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**IMPACT SHEET:** Resource Efficiency in Agri-food Production and Processing (REAP)

# Promoting SCP practices in the agri-food production and processing industries along the supply chain in Tajikistan and Uzbekistan

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# PROJECT BACKGROUND

The REAP project, implemented from March 2020 to August 2024 in Uzbekistan and Tajikistan, aimed to advance sustainable consumption and production (SCP) practices in the agri-food sector. It focused on promoting resource efficiency among micro, small, and medium-sized enterprises (MSMEs) to support the transition to a green, circular economy and foster sustainable economic growth in the region. The project was carried out in Tashkent, Fergana, and Bukhara in Uzbekistan, while in Tajikistan, it covered the regions of Dushanbe, Sughd, Khatlon, and Pamir.

# CHALLENGE

The agri-food sector plays a key role in both Uzbekistan and Tajikistan. However, MSMEs involved in agri-food processing face challenges such as operational inefficiencies, lack of awareness, outdated or inefficient equipment, and limited innovation. Additionally, there is a need for regional technical expertise and technology providers to support the integration of Sustainable Consumption and Production (SCP) practices in these enterprises. Addressing these challenges would enhance competitiveness, resilience, and export potential in the sector.

# PROJECT OBJECTIVES

This action aimed to promote the adoption of SCP practices in agri-food production and processing MSMEs by creating an enabling environment at the regional level and building on current national development strategies while integrating SCP incentives.

The specific objectives included the following:

- Targeting fast, cost-efficient SCP measures, demonstrating their business benefits, and fostering a win-win mindset among MSMEs.
- Strengthening MSME capacity to address challenges related to natural resource shortages through training, embedding sustainable strategies, and fostering collaboration among stakeholders to create ecosystems for SCP and supply chain integration.

# TARGET GROUPS

- MSMEs in the agri-food production and processing industries were the main target group and were supported for implementation of SCP solutions to increase their resource efficiency.
- Local business consultants (Techical Consultants – TCs) were another target group and a pool of technical consultants underwent Training of Trainer (ToT) on SCP.
- National and international financing institutions gained awareness on MSME green finance needs for SCP.
- Ministries, local authorities discussed policy prototypes for supporting SCP in MSMEs.

# PROJECT ACTIVITIES

## Direct support activities

To support the main target group, MSMEs, to implement SCP solutions, three main activities were carried out. The first was to train the TCs and build their capacities on SCP and Resource Efficient Cleaner Production (RECP) through classroom trainings and onsite training during MSME assessment and implementation support visits. The second activity was to work with the participating MSMEs in assessing the operations, recommending improvements and supporting their implementation. The third was to create SCP cells where some of the trained technical consultants were anchored so that the services could be offered to other MSMEs post project.

## Ecosystem related activities

The project also worked with financial institutions and policy makers to create awareness so a conducive environment could be created for SCP. Through several workshops, awareness was created among financial institutions, TCs and MSMEs. This led to linkages between MSMEs and financial institutions, leading to the development of new green financial products and access to green finance among select MSMEs for SCP implementation. Policy makers were also sensitized about SCP and its importance in the region through policy roundtables where challenges were considered and SCP policy prototypes for solutions were developed. Regional Policy Dialogue was also held for cross-border cooperation and knowledge sharing between Tajikistan and Uzbekistan to strengthen SCP practices.

# LESSONS LEARNED

In the beginning of the project very low prices for energy and water presented a challenge. Due to the prices that most likely do not represent the real cost of those resources, the interest in becoming more energy efficient and water-use-efficient were not as high as normally expected. However, since the projects approach focused on the efficiency of all material resources (electricity, gas, fuels, water, material) including their output (waste, waste-water, energy losses) as well as their handling (maintenance, work) this challenge could be overcome. Later in the project the prices doubled but still are relatively low.

The approach of resource efficiency was new to the countries, with low or no awareness, no training available, and the purchasing behaviour of businesses as well as consumers did not take environmental issues into account. As a result, resource efficiency was not high on the agenda of MSMEs relevant for the project. Thus, a large number of MSMEs had to be contacted and convinced to participate in the project. Due to proven processes, showcases from other projects as well as increased efforts, a satisfying number of companies finally joined the project.

Limited access to the internet as well as conventional forms of communication (like email) are common in both countries. Communication happens via messenger-services like telegram. This provides challenges in documentation and accessibility of companies since especially telegram in the pro-version is not provided for western countries. Additional effort of the all team members was necessary to tackle these challenges.

