ESCO and EM in Japan

(Energy Service Company & Energy Management)

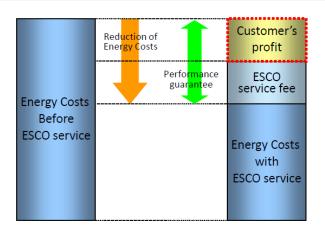
Advantages of ESCO scheme

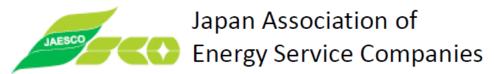
(Performance Contract)

ESCOs guarantee energy cost reduction

(Pay from the Savings)

Investment cost is provided by ESCOs and the service fee is covered by the saved energy cost





Preface

JAESCO (Japan Association of Energy Service Companies) is the only association in Japan which promotes ESCO projects and Energy Management (EM).

JAESCO was established in October 1999 in order to conduct the following activities:

- (1) Policy related lobbying activities
- (2) PR and marketing of ESCO concept
- (3) Training the staff of member companies
- (4) Information
- (5) International cooperation
- (6) others

And in May 2016, JAESCO included EM as its business territories. EM includes;

- (1) Installation of BEMS, FEMS etc.
- (2) Measurement and recording of operation data
- (3) Visualization and analysis of energy consumption
- (4) Supporting optimal operation of facilities
- (5) others

Energy Audit

- Identify Energy Efficiency possibility
- Calculate saved energy & cost
- Estimate installation cost
- Calculate payback year



ESCO

- Evaluate the credibility of customers
- Estimate installation cost
- Calculate long term payment plan of customers
- Design the Measurement & Verification Plan
- Design guarantee level of EE performance

EM

- Installation of BEMS, FEMS etc.
- Visualization of energy and water consumption
- Continuous measurement and analysis of operation
- Supporting of optimal operation of facilities

Governmental policies to promote ESCO

METI (Ministry of Economy, Trade and Industry

April 2007	published "Manual for local governments to introduce ESCO".	
April 2010	revision of the energy conservation law and its ordinance. "large energy consumers must consider the performance contract provided by ESCOs in order to improve energy efficiency."	
April 2014	revision of the ordinance of energy conservation law "large energy consumers must consider to introduce services of BEN aggregators and/or ESCOs to improve load leveling performance."	

MOE (Ministry of the Environment)

Dec. 2007	law for procurement of environmentally conscious products	
	" Government and public organizations must consider to procure	
	ESCO services for their buildings and facilities."	

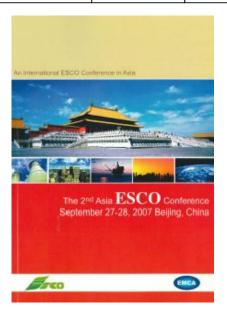
MLIT (Ministry of Land, Infrastructure and Transport)

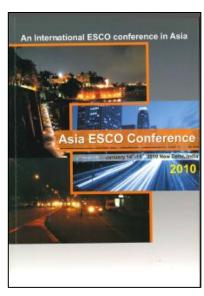
May 2011 revision of manual for public buildings to introduce ESCOs	
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JAESCO hosted 3 Asia ESCO Conferences

year	venue	participation			Subsidy from
		countries	persons	papers	
Oct., 2005	Bangkok	15	300	52	METI (Japan)
Sep., 2007	Beijing	10	200	41	METI (Japan)
Jan., 2010	New Deli	12	300	40	NEDO (Japan)

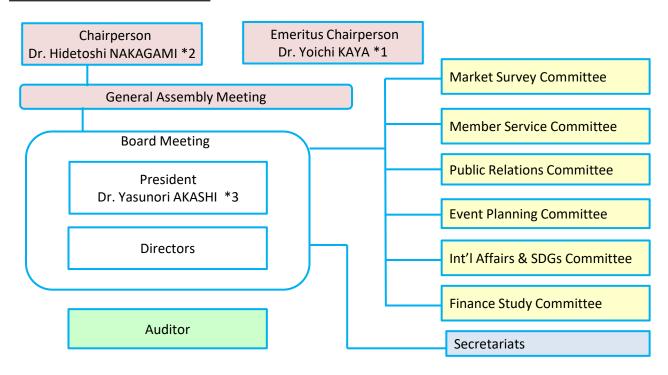






About the Association

Structure of JAESCO



- *1: Professor Emeritus of Tokyo University
- *2: Chairman of Jyukankyo Research Institute (JYURI)
- *3: Professor of Tokyo University

Members of JAESCO

Regular Members ------ 22 companies
Supporting Members ----- 44 companies
Friends of JAESCO ----- 20 individuals
Special Members ----- as the followings

- Dr. Yoichi KAYA (Professor Emeritus of Tokyo University)
- Dr. Shuzo MURAKAMI (Professor Emeritus of Tokyo University)
- Dr. Takao KASHIWAGI (Professor Emeritus of Tokyo Institute of Technology)
- Dr. Yasunori AKASHI (Professor of Tokyo University)
- Dr. Hidetoshi NAKAGAMI (Jyukankyo Research Institute (JYURI))

