



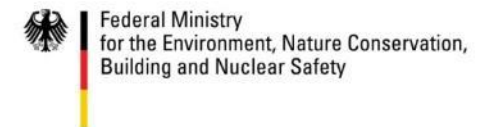
# ESCO Facilitation Approach

## Models 1: full facilitation

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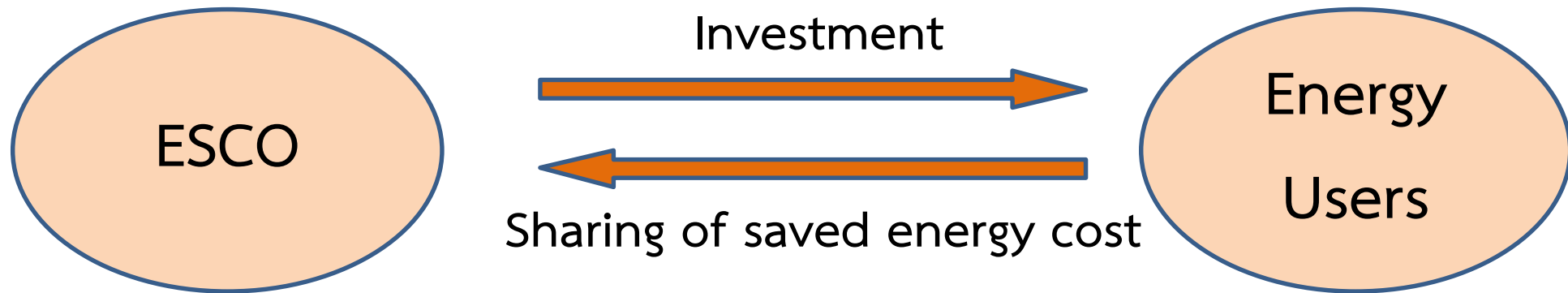
On behalf of:



of the Federal Republic of Germany



ESCOs are investing their engineering skills and fund to install energy-saving facilities for energy users, and then earn their profit from the saved energy cost of energy users

