development (Appraisal: EUR 2.50 million, Actual: EUR 1.11 million): (i) support for the unbundling of the national gas supply and transmission company Petroleum Pipeline Corporation of Turkey (BOTAŞ); and (ii) design and regulations for a gas trading platform and a plan for effective gas market opening.
3 . Renewable Energy Development (Appraisal: EUR 2.20 million, Actual: EUR 2.19 million): (i) a review of current situation, barriers and road map; (ii) renewable energy grid integration; and (iii) business development services to small and medium-sized industries.
4 . Energy Efficiency (Appraisal: EUR 4.50 million, Actual: EUR 4.55 million): (i) market development including business development services to small and medium-sized industries and (ii) capacity building for commercial energy efficiency lending market.
5 . Visibility and Public Awareness: (Appraisal: EUR 0.5 million, Actual: EUR 0 million).

In addition to the above, the project costs in the project appraisal document (PAD, May 29, 2014, pages 6-

7) included costs of the MENR and other counterparts, estimated at EUR 0.45 million, but actual cost was not reported in the ICR.

e. Comments on Project Cost, Financing, Borrower Contribution, and Dates

Project Cost

The World Bank's internal trust fund system shows that the original grant amount was US$12.65 million. However, actual disbursements were US$11.87 million, with the difference accounted for by changes in exchange rates between the Euro and the US dollar, as well as cancelled and undisbursed amounts.

Financing

The EU Instrument of Pre-accession Assistance Trust Fund (EU/IPA TF) provided an EUR 10.625 million grant as a recipient executed trust fund (RETF) to finance all five project components. The project disbursed 97 percent of the grant and the undisbursed grant amount of EUR 0.27 million was cancelled on March 22, 2018. The remaining undisbursed but already refunded grant amount was yet to be cancelled as of May 4, 2018.

Borrower Contribution

The borrower contribution at appraisal was an estimated EUR 0.45 million (PAD, May 29, 2014, page 6). Due to the lack of a reporting system, the borrower's contribution is shown as zero, although counterpart staff time was contributed.

Dates

The Financing Agreement between the EU and Government of Turkey was dated March 27, 2013. An Administrative Agreement between the EU and the World Bank was signed on November 6, 2013. The project was approved and became effective on the same date on May 30, 2014, or about 15 months delayed from the signing of the Financing Agreement due to legal ambiguities. These were overcome when the Minister of Energy and Natural Resources obtained authorization to sign international agreements as per Law number: 244. As a result, the Grant Agreement was finally signed. The midterm review (MTR) was on April 4, 2016. To complete the planned activities, the original closing date of March 31, 2017 was extended by six months to the actual closing date of September 28, 2017 at a level-two project restructuring on February 17, 2017. At the time of restructuring, only 50 percent of the grant had been disbursed; it also included changes in the results framework to update the dates of target achievements. No other project restructuring occurred.

3. Relevance of Objectives

Rationale

The PDOs were strategically aligned with the Bank Turkey Country Partnership Framework (CPF) for the FY18–FY21 when the project was closing in 2017.

- Alignment with strategy

The PDOs were relevant to two objectives of the CPF, namely Objective 7 (Improved Reliability of Energy Supply and Generation of Green Energy) and Objective 9 (Increased Sustainability of Infrastructure Assets and Natural Capital). This project addressed the CPF's Objectives 7 and 9 by: (i) building the capacity in human resources, markets and regulations; and (ii) energy sector infrastructure planning and project preparation, focusing on renewable energy, energy efficiency, and the natural gas market.

Objective 7 of the CPF supported Turkey in reducing its energy dependence, succeeding in energy reform, and diversifying its energy generation with more renewables. Harmonization with EU standards was a key objective of the CPF. The CPF program encompassed two areas. The first was to increase the percentage of renewable electricity generation and improving its integration into the grid through the ongoing projects: Renewable Energy Integration (P144534), Private Sector Renewable Energy and Energy Efficiency (P124898), Geothermal Development (P151739), and EU/IPA Energy Sector Technical Assistance (TA) (P131924 and P151934). The second was to develop energy trading and restructure the of Petroleum Pipeline Corporation of Turkey (BOTAŞ) through TAs and Development Policy Loans. Objective 9 supported Turkey in improving the efficiency of energy consumption as critical for Turkey's competitiveness and sustainable economic growth with positive impacts on climate change.

