

Performance Contracting

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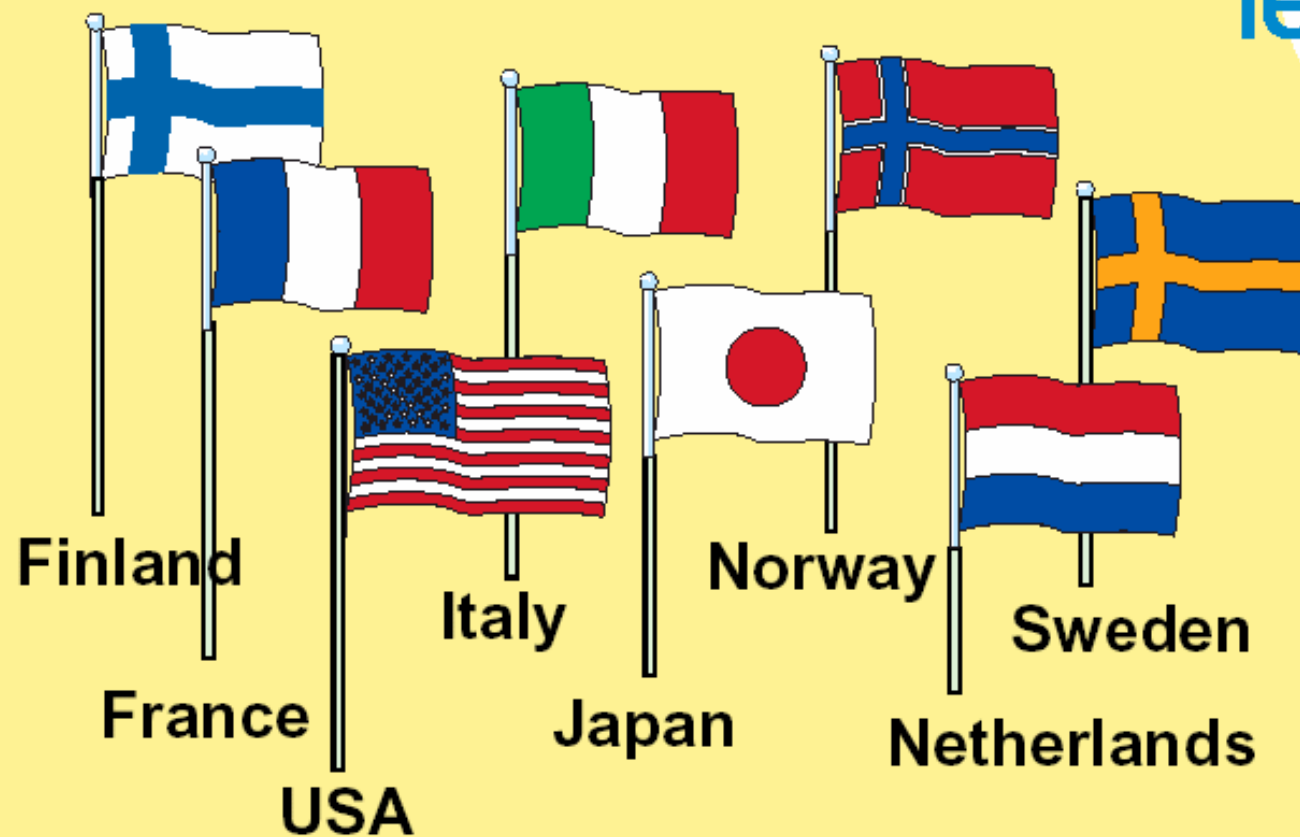
TASK OBJECTIVES



- To facilitate the greater use of Performance Contracts and other Energy Service Company (ESCO) financial options and services in the participating countries.
- It is a business-to-business Task, limited to efforts involving the Performance Contracting agreements and other ESCO related financial options and services between client, businesses and all types of companies offering these services.

