

**IMPLEMENTATION PROCEDURES FOR APO IN-COUNTRY
DEVELOPMENT OF DEMONSTRATION COMPANIES (DMP) PROJECT ON**

**PRODUCTIVITY IMPROVEMENT THROUGH AI APPLICATION IN CARBON ACCOUNTING AND
EMISSION MANAGEMENT**

About DMP

DMP aims to develop model companies/organizations that showcase good practices of productivity improvement with the support of resource persons and NPOs and the commitment of the target companies/organizations. Through capacity building on practical productivity knowledge and dissemination of the results, the program demonstrates good practices for other companies/organizations to embark on similar improvements.

An APO Demonstration Company is defined as a model company/organization established through APO Demonstration Company projects to showcase good practices of productivity improvement for other companies/organizations in the implementing country and other APO members to embark on similar improvements.

1. Scope

DMP establishes demonstration companies/organizations for applications of productivity concepts, tools, and techniques on topics related to the APO Vision 2025 such as sustained productivity growth, Green Productivity, robust innovation ecosystems, inclusive engagement, shared prosperity, and other topics meeting the needs of member economies.

2. Methodology

- a. DMP projects are conducted through collaboration with a team of individual or institutional resource persons from outside the recipient country. Interested parties should submit proposals to the APO Secretariat by the deadline.
- b. Project implementation stages comprise the analysis of current challenges and opportunities for further productivity and efficiency improvement in the existing Carbon Intelligence Platform of the participating company, and development and integration of an AI module with the platform to provide more accurate, customized (customer-specific), data-driven insights into carbon accounting and emission management for optimization of decarbonization efforts and minimization of greenwashing concerns.
- c. The project is carried out through data collection/analysis, research and analysis, programming and coding, and iterative testing; and visiting and holding consultative meetings with stakeholders, proposing recommendations, and strengthening capacity in implementation, dissemination, and other relevant activities within the deliverables and methodology agreed by the APO Secretariat and recipient member/NPO - Ministry of Industry and Technology, Turkiye (NPO Turkiye). The activities may be conducted in any modality deemed most feasible and appropriate, with priority given to face-to-face arrangements.
- d. The AI integrated system will be developed by the agreed deadline. Improvements may be required until acceptance by the APO Secretariat, NPO Turkiye, and demonstration company - Reengen Enerji Teknolojileri A.S.

3. Resource Persons

Tasks

- a. Preparing and proposing project methodology, approach, scope, etc. through close consultation with the APO Secretariat, NPO Turkiye, and Reengen Enerji Teknolojileri A.S.

- b. Undertaking all necessary duties to achieve the intended output(s) as per the agreed arrangement.
- c. Monitoring and evaluating the performance and progress of the productivity enhancement activities of Reengen Enerji Teknolojileri A.S.
- d. Assist the implementing organization – NPO Turkiye in developing dissemination materials and organizing a dissemination event, etc. as per the agreed methodology and project timeline.
- e. Submitting the report to the APO Secretariat by the deadline.
- f. Assisting Reengen Enerji Teknolojileri A.S. in acting as a role model.
- g. Preparing a publication documenting the productivity journey of Reengen Enerji Teknolojileri A.S.

Qualifications

- a. Proven knowledge and experience in AI tools and technologies, including AI multiagent systems, with the ability to develop and manage AI integration projects effectively, including planning, scheduling, and resource allocation.
- b. Expertise in AI deployment and automation on industrial and enterprise scales, multiagent AI systems, and human–AI collaboration.
- c. Expertise in guiding organizations through technical, cultural, and organizational changes that enable digital transformations.
- d. Excellent English verbal and written communication skills to convey complex technical concepts to nontechnical stakeholders as well as ability to build and maintain relationships with NPO Turkiye and other stakeholders throughout project implementation.

Notes:

The detailed scope of work is provided in the Request for Proposal (RFP), which can be found at the following link: <https://www.apo-tokyo.org/procurement-notice/>.