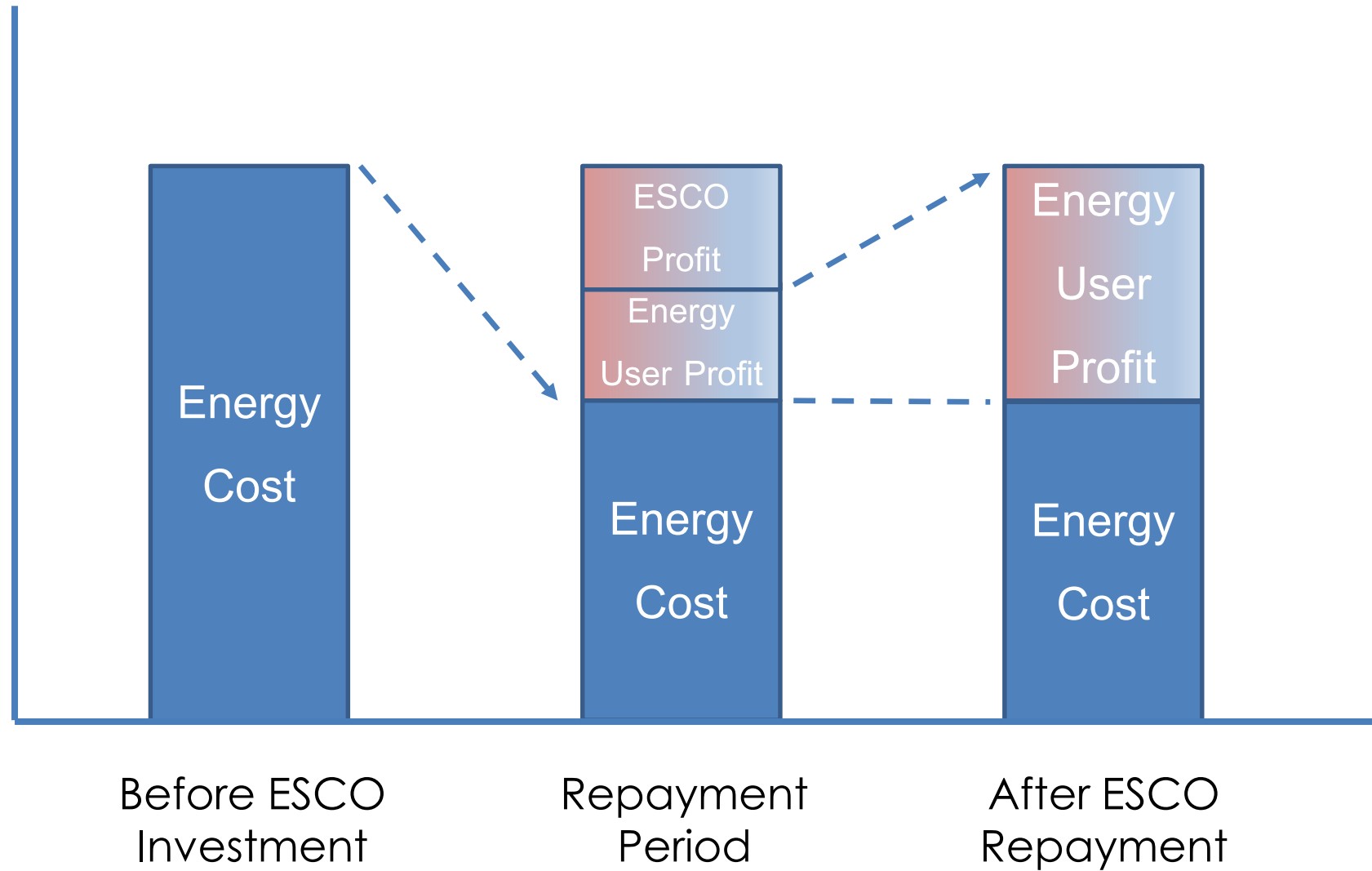




## ESCO Tasks

- Survey and collect the energy usage (Walk-through Audit)
- Prepare the offer and cost estimation
- Measure and analyze the energy usage thoroughly (Investment Grade Audit; IGA)
- Consider the investment cost of the project
- Install the equipment/machine and prepare Energy Performance Contract (EPC)

# Investment and Profit Sharing





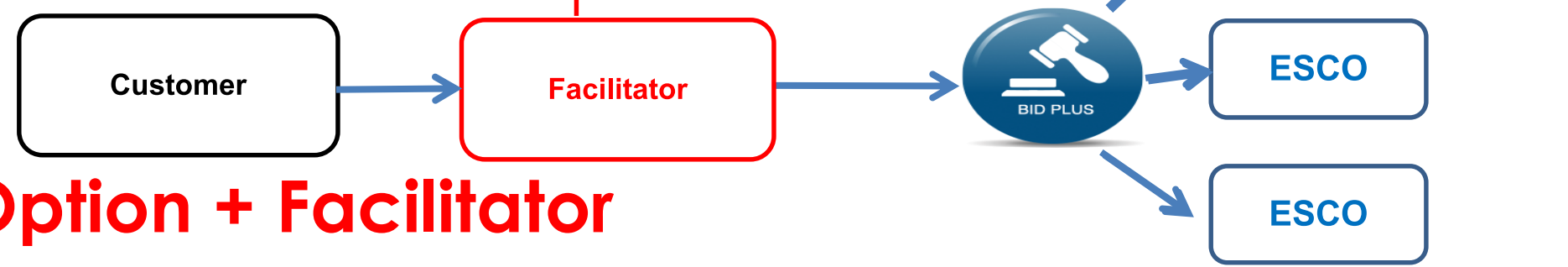
## Obstacles for ESCO Projects

- Lack of knowledge and understanding **Energy Performance Contract (EPC)**
- Method of **Measurement and Verification (M&V)** and
- Lack of **confidence and trust** between the entrepreneur and ESCO