In short *"Payment in relation to performance"*

PARTICIPATING COUNTRIES



Motives



- For some property owners and users the main reason can be lack of investment money
- For some it is simply a very economical business strategy. We only pay when we see value-added functions as reduced energy bills
- For the ESCOs it is a good business argument and a way to connect with customers and start new business relations
- For some companies and government organizations it can be a very efficient way to inspire innovations and to facilitate the introduction of more efficient solutions

Motives for choosing a Performance Contract or other ESCO arrangement

NAESCO Database



- **Electricity Savings**

- Lighting only projects**

- median savings is 47%
of targeted equipment

- Lighting/nonlighting projects**

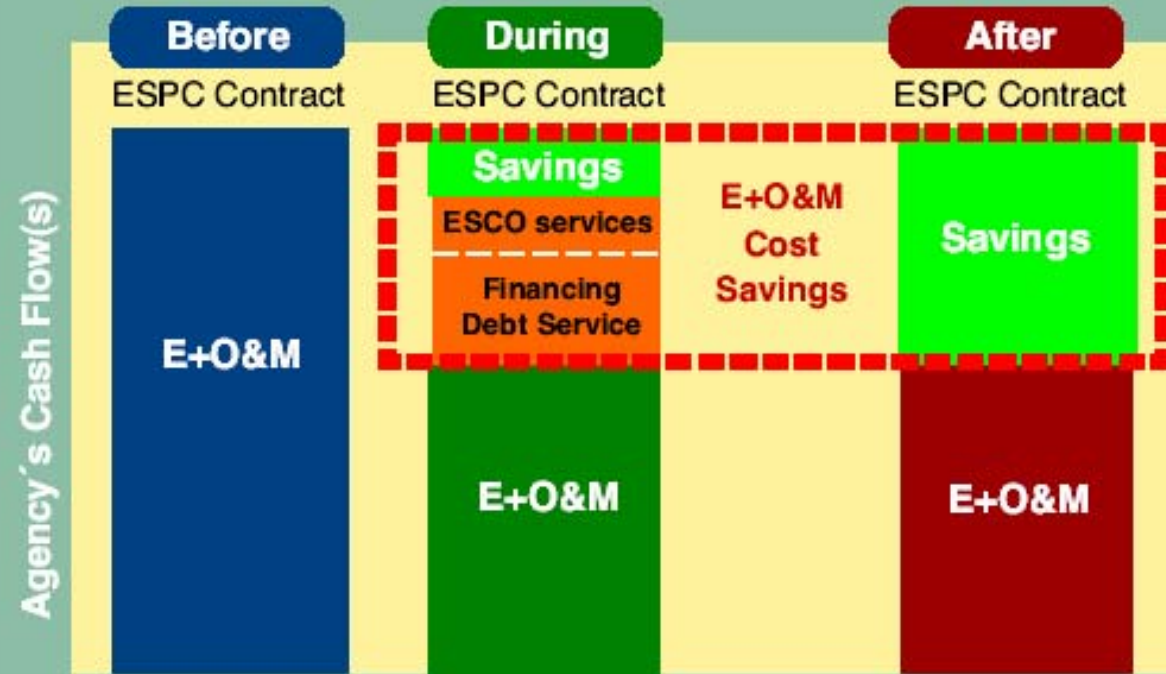
- median savings is 23%
of total electric bill

