

SOLAR Heating
for Industrial Process
Together Toward Efficient Production

Introduction To SHIP Project

Projects Partners

Funded by:

- Global Environmental Facility (GEF)



Implemented by:

- United Nations Industrial Development Organization (UNIDO)



By cooperation with:

- Ministry of Trade and Industry



Ministry of Industry

Background & Project Motivation

- National Strategy for Renewable Energy to satisfy 20% of the generated electricity by renewable energies
- Reaching more than 7200 MW grid-connected through implementation of renewable energy projects by public or private sector
- Water heating for industrial applications is one of the most common processes in the industrial sector and main source of CO₂ emissions



Objective of the Project

The general objective of the project is to develop the market environment for the diffusion and local manufacturing of solar energy systems for industrial process heat in key industrial sectors: “Food, Textile and Chemical” of great potential for solar thermal uses.

Target Temperature of heating in the industrial sector

Target Temperature of heating in the industrial sector the medium and the low temperature range in which :

- 80 degree Celsius represent about 7% of the heat generation in the industrial sector
- 80: 150 degree Celsius represent about 50% of the heat generation in the industrial sector

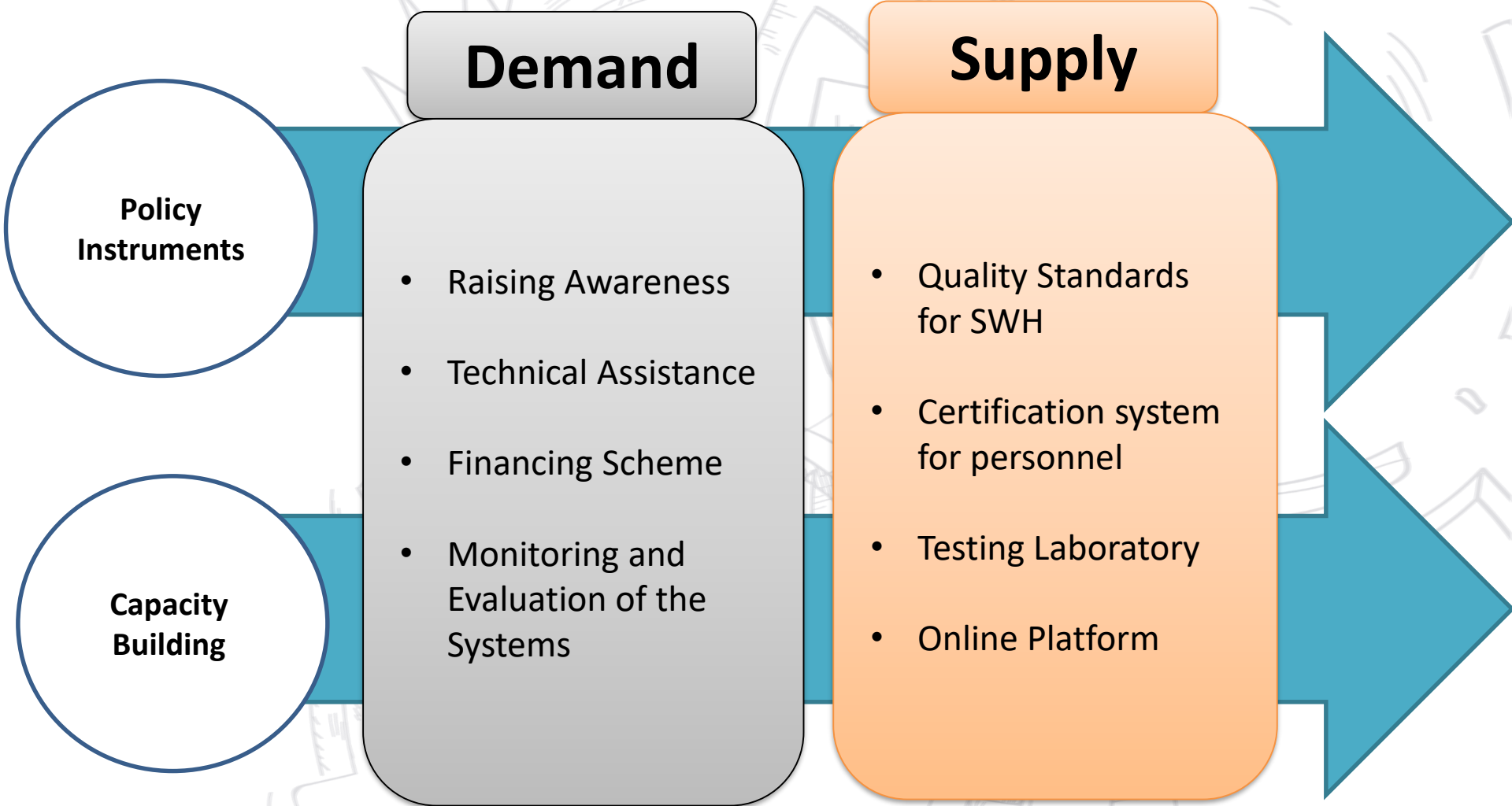
The main target Sectors with the greatest potential for Solar Thermal