- Country context

The PDOs were outcome-oriented as it aimed at achieving "the enhancement of the energy sector". However, the outcomes were measured against targets that were rather process-oriented, such as "approve a program, a design, regulations and a plan; and receive and review financing applications". Hence, the level of "enhancement" was preliminary. The CPF assessed a modest risk for "Institutional capacity for project implementation and sustainability due to coordination issues, institutional restructuring and weak ownership of projects by implementing agencies." Therefore, the PDOs were appropriately pitched for development status and capacity in the country as described in the CPF. The project was affected by the weak capacity of the Project Implementation Unit (PIU) during the first half of implementation and institutional restructuring. However, the latter half showed the improvement in the PIU's capacity.

- Previous sector experience

One year after the approval of this project on May 30, 2014, the EU/IPA Energy Sector Technical Assistance (TA) Program - Phase 2 Project (P151934) was approved on June 19, 2015, as the second "installment" in a multi-year technical assistance program to support the EU/Turkey energy agenda. Rather than the broad "enhancement of the sector", the second TA set more specific PDOs, namely, "to develop the administrative and technical capacity of relevant institutions to achieve an increasing alignment with the EU Acquis and the Europe 2020 targets in the areas of (1) energy efficiency, (2) internal energy market, and (3) long-term energy planning and modelling." The Phase 2 TA's PAD more clearly stated specific alignments of EU, i.e., 2020 energy sustainability targets, "The overall objective of the program is the achievement of a secure, liberal and transparent Turkish energy market in line with the EU Acquis and Europe 2020 energy sustainability targets." The Phase 2 TA project had been prepared before the first project was approved. Therefore, the lessons learned section of the PAD of Phase 2 TA did not incorporate the implementation experience of this project.

Two other new lending projects (except additional financings) were approved in FY2017 after this project: Turkey Geothermal Development Project (P151739) and Azerbaijan and Turkey Trans-Anatolian Natural Gas Pipeline Project (TANAP, P157416). TANAP was part of the Southern Gas Corridor Program to improve the security and diversity of the energy supply of Turkey and the EU by bringing natural gas from the Caspian region to Europe. The former's PDO was to scale up private sector investment in geothermal energy development and the latter's PDO was to diversify Azerbaijan's gas export markets and improve the security of Turkey's and South Eastern Europe's energy supply. Both PADs noted that Turkey harmonized many of its laws and regulations with EU standards. However, both PADs showed no compelling evidence that this TA project influenced the Bank's engagement with the sector so that Turkey would set more challenging PDOs in these two new lending projects than this TA project earlier in the engagement.

Therefore, no evidence was found that later projects included outcomes consistent with progress over time as compared with earlier projects. Such expectation would not always be realistic because some of the projects' approvals could be delayed due to slow preparation. However, the PDOs of the later projects were consistent with this TA project's PDOs.

- Relevance at Appraisal

At appraisal, the PDOs were relevant to the World Bank Turkey Country Partnership Strategy (CPS) for the FY12-15. The CPS Objective 3 was: "deepened sustainable development, including policy advice and financing to address energy, environmental and climate change challenges in an integrated manner."

Rating
Substantial

4. Achievement of Objectives (Efficacy)

Objective 1
Objective
The enhancement of the Turkish energy sector in line with the European Union (EU) energy priorities and strategies.

Rationale
This TA and the second one aimed at aligning Turkey with the Energy Acquis. This TA's efficacy is

evaluated in the following three outcome areas. The counter-factual is that the project's outputs and outcomes would not be achieved or available without the project, hence their provision with the project would constitute energy sector enhancements.

First outcome area: renewable energy

Outputs

- Road map of renewable energy (RE) development, RE grid integration plan, procurement, social and environmental safeguards guide and, financial tool for the RE investments.
- A total of 155 small-scale renewable energy projects developed.
- Eight (8) training events for a total of 234 trainees organized by September 2017.

Outcomes

- The MENR approved a plan for the acceleration of small scale renewable energy development.
- Sixty-nine (69) out of 155 feasibility studies were turned into the total investment of US$75.7 million.
- Competitive tenders for total two giga-watt (GW) projects for solar PV and wind energy were organized.
- The above outputs of the roadmaps and tools were utilized by the General Directorate of Renewable Energy's (DGRE's) studies to design the post-2020 RE support mechanism.
- The monitoring, forecasting and control system of solar power plants would be established with TEIAS investment.