**1500 energy
efficiency projects
members supply
the data**

Payment for EPC contract

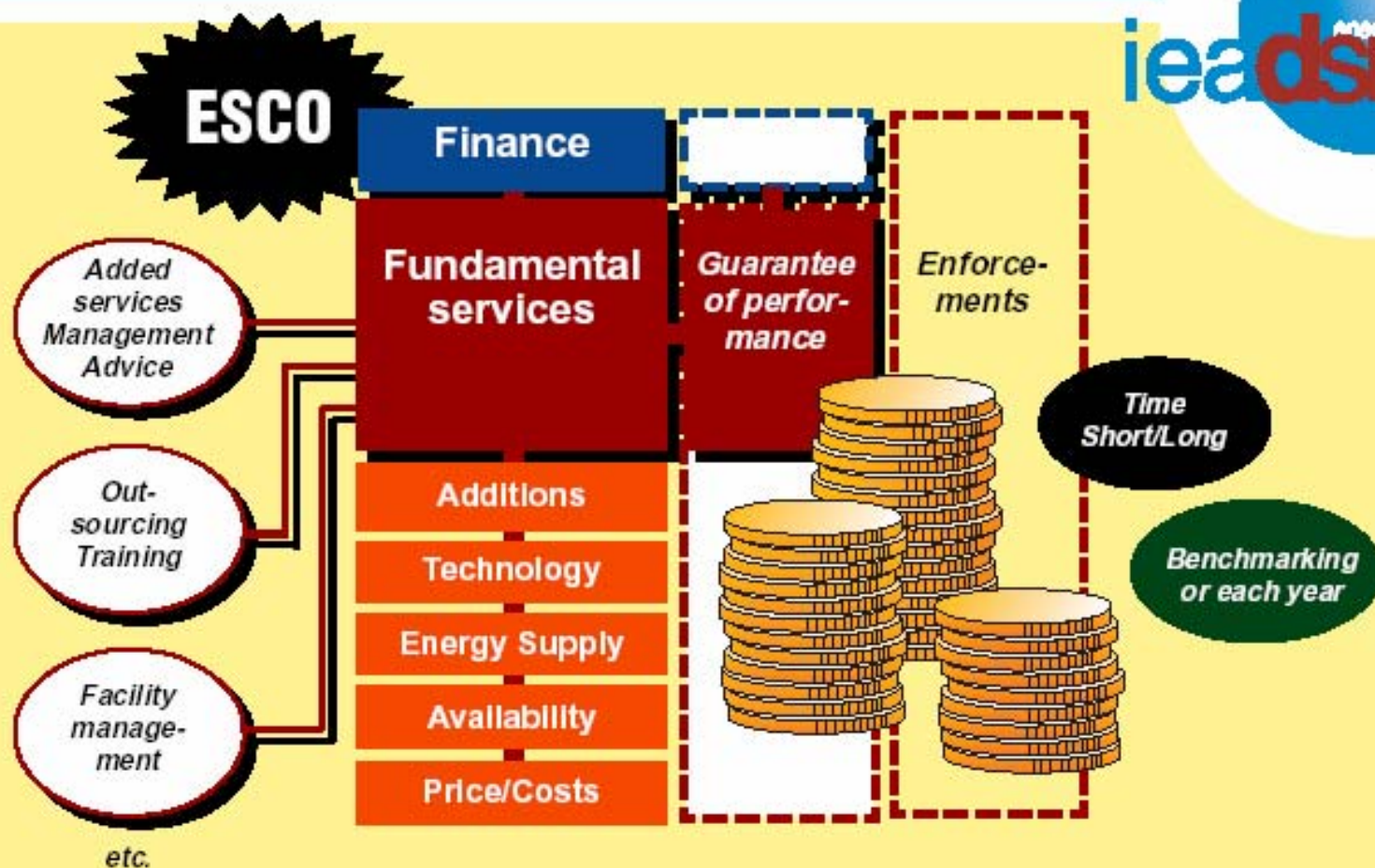


ESPCs Reallocate the Federal Customer's Payments for Energy and Energy-Related Operations & Maintenance Expenses (E+O&M)