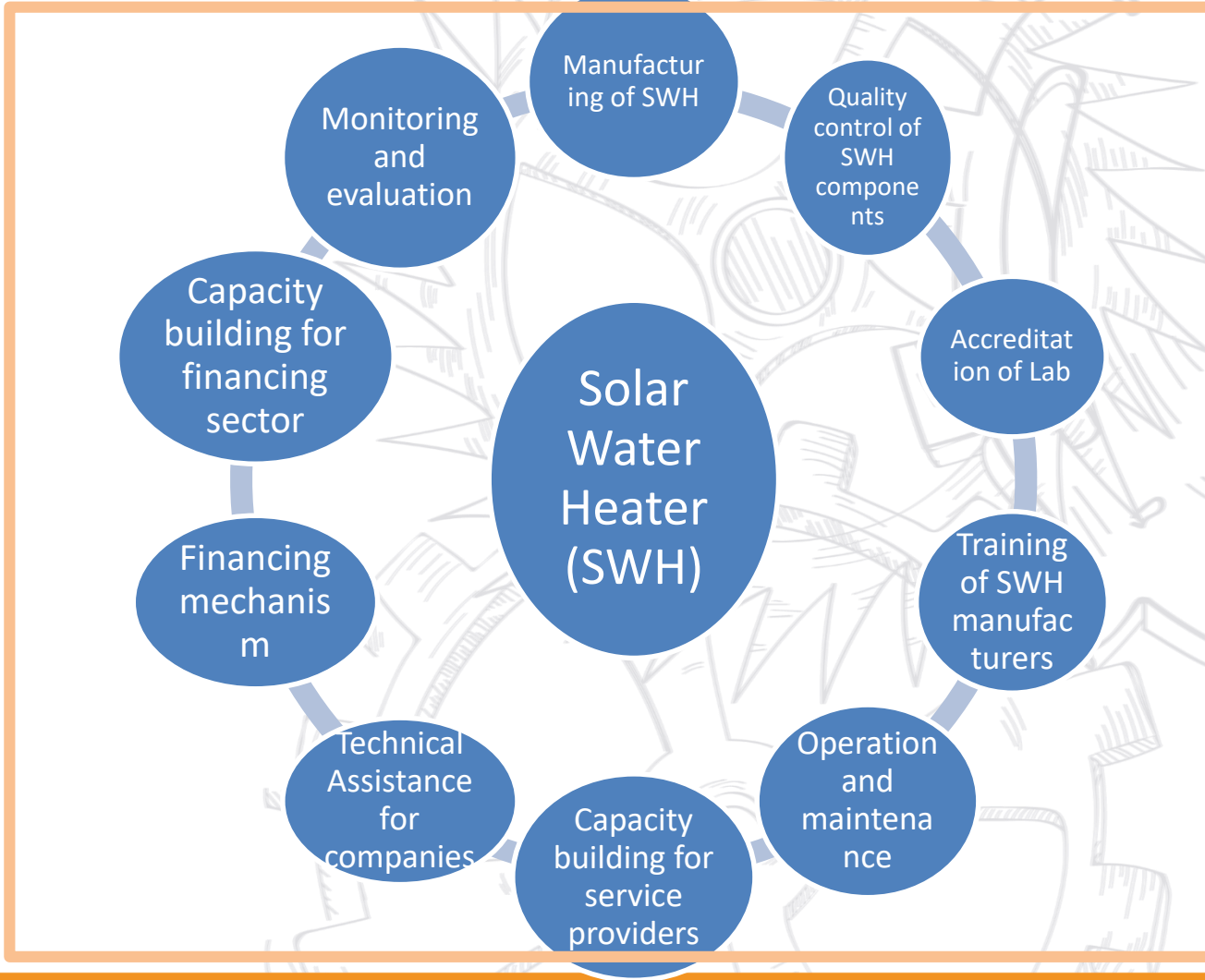
- Textile
- Food and beverage
- Chemical

Project Objective

To develop the market environment for the **diffusion and local manufacturing** of solar energy systems for industrial process heat in key industrial sectors

- DEMAND – demonstration projects through technical and financial support
- SUPPLY – creation of jobs & entrepreneurship for solar energy systems in industrial sector