The success of a project like REAP relies heavily on having the right people—team members, technical consultants (TCs), and MSMEs. Initially, due to COVID-19, the strict selection criteria for TCs could not be fully adhered to, leading to the discontinuation of several TCs who did not meet the criteria or align with the team. However, with the proper hiring process later in the project, this issue was addressed. In some cases, MSMEs participated in the project primarily due to their connections with a specific TC, and when that TC left the project, the MSMEs also withdrew. Therefore, instead of a one-to-one relationship between consultant and client, a broader network on both sides provides more stability when key individuals are no longer involved.

The challenges of achieving a shared understanding and effectively transmitting information and knowledge across different project regions, each with its own cultures and languages, were underestimated. Assessing participants' language proficiency and adapting training and interpretation accordingly would be beneficial but would also require significantly more resources in terms of time and finances.

# PROJECT ACHIEVEMENT

By engaging multiple stakeholders, including 520 MSMEs, 28 financial institutions (FIs), and over 50 policymakers and government bodies, REAP developed 100 local and viable showcases, implemented 36 highly innovative and/or bankable SCP measures, and established SCP cells to foster a supportive ecosystem for sustainable consumption and production. As a result, the project has contributed to the overall transition toward a green, circular economy in both target countries.

The key outcomes in summary are:

**Key project metrics**
(of cumulative work done in all two countries)

**394**
participating companies supported to implement RECP

**1,281**
RECP implementations verified in 232 companies

**35**
consultants trained on RECP and access to finance

**4 SCP cells**
developed in 4 regions

**Key results and outcomes**

**1,863,047 kWh**
of energy saving annually

**121,700 kg**
of materials & resources savings annually

**7,273 m³**
of water saving annually

**504 $tCO_2e$**
of emissions avoided annually

**13,650 kg**
of solid waste reduction annually

**577 m³**
of liquid waste reduction annually

**114,342 euros**
of monetary savings annually

**110+**
green finance opportunities activated

**50+**
policymakers sensitised on SCP policies

**7**
SCP policy prototypes developed

**20+**
financial institutions capacitated on Cleantech finance product development

**30+**
MSMEs supported in access to Cleantech finance

**200+**
stakeholders sensitised on industrial SCP

**Zafar Makhmudov**
Executive Director, The Regional Environmental Centre for Central Asia

"The REAP Project has paved the way for sustainable practices in Uzbekistan and Tajikistan and ignited a transformative journey towards a green economy. With a strong commitment to collaboration and innovation, we stand ready to continue this vital work, demonstrating that with technical and financial support, we can achieve remarkable resource efficiencies and foster a brighter, sustainable future for all in Central Asia. Today, the REAP Project instigated opening four SCP clusters further to promote the green economy in Uzbekistan and Tajikistan."

## Long-term project sustainability

One of REAP's main objectives was to establish local SCP cells that would continue its legacy beyond the funded project period. These cells are now well-equipped to carry forward REAP services, including SCP consultancy for MSMEs, and are operating effectively. As part of their future work, international experts continue to collaborate with them, and several tenders and bidding procedures have been jointly prepared. By the end of the project, a GIZ-funded initiative involving the Ferghana SCP cell and AREC was set to begin. Additionally, work is in progress on an ERASMUS proposal, involving two universities in Ferghana, one in Bukhara, one in Khujand (Tajikistan), and a European university, supported by REAP international experts, with finalization expected in February 2025.

The REAP project ensured the long-term sustainability of its results through stakeholder engagement, policy advocacy, and capacity-building initiatives. By developing stakeholder maps, conducting multistakeholder roundtables, and creating policy prototypes, the project laid the foundation for the sustained adoption of SCP practices in Tajikistan and Uzbekistan.

## Project contributions to Climate Change Mitigation and SDGs

The REAP project contributed to climate change mitigation and the achievement of Sustainable Development Goals (SDGs), particularly SDG 12: Responsible Consumption and Production, by promoting resource efficiency and sustainable production practices in the agri-food sector. Through direct engagement with MSMEs, capacity-building efforts, and policy advocacy, the project fostered a mindset shift toward more responsible consumption and production in the region.

Climate change mitigation was specifically addressed through **enhanced energy efficiency** among participating MSMEs. By implementing **Resource Efficient Cleaner Production (RECP)** practices across **394 MSMEs in Uzbekistan and Tajikistan**, the project achieved **energy savings of approximately 1.9 million kWh per year**. This resulted in the mitigation of **504 $tCO_2e$ per year** of greenhouse gas (GHG) emissions (Scope 1 and Scope 2) from the participating MSMEs.