Source: FEMP, 2001

ENERGY PERFORMANCE CONTRACTING

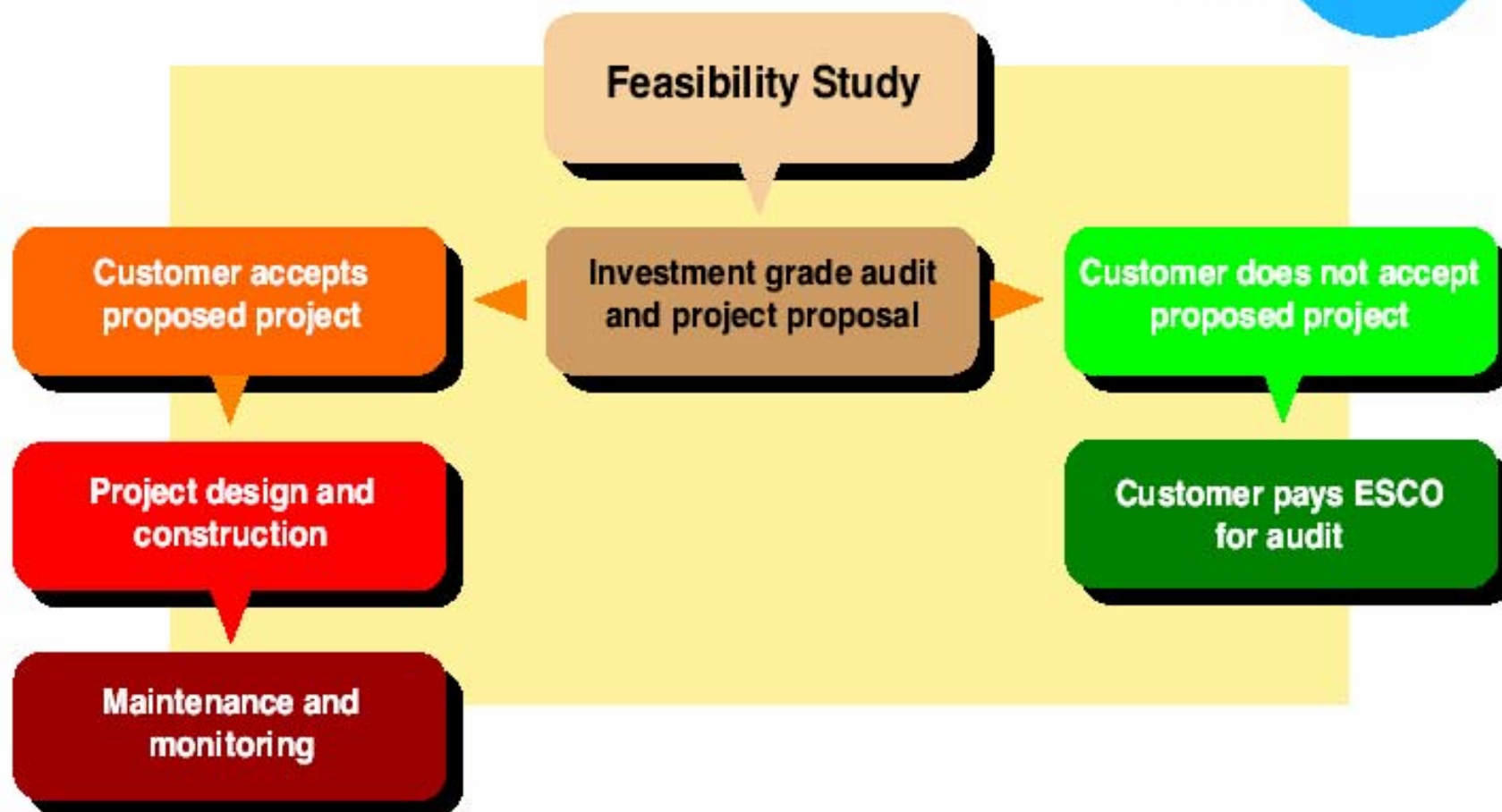


BARRIERS



- Slow movement from buyers
 - Lack of understanding of the opportunities
 - Lack of information
-
- Time consuming work for
 - raising interest in general – formulation of contracts
 - measurement and verification – attitude and culture
-
- Lack of Public Recognition
 - Procurement rules (Absence of bidding system)
 - Lack of General Conditions
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- Lack of Technical experts
 - Lack of capital
 - Different responsibility for investment and operation
 - Low energy prices