Second outcome area: energy efficiency

Outputs

- 260 energy audits and bankability reports completed for industrial small and medium enterprises (SMEs) and other buildings.
- The Articles of the new EU Energy Efficiency Directive (EED) (2012/27/EU) analyzed and a roadmap developed.

Outcomes

- SMEs energy efficiency (EE) market emerged and the capacity of the banking sector to evaluate and finance SME EE projects was improved. Seventy-nine (79) subprojects out of the 260 energy audits were converted into investments, some of which were funded from the World Bank's SME EE Project (P122178).

Third outcome area: natural gas

Outputs

- The Natural Gas Market Legislative and Implementation Report.

- Assessment of European and Turkish gas markets.
- Design and draft regulations for a mechanism for the wholesale trading of natural gas.

Outcomes

- Gas Trading Platform (GTP) design was approved by the MENR, Energy Market Regulatory Authority (EMRA) and the Energy Exchange Istanbul (EPİAŞ). EMRA and EPIAS commenced work to integrate GTP in EPIAS.
- Energy Market Regulatory Authority (EMRA) adopted the regulation on the organized natural gas wholesale market. EPİAŞ initiated the market operations by April 2018.

Rating
Substantial

Rationale
The project's efficacy is rated substantial. The TA improved knowledge, prompted market development, changes in procedures and behavior, and adoption of new operational approaches and policies.

Overall Efficacy Rating
Substantial

5. Efficiency

Ex-ante analysis
At appraisal, economic and financial analyses were not carried out.

Ex-post analysis
The ex-post analysis assessed the efficiency of the operation in terms of: (a) what the expected monetized value of the project's benefits was and the degree to which these targets could be met; and (b) whether the resources could be harnessed efficiently at the design and implementation stages. The ICR bases its analysis on the efficiency of resource use, indicating that for EUR 2.2 million, the project was able to leverage US$75.5 million in RE investments that were constructed or under construction by project closing. And for US$1.58 million, 79 EE projects were implemented or were under construction by project closing, which would yield annual cost savings of US$0.54 million; this points to a capital "payback period" of about 3 years (however, the annual energy savings would accrue over 10 to 15 years). During the project, EE activities involved 260 audits across 848 subprojects.

Efficiency Rating
Substantial

a. If available, enter the Economic Rate of Return (ERR) and/or Financial Rate of Return (FRR) at appraisal and the re-estimated value at evaluation:

	Rate Available?	Point value (%)	*Coverage/Scope (%)
Appraisal		0	0 ☐Not Applicable
ICR Estimate		0	0 ☐Not Applicable

* Refers to percent of total project cost for which ERR/FRR was calculated.

6. Outcome

The relevance of objectives was substantial. The project’s efficacy was substantial. Efficiency was substantial. The project’s overall outcome is satisfactory.

a. Outcome Rating
Satisfactory

7. Risk to Development Outcome

Technical risk is modest. The project did not promote innovative technology. However, global experiences showed instances of poor operational and/or financial performance of small scale renewable energy projects due to lack of capacity and/or ownership, equipment failure, poor operation and maintenance, changes in regulation/tariff regime, etc. Financial risk is high for renewable energy and energy efficiency projects unless supported by the regulation and risk management. This financial risk is especially high for the remaining large number of potential projects that had not yet been turned into investments. Economic risk at both the country and global levels may affect the level of investment in renewable energy and energy efficiency either negatively or positively (e.g., high oil prices). The social and environmental risks in terms of people’s support to renewable energy and energy efficiency projects would be mitigated by the social and environmental safeguards and awareness raising activities that were promoted by the project. The weakening of Government ownership and commitment, and the institutional risks to the unbundling of the national gas supply and transmission company BOTAŞ and opening of gas market are high, which could undermine the progress achieved by the project.

8. Assessment of Bank Performance

a. Quality-at-Entry

The project had a strategic relevance to help Turkey meet its energy sector development objectives through the strategic tripartite collaboration among Turkey, World Bank and European Commission (EC). The three parties strategically used the project to pursue opportunities for EC/World Bank synergies in working with the Turkish authorities, with the Bank's comparative advantage in its long involvement with Turkey's energy sector and the EU's comparative advantage in its relationship with Turkey's Government regarding Turkey's EU accession. All three parties regarded the project as the first "installment" in an envisioned multi-year program. In addition, the EU aimed at moving towards a more sectoral approach in IPA implementation. Furthermore, about 60 percent of the counterpart staff were newly recruited graduates and the project's capacity building activities had strong impacts on the implementing agency, i.e., MENR and other counterpart government agencies.

