

**The Scientific and Technological  
Research Council of Türkiye (TÜBİTAK)  
Project Implementation Unit (PIU) for the  
TÜRKİYE GREEN INDUSTRY PROJECT**

**TERMS OF REFERENCE  
IT CONSULTANT  
(Ref: TÜBİTAK CS-INDV-7)**

Country: **Türkiye**  
Duty Station: **Ankara**  
Type of Job Posting: **External**  
Employment Type: **Project-Full-time**  
Application Deadline: **26/03/2024**  
Type of Consultancy: **Individual Consultancy**

**BACKGROUND**

“**Türkiye Green Industry Project (TGIP)**” is a project implemented by Ministry of Industry and Technology (MoIT), the Small and Medium Enterprises Development Organization of Türkiye (KOSGEB) and the Scientific and Technological Research Council of Türkiye (TÜBİTAK) financed through World Bank. The project is designed to accelerate the green transformation in industry and thus intensify decarbonization efforts. The project duration is six years and the project implementation entities are MoIT, KOSGEB and TÜBİTAK. The Project will be implemented through four components:

**Component 1:** Support industrial SMEs improve their energy and resource performance and reduce their carbon emissions, which will be managed by KOSGEB and aims to provide reimbursable financing for investments in solar energy, resource efficiency, and circular economy.

**Component 2:** A Contingent Emergency Response Component to be managed by KOSGEB in the event of an eligible crisis or emergency, in line with World Bank Policy: Investment Project Financing

**Component 3:** Support the Green Innovation of Industrial Enterprises, which will be managed by TÜBİTAK and aims to provide matching grants and reimbursable financing for green firm-level and platform-level innovation (product and process).

**Component 4:** Project management and institutional development, which will be managed by DGI of MoIT and aims to coordinate project activities, define an eligible green technology taxonomy, provide technical assistance to MoIT and partners, qualify and certify green transformation experts, establish a green knowledge management system for industries, and provide awareness to firms about the project’s activities and results.

TÜBİTAK will manage **Component 3** that includes four subcomponents, targeting different levels of Türkiye’s R&D and innovation ecosystem. With this component, TÜBİTAK will provide matching grants, and reimbursable financing to private enterprises and service providers to finance of their green innovation subprojects. Projects that will be supported through R&D and innovation support programs carried out by TÜBİTAK within the scope of the TGIP are defined as “subprojects”.

In line with the existing international definitions, green innovation support would include the creation, adoption and adaptation of new or significantly improved products (goods and services), and business processes, which will improve sustainable development and lead to more efficient and responsible use of natural resources and positive impacts on the environment (including energy savings, pollution reduction or prevention, waste recycling, resource efficiency, etc.).

The four subcomponents that will be carried out by TÜBİTAK are given below:

Name of the Subcomponent	The Aim of the Subcomponent
<b>Subcomponent 3.1: Climate-informed and Green Innovation Technology Extension Program<sup>1</sup></b>	To support technology and innovation needs assessments at the firm level and at exploring possible solutions based on an expert diagnosis.
<b>Subcomponent 3.2 Green Transformation in Industry Program<sup>2</sup></b>	To support climate-informed and sustainable green innovation by R&D and innovation subprojects of private sector firms including consortia of firms and/or technology providers, research centers, and universities.
<b>Subcomponent 3.3: Industrial Innovation Networks (SAYEM) Green Transformation Program<sup>3</sup></b>	To support formation of networks of multiple stakeholders to engage holistically in the development of climate-informed, green innovation solutions for industry.
<b>Subcomponent 3.4: Capacity Building and Technical Assistance to TÜBİTAK</b>	To support the capacity building of TÜBİTAK in assistance of the implementation of the Project

## JOB DESCRIPTION

We are looking for an IT Consultant responsible for overseeing and executing all aspects of information technology and systems appropriate to the objectives related to the **TGIP Component 3**. The IT Consultant will make critical contribution to ensure the smooth functioning of IT-related activities and the successful implementation of technological solutions, and related IT Platforms while continuously improving its operation. The IT Consultant will report to the Project Management Unit of the TÜBİTAK Project Implementation Unit (PIU) coordinating with the IT Consultants.

## DUTIES AND RESPONSIBILITIES

The IT Consultant will be expected to perform and deliver the following tasks:

- Making technical analyzes and designs of software applications for which business analyzes have been made,
- Conducting unit tests and preparing technical documentation
- Following up and resolving the findings regarding the developed applications
- Providing technical inputs to improve the planning, development and implementation of TÜBİTAK's relevant IT systems regarding monitoring, payment, integration and reporting operations of the Project,
- Testing the necessary technical analyzes during the development phase of relevant IT systems together with the PIU,

<sup>1</sup> Subcomponent 3.1; Call URL: <https://tubitak.gov.tr/en/funds/industry/national-support-programmes/content-1831-climate-informed-and-green-innovation-technology-extension-program>

<sup>2</sup> Subcomponent 3.2; Call URL: <https://tubitak.gov.tr/en/funds/industry/national-support-programmes/content-1832-call-for-green-transformation-in-industry>

<sup>3</sup> Subcomponent 3.3; Call URL: <https://tubitak.gov.tr/en/funds/industry/national-support-programmes/content-1833-sayem-green-transformation-call>

- Providing cooperation and coordination with relevant departments of TÜBİTAK, PIU members and other Consultants or consultants assigned for the Project, and supporting them within the scope of their job descriptions,
- Performing other duties that may be assigned by the PIU Management within the scope of the Job Description,
- Ensuring that national legislation and the above-mentioned responsibilities and duties are properly followed and complied with, and reporting duties and other duties are delivered on time.