NAESCO model – example



EPC PROCESS – PROBLEMS – ACTIONS – RESULTS

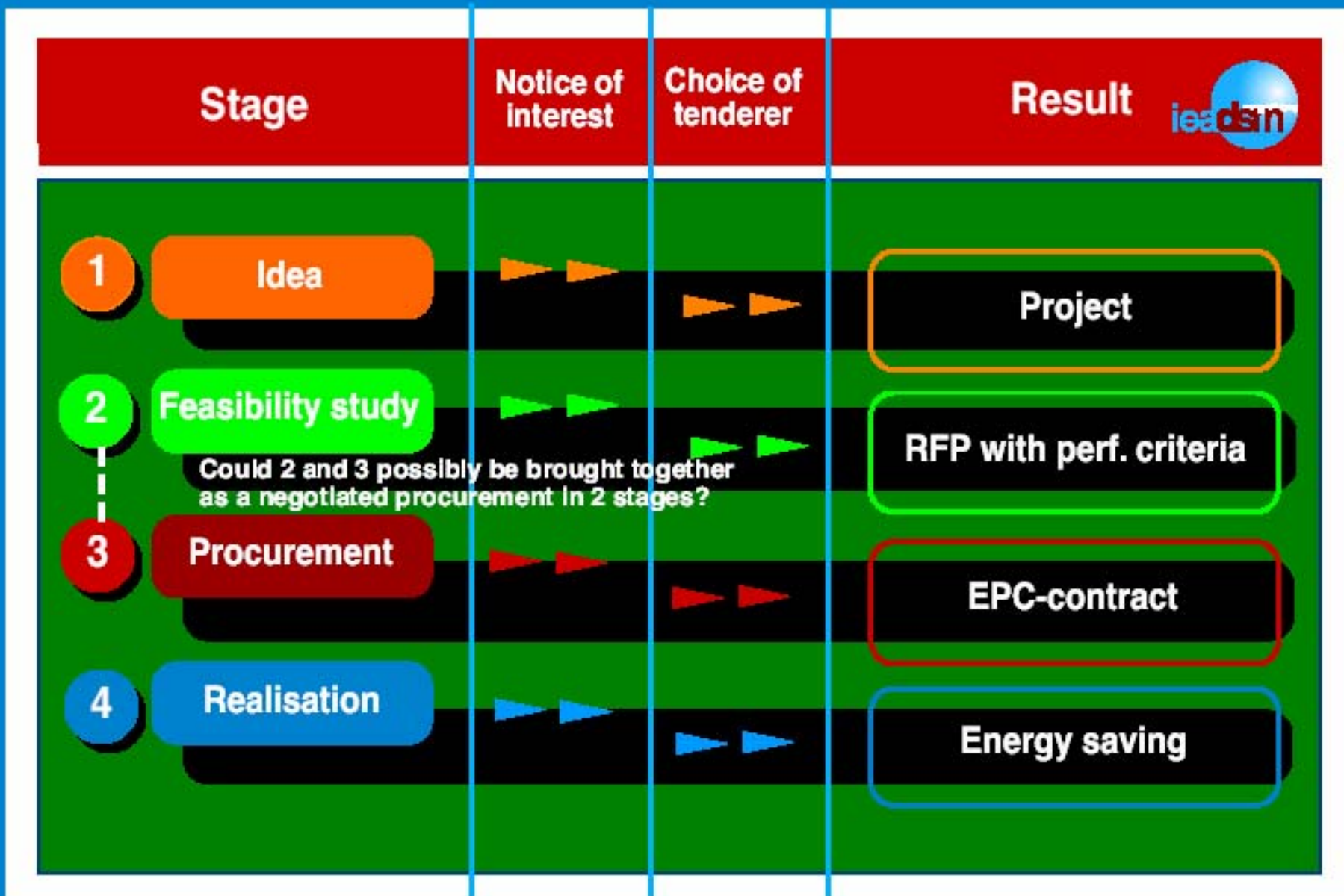


Problems	Short Term Actions	Long Term Results
1. Credibility & Trust	Information SAVE, Best Practice Creation of networks Demo Projects World EPC Conference Success stories	World EPC Network established "ISO 18000" Energy management Accreditation
2. Process & Procurement	Network of skills created Energy Agency, FEMP Clarification of Rules Guidelines Alt. with energy Audits and Feasibility study Two-stage, prequalification Conditional Award of Contract	Different alternatives for initiation of EPC-projects accepted by all stakeholders Both Owner, Energy Agency and EPC-initiated
3. Contracts	Public Property Owners establish national Standards As FEMP, States EC, WTO	A "FIDIC" Energy Perform. Contract Conditions finalised Manuals (web & printed) for EPC-projects generally available