The project's approach was based on lessons learned from the Bank's long partnership with Turkey. It was critical to integrate analytical and policy operations into national development plans and medium-term programs. The programmatic structuring of work was particularly effective. The project' design reflected the experiences and lessons learnt by the Turkish Government, the EC and the Bank in carrying out technical assistance projects. Turkey has benefited from IPA-financed technical assistance in the past.

Technical, financial, economic and social and environmental safeguards aspects were adequately treated. These aspects would be addressed in feasibilities studies and business plans (financed by the project) for potential investments in energy efficiency and renewable energy projects (not financed by the project).

Policy and institutional aspects were assessed properly. The project was to strengthen these aspects. Implementation arrangements were complicated for: (a) alignment of the EU and the World Bank business procedures and (b) inclusion of a wide range of public sector stakeholders as key beneficiaries. Monitoring and evaluation (M&E) arrangements were reasonable, which was to be conducted quarterly jointly by the World Bank, Ministry for EU Affairs (MEU), and European Union Delegation to Turkey (EUD).

Risk assessments were mostly appropriate. However, the design risk overlooked the possible legislative delay in signing the Grant Agreement as it was first time for the EU's IPA funds for Turkey to be channeled through a World Bank administered trust fund. As discussed on the components earlier in this section, the institutional capacity risk of MENR and the corresponding mitigation measures were inadequate.

Bank inputs and processes were largely adequate. The World Bank task team closely coordinated with the EU, MENR and other stakeholders. The Bank designed contracts to be subject to prior review, which was appropriate given the PIU without prior Bank project experience. However, the Bank lacked attention to the complex tax arrangements, which caused delay in payments as detailed in the fiduciary section below.

Quality-at-Entry Rating

Moderately Satisfactory

b. Quality of supervision

The Bank team's focus on development impact was demonstrated by their intensive procurement and technical support to the PIU throughout implementation. The World Bank hired an extended-term consultant in the Ankara office to follow up daily on implementation. The team included a seasoned task team leader (TTL) based in the headquarters and later a locally based TTL. The Bank brought up the PIU capacity issues at the high-level meetings with the Ministry. As a result, the PIU was supported with additional staff and all contracts were completed successfully.

EU/IPA TF financed the Bank project supervision costs as a Bank executed trust fund (BETF), which was EUR 527,739, about 5.1 percent of the actual project cost (RETF), which was adequate, and about 4.6 percent of the total EU/IPA TF contribution, which was less than eight percent set in the Administration Agreement (November 6, 2013). The undisbursed amount was largely reflected in the trustee's unpaid contribution.

Throughout the implementation, the World Bank's performance reporting was candid. In total, seven Implementation Status and Results Report (ISRs) were filed. Development Objective (DO) ratings (i.e., for achieving PDOs) were Satisfactory for two ISRs and Moderately Satisfactory for the remaining five. The last rating was Moderately Satisfactory.

The ICR reported the number of missions as sufficient but did not specify the actual number in total or per year. The Bank task team clarified that as the TTL was based in Ankara, the project was supervised daily. When the TTL visited, he supervised all other energy sector operations. Midterm review (MTR) was on April 4, 2016. However, the results of the MTR were not reported in the ICR. The task team clarified that the MTR had no substantial finding other than limited disbursement and persistent capacity constraints.

The World Bank's timely action to extend the project closing date enabled satisfactory completion of all activities. Half of the grant was disbursed during the extended period of 10 months (comprising a six-month implementation period, followed by a four-month disbursement grace period).

The Bank's performance had some shortcomings. The Bank experts' review of outputs helped produce more effective reports. However, changes in Bank reviewers sometimes resulted in contradicting comments on the same reports. The Bank experts' reviews significantly contributed to the outputs with their international experience. However, in some cases, the Bank experts' reviews needed to adapt to Turkey's specific circumstances and lacked familiarities with the Turkish legal, regulatory and policy practices.