The selection of the participating individual or institutional resource person(s) will be made by the APO Secretariat based on its selection criteria. The APO Secretariat will in no case be responsible or liable for any costs involved in proposal submission, regardless of the conduct or outcome of the selection process.

4. Duration

The maximum project duration is 6 months for stage 1, which may be followed, if necessary, by stage 2 for 3 months, with both implemented in the virtual and/or face-to-face modality. Stage 2 should start with a gap of up to 6 months after completion of stage 1.

5. Implementation

Based on the approved proposal and consultation with applying member economies, a project Implementation plan (PIP) will be developed as the main reference for the project. The APO Secretariat will issue a certificate of completion to Reengen Enerji Teknolojileri A.S. upon completion of stage 1 and a certificate to Reengen Enerji Teknolojileri A.S. upon completion of stage 2. The project may be conducted in the following two stages.

Stage 1. Implementation (up to 6 months)

- a. The resource person(s) analyzes the challenges and opportunities related to productivity through a diagnostic survey of Reengen Enerji Teknolojileri A.S.

- b. The resource person(s) proposes an improvement plan and obtains a consensus on a mutually agreeable action plan and number and duration of consultations.
- c. The resource person(s) implements the approved improvement plan, such as training, capacity building, modification of existing practices, development of new processes, and applications of new technologies, management tools, and productivity improvement methods.
- d. If financial support from the APO is required to implement the improvement plan, a letter of commitment or contract signed by Reengen Enerji Teknolojileri A.S. and NPO Turkiye to ensure proper use of the funds to achieve the intended objectives will be issued based on the approved improvement plan.
- e. The resource person(s), NPO Turkiye, and APO Secretariat communicate to review the diagnosis and progress and recommend ways to resolve problems or administrative bottlenecks faced.
- f. The resource person(s), NPO Turkiye and APO Secretariat review and evaluate the results of the project to determine whether the objectives have been achieved.
- g. NPO Turkiye takes the lead in planning, preparing, and conducting dissemination activities, ensuring multiplier effects of the project in the member. The results and process of the project are disseminated through a locally organized event(s) and materials derived from the project, such as the final report, practical manual, and a multimedia record in a local language (if possible, with an English version or English translation).
- h. NPO Turkiye submits the final project outputs to the APO Secretariat in consultation with Reengen Enerji Teknolojileri A.S. before the completion of this stage.
- i. A report is written by the resource person(s) and uploaded to the APO website as a learning tool to replicate the success of the project.

Stage 2. Follow-up (up to 3 months, implemented 6 months after completion of stage 1)

- i. The resource person(s) provides advice for follow-up implementation activities with emphasis on strengthening results/successes and widening dissemination.
- ii. NPO Turkiye submits an annual report to the APO Secretariat in consultation with Reengen Enerji Teknolojileri A.S. before the completion of this stage.
- iii. Stage 2 can be implemented up to 2 years after the completion of stage 1.

6. Roles and Responsibilities

Implementing organization(s): NPO Turkiye

- a. Identify the most appropriate company(ies) or organization(s) as a venue for demonstration projects.
- b. Assign a team in NPO Turkiye to be fully involved in the project and trained as local subject-matter experts.
- c. Coordinate the overall schedule for implementation of the project.
- d. Provide, in addition to a coordinator(s), local resource persons to work as counterparts to the overseas resource person(s), if necessary.
- e. Arrange all logistic requirements relating to the project (e.g., local transportation, meeting room, interpretation, etc.) for the resource person(s).

- f. Guide and assist Reengen Enerji Teknolojileri A.S. in planning, coordinating, implementing, monitoring, and documenting project activities in consultation with the resource person(s) and APO Secretariat and monitor the process of implementation, particularly the key performance areas.
- g. Coordinate and supervise the preparation of dissemination materials, such as a practical manual and multimedia record.
- h. Conduct a dissemination event(s) such as a workshop, seminar, and industrial visit(s).
- i. Within one month after completion of stage 1, submit the final project outputs, including a final report to the APO Secretariat documenting the entire process of the project; analyzing the results and impact as well as contributions to productivity improvement; and suggesting recommendations for replication in the member utilizing domestic talent, networks, and resources.
- j. Within one month after completion of stage 2, submit the annual project report to the APO Secretariat.