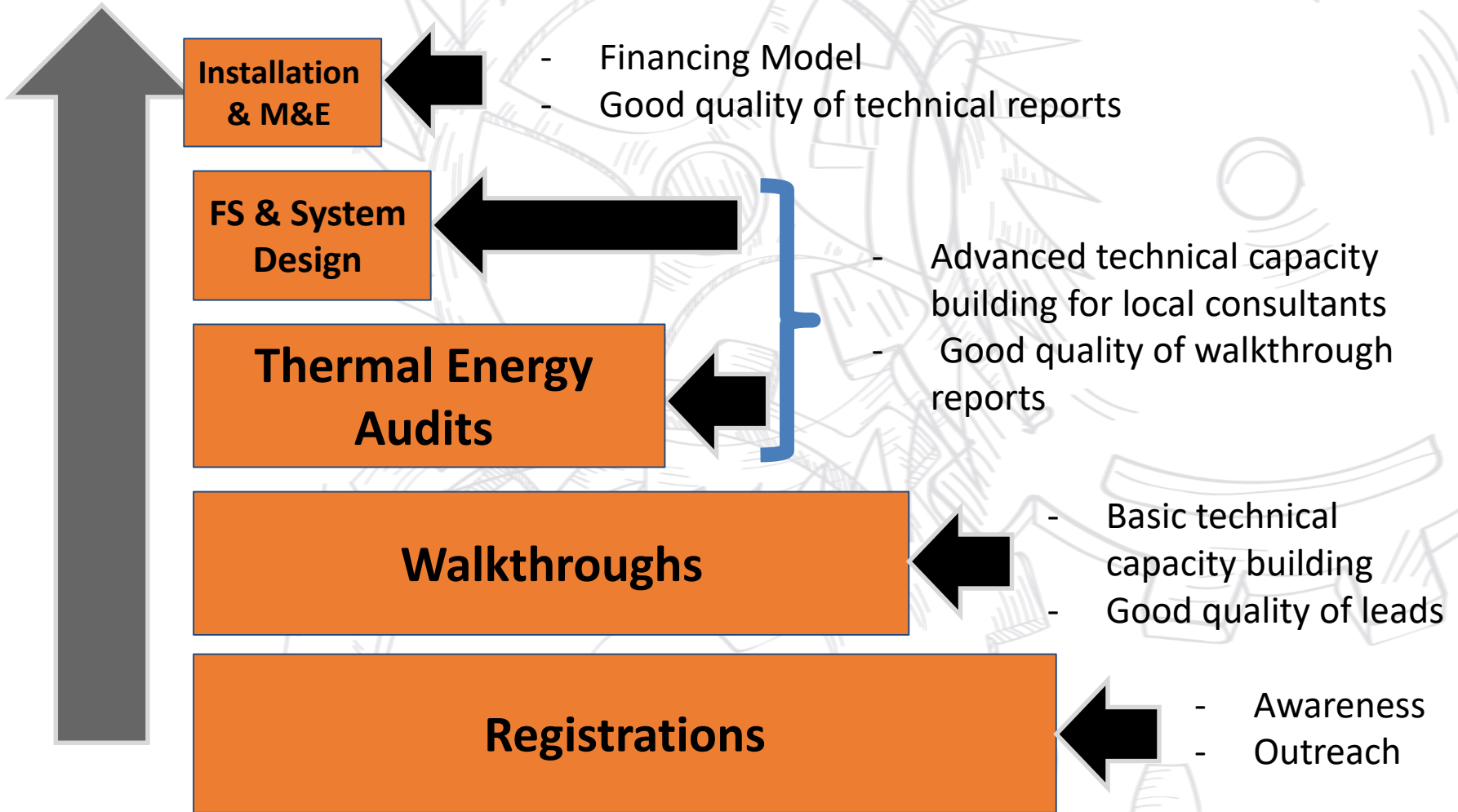
- Road Map
- Market creation
- Increasing competitiveness
- Market control
- Training and skills development
- Financing mechanisms
- Awareness raising

Project Components

- 1. Develop policy instruments** to promote the use of solar energy for industrial process heat
- 2. Mobilize financing** for the deployment of solar energy for industrial heat
- 3. Improve the manufacture**, supply and distribution of solar energy components and systems
- 4. Build the capacity** of technical staff designing, developing and servicing solar system