## REQUIRED SKILLS AND EXPERIENCE

### Education

- Bachelor's degree in Computer Engineering or Software Engineering or related fields,
- Master's degree in or related engineering fields will be an asset.

### Experience

- Minimum 3 (three) years of general work experience as an IT Consultant (Working as a software developer in projects with at least 15,000 users and documenting this),
- Minimum 3 (three) years of experience in Java, Spring Framework, JSE, JAVA EE, JAVA MVC framework,

### Language

- Proving English proficiency with the score obtained from one of the exams below (No validity period is required for the scores obtained from the exams specified in the table).

Exam Type	KPDS UDS YDS YÖKDİL	TOEFL IBT	TOEFL CBT	TOEFL PBT	FCE	CAE	CPE
<b>Required Minimum Score</b>	70	84	221	561	C	B	C
<ul style="list-style-type: none"> <li>• An English proficiency score is not required from candidates who prove that they took 100% of all courses in English during their undergraduate education (approved document from the University), except for courses that are not related to the main field such as Turkish, History of Revolution.</li> <li>• In a country where the official language is English; English proficiency score is not required for those who have received a bachelor's or master's degree.</li> </ul>							

KPDS	: Public Personnel Foreign Language Exam
ÜDS	: Interuniversity Board Foreign Language Exam
YDS	: Foreign Language Proficiency Test
YÖKDİL	: Higher Education Institutions Foreign Language Exam
TOEFL IBT	: Test of English as a Foreign Language – Internet-Based Test
TOEFL CBT	: Test of English as a Foreign Language – Computer-Based Test
TOEFL PBT	: Test of English as a Foreign Language – Paper-Based Test
FCE	: First Certificate in English
CAE	: Certificate in Advanced English
CPE	: Certificate of Proficiency in English

### Other

It is preferred that candidates have the following skills:

- Experience in World Bank projects will be an asset,
- Experience in World Bank project operations will be an asset.
- Understanding project management concepts, including planning, implementation, and

coordination,

- Effective collaboration with project teams, partners, and stakeholders to ensure alignment and shared understanding of PIU processes and goals,
- Strong analytical, communication, and interpersonal skills,
- Highly organized in both time and in resources, with the ability to work efficiently to meet strict deadlines,
- Experience in writing functional and technical requirements of the IT tools and Data Modelling,
- Having knowledge about OOP, SOLID principles, data structures, algorithms, multi-layered software architectures and design patterns,
- Having developed applications with relational databases and having good knowledge of SQL and/or T-SQL,
- Experience with Azure Devops, CI/CD processes and Git,
- Having knowledge about Agile software development processes,
- Having knowledge and experience in container architecture, Kubernetes, Docker,
- Having knowledge and experience in Java, Spring Framework, JSE, JAVA EE, JAVA MVC framework, Javascript, SQL and RESTful/SOAP web services or have a certificate in these fields ,
- Having knowledge and experience in application development with .NET Core,
- Having knowledge and experience about RESTful, WCF Web Services,
- Having knowledge about ELK Stack (Elasticsearch, Logstash, Kibana),
- Having knowledge and experience in Enterprise Software Architecture, ORM (Entity Framework, Dapper),
- Having experience in the use and management of queuing mechanisms (RabbitMQ, Kafka, etc.),
- Having knowledge and experience in software security and secure software life cycle,
- Having knowledge and experience about MicroService architecture,
- Having knowledge and experience about user identification and authorization methods and technologies (OAuth2, Single Sign On (SSO), Electronic Signature, Mobile Signature),
- Being able to keep up with the intense and stressful work tempo,
- Being suitable for teamwork, solution-oriented, disciplined and open to development,
- Ability to travel without restriction,
- Adaptable to flexible working hours,
- Teamwork skills,

## **DURATION AND LOCATION OF EMPLOYMENT**

- The IT Consultant will be based in Ankara as a member of the Project Implementation Unit of the TÜBİTAK. The Project has a 6-year duration. The planned duration of service of the IT Consultant is foreseen to start in the second quarter of 2024. The IT Consultant will be employed on a full-time basis. Contracts will be issued annually and there is a 2-month trial period. Contracts may be renewed depending on the needs of the Administration, the performance of the Consultant and the status of the financial source.