Through its activities, REAP directly contributed to SDG 7 (Affordable and Clean Energy), SDG 8 (Decent Work and Economic Growth), and SDG 9 (Industry, Innovation, and Infrastructure). This was achieved through Activity 2 (Capacity building of local experts) and Activity 3 (SCP implementation in MSMEs and innovation training for highly motivated MSMEs).

Additionally, Activity 4 (Stakeholder dialogue and roundtables), Activity 5 (Regional policy exchange), and Activity 6 (Capacity building of financial institutions and support for MSMEs' access to finance) had a positive impact on SDG 13 (Climate Action).

Furthermore, Activity 7 (Ecosystem development) and Activity 8 (Dissemination) contributed indirectly to SDG 5 (Gender Equality and Women's Empowerment) and SDG 17 (Partnerships for the Goals) by fostering inclusive collaboration and knowledge-sharing.

# Impacts at a Glance

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|---|---|
| **Economic Impact** | • 114,342 EUR saved annually through improved energy efficiency, use of raw material and reduced wastages.<br>• 4 SCP cells have been established, providing locally available SCP consultancy at viable costs. |
| **Environmental Impact** | • 34% reduction of specific energy use (electricity, fuel); 1,863,047 kWh saved annually.<br>• 58% reduction of other resources (raw material, water); 121,700 kg of material and 7,273 $m^3$ of water saved annually.<br>• 88% reduction of waste generated; 13,605 kg of solid waste reduced. |
| **Social Impact** | • With the development of 4 SCP cells, 12 new jobs for trained REAP consultants have been created.<br>• SCP measures have a positive impact on health and safety risk reduction. Improved insulation reduces heat load on workplaces, improved boiler operations and processes for material handling reduce dust and noise level. Training on SCP also generates awareness on safety.<br>• Gender equality was promoted by increasing female participation in training programs, stakeholder meetings, and project activities. Targeted outreach and inclusive recruitment of technical consultants ensured greater involvement of women in traditionally male-dominated sectors. |
| **Climate Benefits** | • 504 $tCO_2e$ reduction of GHG emissions via improved energy efficiency through insulation of hot/cold pipes, efficient lighting systems, improved compressor and boiler operations.<br>• Waste reduction and efficient use of raw material including repair/maintenance options. |
| **Green Finance** | • Several new green finance products specifically tailored to the needs of MSMEs.<br>• Around 150 MSMEs have been trained on accessing green finance.<br>• 60 participants from 28 financial institutions have been trained on green finance product development.<br>• More than 30 MSMEs have been supported in accessing green finance, with nearly 80% successfully receiving financing. |
| **Target Group Engagement** | • 520 MSMEs engaged in project activities, 394 actively participated and implemented SCP measures.<br>• 30 technical consultants trained and 4 SCP cells developed.<br>• Overall 393 stakeholders involved.<br>• Overall 10 classroom training days and 6 online days per technical consultant conducted and 375 days of on-the-job trainings with international experts.<br>• 100 SCP showcase, 2 cluster best practice and 36 highly innovative, bankable SCP measures documented. |
| **Policy Development** | • Over 50 policy makers, advisors and government bodies and institutions trained through 2 policy roundtables and 2 national authorities meet<br>• Seven policy solution prototypes developed to strengthen the ecosystem for SCP uptake in industries.<br>• Four SCP policy papers produced, comprising two policy input briefs and two policy output papers.<br>• Provided critical inputs to the team developing the “Green Economy Development Strategy for 2023–2037” in Tajikistan, emphasizing SCP implementation in industries.<br>• Designed policy prototypes to enhance the Green Certification System, Sustainable Public Procurement practices, and National Technical Capacity Building programs for SCP consultants. |
| **Europe-Asia Cooperation** | • 10 events with European and Asian participant have been organized and/or visited (e.g. COP 26/27, EU-Day 23/24, International Trade Fair “Sughd-2022”, PamirInvest-2022, Dushanbe Economic Meeting 2022, CACCC, CALP.<br>• 1 project with Fergana Polytechnic Institute and Austria Recycling funded by GIZ has started, several more (e.g Erasmus and cooperation with EBRD) are in the pipeline. |

## FUNDING

EUR 2,958,871
(EU Contribution: 80%)

## DURATION

2020 - 2024

## PARTNERS

Regional Environmental Centre for Central Asia (CAREC)

adelphi Research gGmbH

Austria Recycling (AREC)

Chamber of Commerce and Industry of the Republic of Uzbekistan

National Association of Small and Medium Business of Tajikistan

STENUM Asia Sustainable Development Society (STENUM Asia)

The Energy and Resources Institute (TERI)

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*This impact sheet is developed together with SWITCH-Asia Policy Support Component*

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