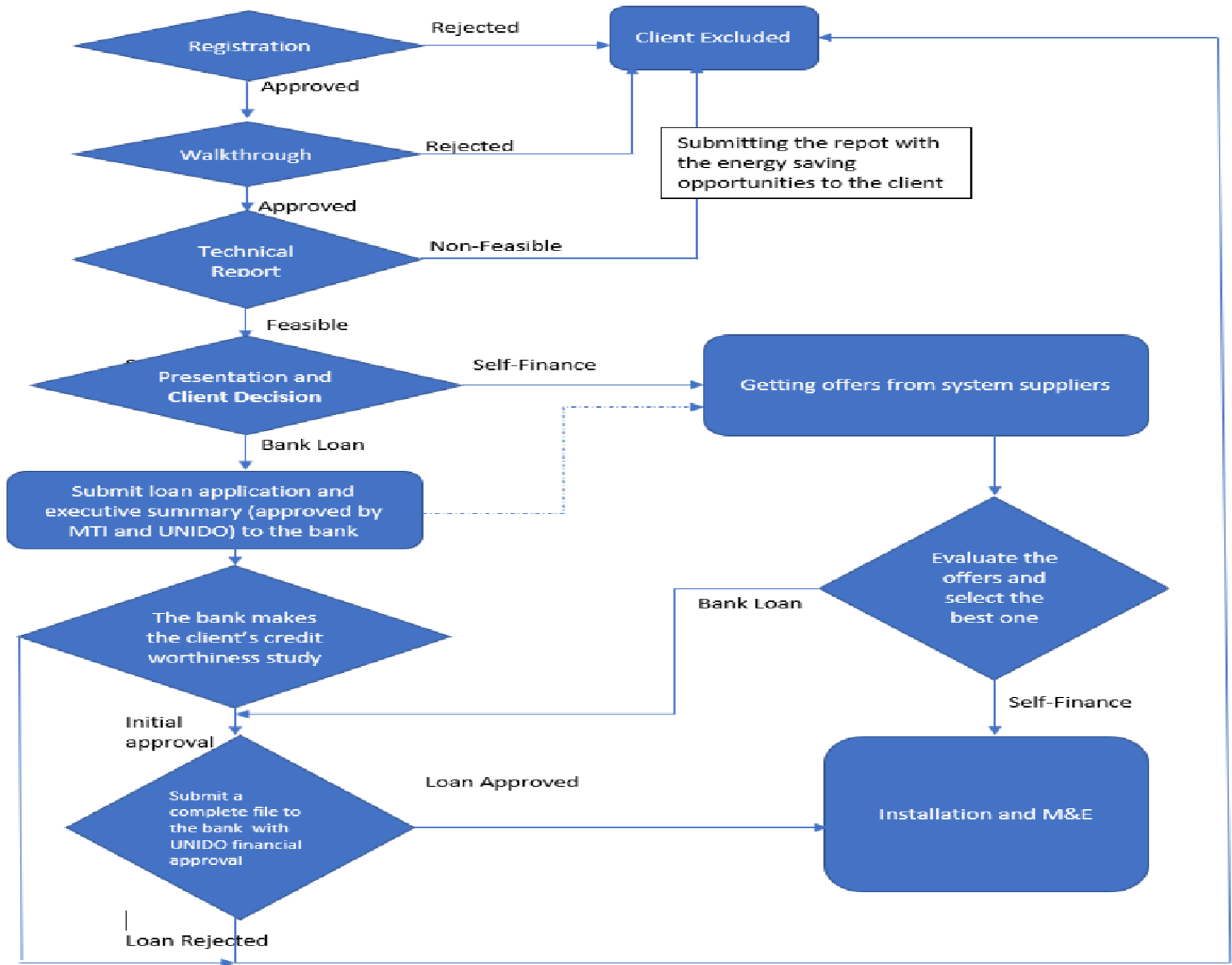
Component 2

- 1. Output 2.1.1. Revolving Fund to facilitate financing of solar thermal technologies is set up**
- 2. Output 2.1.2. Solar thermal technologies installed in selected facilities**
- 3. Output 2.1.3. Technical capacity of staff of local banks on the assessment of projects enhanced**
- 4. Output 2.1.4. Awareness campaign on solar thermal technologies for industrial process heat implemented**



Financing Scheme (NBE)

- Bank Loan Amount: 90% of investment cost
- Applicant Self-Finance 10% of the investment cost.
- Minimum Amount: EGP 100,000
- Maximum Amount: N/A
- Interest Rate: the annual interest rate will vary according to the size of the company (As per the The Central Bank of Egypt “CBE” definition)
 - Small: The average of CBE initiative interest rate on half the loan and 1.5% on the other half of the loan in the case of inapplicable CBE initiative.
 - Medium and Large: The average of CBE initiative interest rate on half the loan and 1% on the other half of the loan.
- Bank Fees: No fees are charged
- Loan Repayment: Up to 5 years with a grace period of up to 1 year



Thank You!