Demonstration company: Reengen Enerji Teknolojileri A.S.

- a. Assign a team and coordinator to work on the project.
- b. Accept and facilitate the training and consultancy services conducted by the resource person(s).
- c. Provide all necessary inputs and information required for the project and extend all necessary local support to the resource person(s), NPO Turkiye, and APO Secretariat.
- d. Implement suggestions and recommendations of the resource person(s) based on feasibility and document the results and outcomes of the improvement plans.
- e. Collaborate with NPO Turkiye in preparing dissemination materials.
- f. Present the project activities and results during a dissemination event(s) for the benefit of other company(ies)/organization(s).
- g. Collaborate with NPO Turkiye in preparing a final report for submission to the APO Secretariat.
- h. Announce, publicize, and prominently display the APO's presence and involvement in the Reengen Enerji Teknolojileri A.S. throughout the duration of the project.
- i. Showcase good practices of productivity improvement for other companies/organizations in Turkiye and other APO members to embark on similar improvements.
- j. Provide information required by the resource person(s) for publication documenting the productivity journey of Reengen Enerji Teknolojileri A.S.

APO Secretariat

- a. Assign a resource person(s) on productivity tools and techniques and, if necessary, a technical resource person with expertise in the topic of the project.
- b. Coordinate communication among the resource person(s), NPO Turkiye, and Reengen Enerji Teknolojileri A.S. to ensure smooth implementation of the project.
- c. Monitor the progress of project implementation in consultation with the resource person(s) and NPO Turkiye

- d. Advise NPO Turkiye and Reengen Enerji Teknolojileri A.S. in planning and organizing follow-up activities such as developing dissemination materials and/or organizing a dissemination event(s) for local participants.

7. Final Project Outputs

Stage 1 of the demonstration company project will be completed with submission of the following:

- a. Development and integration of the DecarbonAI: AI Powered Net Zero Co-Pilot, an AI-based solution, with the existing Carbon Intelligence Platform of Reengen Enerji Teknolojileri A.S. with the following features:
 - i. Virtual Compliance Assistant: Providing interactive data insights for sustainability and energy compliance, streamlining ESG due diligence, and verifying information accuracy using the user/customer documents, policies, reports, and database.

Energy Decarbonization Strategy Assistant: Utilizing data from the Faradai Decarbon database to understand current energy performance, guiding data-driven energy procurement decisions, and addressing gaps and analysis in the Virtual Compliance Assistant.
 - ii. Energy Management Assistant: Employing the Faradai Decarbonization Assistant to navigate energy management complexities, identify decarbonization actions, detect anomalies, and analyze regulatory compliance (reporting to the Virtual Compliance Assistant).
- b. A dissemination event to showcase good practices of productivity improvement and disseminate the results of the project to relevant stakeholders in Turkiye and other APO members.
- c. A final report prepared by NPO Turkiye in consultation with Reengen Enerji Teknolojileri A.S. and endorsed by the resource person(s).
- d. A practical manual for replication (in soft copies and/or printed hard copies) prepared by NPO Turkiye.
- e. A multimedia record such as a video/DVD of the experiences of Reengen Enerji Teknolojileri A.S. prepared by NPO Turkiye and Reengen Enerji Teknolojileri A.S.
- f. The final report may detail the justification and plan for the implementation of stage 2.

Stage 2 of the demonstration company project will be completed with submission of the following:

- a. Annual project report prepared by NPO Turkiye in consultation with Reengen Enerji Teknolojileri A.S. and endorsed by the resource person(s).
- b. Any other relevant materials documenting the success stories or dissemination of the stories as well as other follow-up activities.

8. Financial Arrangements

The following financial arrangements are applicable for both virtual and face-to-face modalities.