Quality of Supervision Rating

Moderately Satisfactory

Overall Bank Performance Rating

Moderately Satisfactory

9. M&E Design, Implementation, & Utilization

a. M&E Design

The theory of change was not sound and was not reflected in the results framework. While the key activities and outputs led to the expected outcomes, the expected outcomes did not directly lead to the PDOs that were at higher level. This disconnect was clearly reflected in one PDO level target, i.e., "The MENR approves a program for the enhancement of the Turkish energy sector…." Key activities were mainly the energy sector assessment and planning, including feasibility studies for renewable energy and energy efficiency project, and associated training and public awareness raising. The outputs were largely reports and a project website in Turkish language and the outcomes were largely approval of outputs reports. These outcomes could lead to next steps to implement the approved program to enhance the Turkish energy sector in line with the EU energy priorities and strategies. However, these next steps were outside the project scope. The objective of "enhancement" was not clearly defined.

PDO level indicators encompassed all expected outcomes (PAD, pages 4-5) of the PDO statement. However, all expected outcomes (PAD, pages 4-5) were process-oriented, i.e., to "approve a program, a design, regulations and a plan; and receive and review financing applications", which did not directly reflect the PDO "enhancement of the energy sector". The intermediate results indicators were adequate to capture the contribution of the operation's components (activities) and outputs toward achieving PDO-level outcomes. However, the intermediate results indicators related to "consultant engagement" were inappropriate as they were inputs. The indicators were mostly descriptive, specific, achievable and time-bound. Most of the indicators were outputs of the project activities and thus attributable to the project activities. The baselines and targets were available for all indicators. The MENR was mainly responsible for the monitoring and evaluation (M&E) and others included BOTAŞ, Turkey Electricity Transmission Company (TEIAŞ), EMRA, consultants, etc. M&E design and arrangements were well-embedded institutionally because M&E was planned to be conducted jointly by the World Bank, MEU and EUD on a quarterly basis. However, due to the lack of clarity of the PDOs and gap between the PDOs and expected outcomes, the M&E design did not provide decision makers with methodologically sound assessments of the level of achievement of the PDOs.

b. M&E Implementation

Most of the M&E data in the results framework was collected on time by the PIU, recorded in ISRs and reported to EU and the Steering Committee on time. However, some of the annual progress indicators were not collected according to the results framework in the PAD, such as "Changes to legal framework completed", which was deemed to be an important precondition to achieve before the final target at the project completion can be achieved.

None of the weaknesses in M&E design, such as specification of indicators to clarify the PDOs, were corrected during implementation. The types of M&E indicators were mainly descriptive and subjective and thus not subject to statistical or methodological analysis. Therefore, the quality of M&E indicator collection could not be assessed. Nevertheless, the Steering Committee went beyond just implementing the M&E system of the results framework in the PAD. They monitored and evaluated the project progress and results better and more meaningfully.

c. M&E Utilization

M&E findings were shared with the various stakeholders, such as EU, Bank and intergovernmental agencies (e.g., TEIAS, EMRA, BOTAS, etc.). However, the M&E data played negligible role in decision making. The M&E data were mostly used for evidence of achievements of outputs and inputs such as consultants, rather than outcomes. The Bank task team's intensive implementation support, the PIU's strong dedication and ownership, and the Steering Committee's persistence in following up helped the project deliver almost all envisaged outputs and meet most of the project targets. The M&E utilization barely had impact on the project's success.

M&E Quality Rating

Modest

10. Other Issues

a. Safeguards

Environmental safeguards

At appraisal, the project was classified as Category B under OP/BP 4.01 (Environmental Assessment) because renewable energy and energy efficiency projects for small and medium enterprises (SMEs) and buildings would be prepared as part of the business development services. The consultants' terms of reference specified that they would carry out their analysis and prepare the audit and feasibility reports and business plans with reference to World Bank's safeguards policies including 4.01 on Environmental Impact Assessment and 4.12 on Involuntary Resettlement. However, the final specification of the Environmental Assessment documents for these projects would depend on the finance source selected and each SME would decide on the party who would prepare this environmental documentation. The Bank team confirmed that the consultants' reports adequately referred to the Bank safeguards policies and therefore the safeguards policies were complied with.

Social safeguards

The project did not trigger any social safeguards policy.

b. Fiduciary Compliance

Financial Management (FM)

The financial management (FM) ratings during implementation varied between Satisfactory and Moderately Unsatisfactory on the compliance with the reporting requirements of the Grant Agreement. The compliance problem mainly stemmed from the high staff turnover of the PIU and lack of qualified FM staff. The Bank's ad hoc assistance to the PIU for financial reporting and payment accounting were insufficient when the PIU lacked the necessary FM capacity. Nevertheless, the MENR obtained clean project audit reports from the Treasury controllers. The MENR had a stable FM staffing level since 2017 and the FM arrangements were satisfactory as of the ICR preparation in March 2018. Nearly all (97 percent) of the RETF were fully accounted for by the time of end disbursement date. The ICR did not report corruption or misuse of funds associated with the project. At appraisal, the counterpart funding was an estimated EUR 0.45 million (PAD, May 29, 2014, page 6). The actual cost was not reported in the ICR because the counterpart funding was in-kind staff costs and the Turkish Government does not report a project specific staff cost.