Takuya YAMAMOTO (Daiichi Sogo Legal Office)

Kazuo OKUMURA (Energy Conservation Center of Japan (ECCJ))

Tetsuya MAEKAWA (JAESCO Special Advisor)



ESCO and Energy Management Markets Trends

July 2025

Japan Association of Energy Service Companies

1 Study Objectives and Overview

The objectives of this study are:

- To survey ESCO and Energy Management market trends
- To gather information on the activities of JAESCO member companies
- To collect and organize data for the dissemination of information regarding ESCO and Energy Management projects

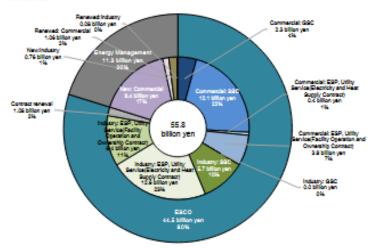
We e-mailed a questionnaire to 68 JAESCO member companies and 89 non-JAESCO member companies. Table 1 shows the number of responses. We have analyzed 25 companies which answered their ESCO and Energy Management track records.

Table 1 Trained of Topolises					
	No. of companies	No. of responses 1)	No. of analysis target companies		
JAESCO member companies	68	68 (100% response rate)	15		
Non-JAESCO member	89	18 (20.2% response rate)	10		

Table 1 Number of responses

2 Contract Amount and Sales Revenue of ESCO and Energy Management

The sum of the contract amount and the sales revenue in 2023 was 55.8 billion yen, of which ESCO and Energy Management accounted for 44.5 billion yen (80%) and 11.3 billion yen (20%) respectively (shown in Figure 1). Energy Service Provider (ESP) and utility services in the industry sectors accounted for a large portion of ESCO in terms of contract amount. As for Energy Management, sales revenue for new contracts in the business sector was the highest. Sales revenue for renewed ongoing contracts was relatively small compared to new contracts in both the business and industrial sectors.



- SSC: Shared Savings Contracts, GSC: Guaranteed Savings Contract, ESP: Energy Service Provider
- Excluding the sales revenue from new buildings in Energy Management.

Figure 1 The contract amount and sales revenue of ESCO and Energy Management in 2023

¹⁾ Including companies with "no track records."

3 Number of signed contracts for ESCO and Energy Management

Figure 2 presents the number of signed contracts for ESCO and Energy Management in 2023. Out of a total of 1,891 contracts, 1,792 were Energy Management (93%), and 99 were ESCO (5%). The majority of ESCO was ESP and utility services in the industry. The majority of Energy Management was new contracts and renewed contracts in the business sector.

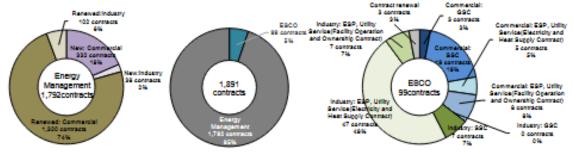


Figure 2 Number of signed contracts for ESCO and Energy Management

SSC: Shared Savings Contract, GSC: Guaranteed Saving Contract. ESP: Energy Service Provider

4 Unit Contract Amount of ESCO and Energy Management

Unit contract amount of ESCO and Energy Management (Table 2) differed substantially. For ESCO, minimum amount was ESP, utility service (Electricity and Heat Supply Contract) in the commercial sector with 77.9 million yen/contract, and maximum was ESP and utility services (Facility Operation and Ownership Contract) in the industrial sector with 913.9 million yen/contract. For Energy Management, on the other hand, maximum amount was the new contracts in the business sector with 28.2 million yen/contract. As for Energy Management, the new contracts for the business sector were 28.2 million yen/contract, and the new contracts for industrial sector were 20.1 million yen/contract. Meanwhile, renewed. contracts for Energy Management were substantially smaller with 0.8 million yen/contract for the business sector and 0.8 million yen/contract for the industrial sector.

This survey was conducted with the support and cooperation of the Ministry of Economy, Trade and Industry and Sustainable open Innovation Initiative.

Table 2 Unit contract amount of ESCO and Energy Management (in million yen/contract)

			Contract Amount		
		GSC	783.1		
	횭	SSC	636.5		
0	Commercial sector	ESP, utility service (Electricity and Heat Supply Contract)	77.9		
		ESP, utility service (Facility Operation and Ownership Contract)	484.6		
ESCO		GSC	-		
ш	ь	SSC	808.4		
	Industrial sector	ESP, utility service (Electricity and Heat Supply Contract)	269.1		
		ESP, utility service (Facility Operation and Ownership Contract)	913.9		
		Renewed contracts	360.6		
nert	New	Business	28.2		
Energy Management		Industrial	20.1		
	Renewed	Business	0.8		
	Pene	Industrial	0.8		

- SSC: Shared Savings Contract, GSC: Guaranteed Savings Contract, ESP: Energy Service Provider
- Excluding the sales revenue from new buildings in Energy Management