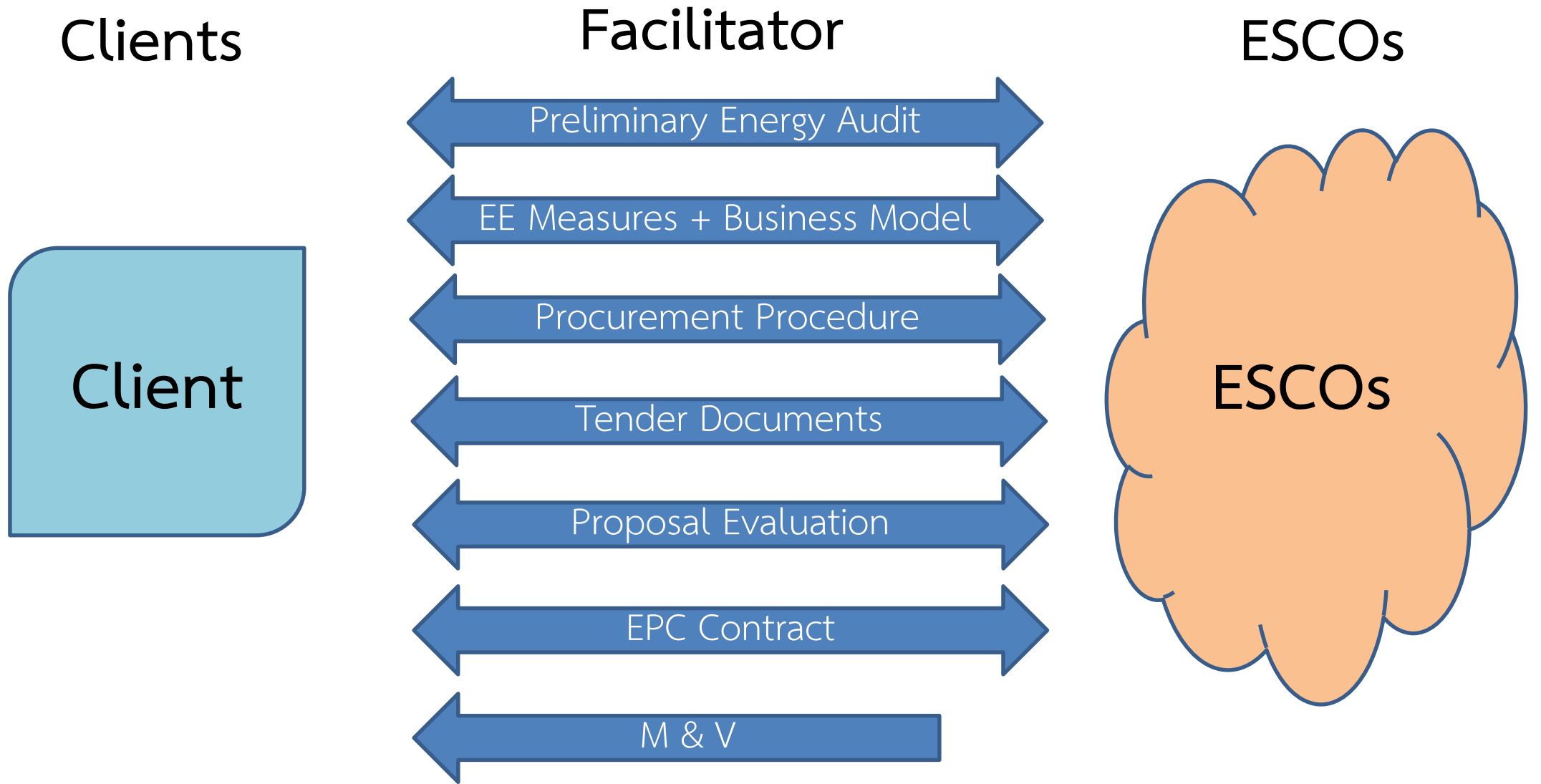


CURRENT

OPTION 1



# Option + Facilitator



Modified from IEA DSM, 2012

# Facilitation Approach Model for ESCO Projects



	Steps of Implementation	Model 1	Model 2
1	Contact interested customers (issue letter of intent (LOI) or sign MoU)	FA	FA
2	Gather energy consumption data from customer, discuss <b>EPC</b> and potential saving measures (provide data to ESCOs)	FA	FA
3	Prepare preliminary energy audit and baselines	FA	-
4	Pre-qualification (PQ) of ESCOs (issue invitation letter, PQ criteria and scope of work)	FA	FA
5	Invite ESCOs for a walk-through energy audit, FA to provide prelim. specifications and standard bill of quantities (BOQ form)	-	FA
6	Bid evaluation of ESCOs' proposals and BOQ, selection of an ESCO and pre-EPC	-	FA
7	ESCO to develop investment grade audit (IGA)	-	ESCO





	Steps of Implementation	Model 1	Model 2
8	Prepare tender documents (instruction, conditions, BOQ form, EPC, etc.)	FA	-
9	Invite ESCOs to bid, clarification meeting and site visit by ESCOs	FA	-
10	Bid evaluation of ESCOs' proposal and selection of a suitable ESCO	FA	-
11	Participate in finalizing EPC between project owner and ESCO	FA	FA
12	Installation supervision	FA	FA
13	Assist in M&V	FA	FA



## Scope of work for ESCO Facilitator that can be proceeded

- Prepare preliminary energy audit
- Define the qualification and criteria for choosing ESCO
- Prepare tender documents and cost estimation
- Consider the bidding result and provide suggestion for choosing ESCO
- Prepare Energy Performance Contract (EPC)
- **Supervise the installation work**
- **Supervise Measurement and Verification (M&V)**

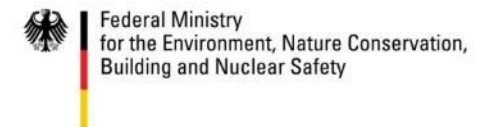


# Q&A

## Thank you for your attention



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