The Bank overlooked the complex tax arrangements at appraisal. Value added tax (VAT) exemption, stamp tax and payment procedures emerged as the main payment challenges. It took about one year for the PIU to obtain VAT exemption certificate from relevant public bodies. The Administration and Grant Agreements did not allow the VAT exemption for the sub-contractors. While IPA projects were legally exempt from any taxes, the contract between the PIU and the consultants were subject to stamp tax. Contractors had not been notified in the contract about their liability to pay the stamp tax.

<u>Procurement</u>
Over the life of the project, procurement implementation was in compliance with the requirements of the Grant Agreement, the procurement plan and procurement/consultant guidelines applicable for the project. Procurement compliance has been Moderately Satisfactory throughout the project. As arranged at appraisal, the MENR PIU carried out the procurement. Their procurement capacity was established through on-the-job training and intensive support by the World Bank with a short-term support financed from the MENR's Global Environment Facility grant. Capacity constraints and unfamiliarity with the World Bank procurement procedures delayed the signing of the consulting services contracts; however, later the PIU became familiar with the Bank procedures and contracts were completed. The project had no case of misprocurement. Changes in Bank personnel occasionally resulted in contradicting procurement opinions and requests from the Bank. The procedures on the Bank's 'No Objection Letter' for all phases in the tendering process caused delays in each stage until the signing of the contract mainly because of late responses by the Bank.

<u>Disbursement</u>
The ICR did not report any cases of disbursement for ineligibility of expenditures.

c. Unintended impacts (Positive or Negative)
Not applicable.

d. Other
Not applicable.

11. Ratings

Ratings	ICR	IEG	Reason for Disagreements/Comment
Outcome	Satisfactory	Satisfactory	---
Bank Performance	Moderately Satisfactory	Moderately Satisfactory	---
Quality of M&E	Modest	Modest	---
Quality of ICR		Substantial	---

12. Lessons

The following are lessons learned from the ICR (paras 112 to 114, and 116) with some paraphrasing:

1 . **The project showed the high potential of maximizing finance for development through large scale technical assistance services in Middle Income Countries.** The development impact of this TA proved the high value added of EU/World Bank joint operations and developed a brand-new business line to accommodate the MENR's capacity-building demand. Eventually, the tools produced, audits conducted, and feasibility studies drafted ended up mobilizing considerable private sector financing for RE and EE. Furthermore, the observed outcomes during the implementation period are just the initial steps of this achievement and further expansion is expected. On the other hand, the regulations developed based on the project outputs, helped to level the playing field in energy sector; particularly the natural gas subsector.

2 . **For the EU/World Bank joint operations, the design of implementation arrangements, particularly their procedural and operational compatibility, deserves utmost attention.** In the tripartite legally binding operations, procedural hurdles of any party can result in a domino effect in the preparation and implementation period. Therefore, in the design stage, the procedural risks must be identified in detail, including the mitigation measures.

3 . **The results framework must be designed properly to accurately assess the impact of the RETF TA at this scale.** It is a challenging task to design an attributable, measurable, and realistic RF for large-scale TA operations with a list of consultancy services. Therefore, an experienced M&E specialist should be included in the task teams at the design stage to avoid any vagueness in the RF design. The weak RF design caused weak M&E utilization and difficulty in assessing the overall performance of this operation.

13. Assessment Recommended?

No

14. Comments on Quality of ICR

The ICR provides a detailed overview of the project. The narrative supports the ratings and available evidence. It is candid and makes considerable efforts to navigate the causal chains to focus on results. The ICR follows the majority of the Bank Guidance ICR for Investment Project Financing Operations (Operations Policy and Quality, 2017). Nonetheless, improvements are still possible in terms of providing critical assumptions (e.g., Figure 1 on the Results Chain for the Project), selecting only 3 to 5 most valuable lessons and separating them from recommendations, and ensuring that the data are consistent throughout the report.

a. Quality of ICR Rating
Substantial