To be met by the APO

- a. All assignment costs of overseas resource person(s) including honoraria for the virtual and face-to-face modality as well as airfare and daily subsistence allowance for the face-to-face modality (stages 1 and 2).
- b. Honorarium for one local resource person (stages 1 and 2).

- c. Up to USD10,000.00 for dissemination-related activities (documentation, production of training manuals and dissemination materials, dissemination events, etc.).
- d. If necessary, financial support for acquiring goods/services in implementing the improvement plan agreed upon by the resource person(s), NPO Turkiye, and APO (stage 1) will be provided at a maximum of 10% of the total cost or USD5,000.00, whichever is lower. The Secretariat will examine the appropriateness of the proposed goods/services for acquisition under the financial support of the APO prior to disbursement.
- e. Interpretation/translation costs for dissemination-related activities if necessary (stages 1 and 2).

To be met by NPO Turkiye

- a. Expenses for coordinating and implementing projects under DMP.
- b. Expenses for dissemination-related activities not covered by the APO.

To be met by Reengen Enerji Teknolojileri A.S.

- a. Expenses for logistic arrangements, including local travel costs of resource persons and expenses for interpretation.
- b. Costs associated with the purchase, installation, operation, and maintenance of equipment, if any.
- c. All other expenses not covered by the APO and NPO Turkiye.

Expense reimbursement and project postponement/cancellation

- a. With regard to the local implementation costs for dissemination activities, 50% of the APO share can be advanced after the PIP is issued.
- b. With regard to the financial support for acquiring goods/services, 50% of the APO share can be advanced after agreement among the resource person(s), NPO Turkiye, and APO Secretariat on the improvement plan.
- c. Prior the reimbursement of the financial support for acquiring goods/services, the Secretariat will assess the suitability of the proposed goods/services for acquisition specified in the improvement plan. Upon the assessment, the APO Secretariat will prepare the agreement or contract document explaining the terms and conditions of the financial support to be signed by all parties involved. The specific processes and requirements will be outlined in the PIPs.
- d. The remainder of both local implementation costs and financial support will be reimbursed after the completion and submission of the final project outputs together with the necessary supporting documents under the applicable APO rules and regulations for the disbursement of project expenses. The final reimbursement for financial support is also based on the assessment of the implementation of the improvement plan.
- e. NPO Turkiye is requested to provide all necessary original copies of proof of payment to the APO Secretariat at one time no later than three months after the dissemination event(s) is conducted. The proof of payment, such as bills, payment records, and receipts, should be issued by third parties and written in clear English or with an English translation if not originally in English. An overall list of expenses categorized based on purpose for the production of dissemination materials or holding a dissemination event(s) should be also provided to the APO Secretariat (see Examples of Expense Categorization in the table below).

- f. The final payment will be made based on the actual expenditure after NPO Turkiye submits all necessary documents. Internal evidence by NPO Turkiye is not accepted as proof of payment and the expenses claimed by it will not be reimbursed.
- g. In case of a cancellation after the issuance of the Letters of Assignment to a resource person(s), all costs associated with the cancellation should be met by the party responsible.

Examples of Expense Categorization*

Activity	Expense Category	Description
a. Manual development	Publication/photos/documentation	Expenses related to development and publication of a manual such as photography, printing services, editing, etc.
	Translation/interpretation	Translation and/or interpretation
b. Multimedia record	Publication/photos/documentation	Expenses related to development of a multimedia record such as videorecording, audio/video editing, etc.
	Translation/interpretation	Editing, subtitling, and translation of videos
c. Meeting and dissemination event	Equipment/conference room	Equipment/conference room rental
		Conference package (e.g., venue rental and basic refreshments)
	Publication/photos/documentation	Production of printed material such as brochures, flyers, etc.
	Stationery/supplies	Pens, notepads, etc.
	Translation/interpretation	Translation and/or interpretation
d. Implementation of the improvement plan	Acquiring goods/services and/or funding activities for the implementation of the agreed improvement plan	Expenses related to the implementation of the improvement plan

*Examples are provided for the reference of NPO Turkiye. Please consult with the APO Secretariat if any item is unclear or there are other questions about categorization.