EPC PROCESS – PROBLEMS – ACTIONS – RESULTS



Problems	Short Term Actions	Long Term Results
4. Financing	<ul style="list-style-type: none"> Banks awareness Local government allowed to enter multiyear contracts EBRD & World Bank National Economic incentives Government guarantees Warranty formulations Insurance arrangements 	<ul style="list-style-type: none"> White and Green Certificates Trading an accepted mechanism for Climate Actions EPC Performance Bonds established
5. Measurement & Verification	<ul style="list-style-type: none"> Analysis of existing Protocols Pilot Projects Simple benchmark-alternatives Yearly measuring 	<ul style="list-style-type: none"> Simplified benchmarking and repeated measuring routines established
6. Market Only limited in most countries but increased interest	<ul style="list-style-type: none"> Start of breakthrough for EPC in many OECD countries Public bodies launch EPC comp. – both large projects & parts of smaller 	<ul style="list-style-type: none"> EPC-solutions have penetrated OECD-countries and is increasing in transition & developing countries



Market Segments - Perf. contracting



Overview

	Finland	France	Italy	Japan	Netherlands	Norway	Sweden	USA
<i>Promising market segm.</i>								
• Service sector:								
– public	X	X	X	X		X	X	X
– private				X	X	X	X	X
• Commercial		X	X	X		X	X	X
• Residential					X		X	
• Process industry	X	X	X	X			X	X
• Other industry	X					X	X	
Existing stand. contr.	X	X	X	X			X	X

National Government Programs & Policies



Overview

	Finland	France	Italy	Japan	Netherlands	Norway	Sweden	USA
Procurement adapt								X
Public buying	X	X	X	X		X	X	X
Work out stand. contracts	X	X	X				X	X
Energy audits	X	X			X	X		
Energy Agency or equal	X			X	X		X	X
Compulsory Regulations			X					
Financial mechanisms		X		X	X		X	
Subsidies	X	X	X	X	X			
Tax advantages			X					
Energy costs								
M&V								X
Changes in laws			X	X	X			X
Information	X	X	X	X	X	X	X	X

EPC market potential per year



Estimation						
		Today 2000-01		Tot. potential		%
		Euro	USD	Euro	USD	Today/ potential
1	"Europe"	150 mill ¹⁾	135 mill	70 bill ¹⁾	63 bill	0.2%
2	Japan		64-196 mill ²⁾		19 bill ²⁾	1%
3	USA		1.8-2.0 bill ³⁾	≈70 bill ⁴⁾	≈63 bill	3%
Total 1-3			2.3 bill		144 bill	1.5%

Sources:

1) Lambert, 1999

2) Country Report Japan

3) Country Report USA

4) Leutgöb et al, 2000

1 USD = 1.1 Euro

CTI Recommendations

A workshop by IEA/CTI 2001



- **Third-party financing is not applied to its full potential in the countries in Central Europe**
- **Further development of the regulatory framework is desirable so that the services can be better utilised in the public sector.**
- **The procurement rules can be refined.**
- **An association of ESCOs could be a good network.**
- **Central European countries should recognise TPF and granting relevant incentives.**
- **Important that national administrations show examples of using TPF.**
- **Further discussions should be taken up about future actions, including also the discussion with the ongoing IEA DSM Task X "Performance Contracting" for information on experiences with necessary regulatory and legal context.**

EU Actions



- **Proposal for a Framework Directive for Minimum Efficiency Requirements for End-Use Equipment.**
- **Proposal for a Directive on Linking Project-based Mechanisms including JI and CDM to EC Emissions Trading Scheme.**
- **Proposal for a Directive on Energy Demand Management.**
- **Initiatives on increased energy-efficient public procurement.**

Possible actions from European mission

What we need to further develop ESCOs in the EU

- ◆ Clear definition of ESCO at EU level.
- ◆ Draft Directive on Energy Services
- ◆ Possible EU Code of Conduct for ESCO linked to:
- ◆ Possible EU wide Accreditation of ESCO (by who ?).
- ◆ EU list of accredited ESCO and establishment of the European Energy Service Company Association (EAESCO).

SUGGESTED ACTIONS



- 1 Information**
 - *Seminars*
 - *Training*
 - *Education*
 - *Calculation templates*
 - *The importance for the environment*
- 2 Introductory Energy Audits as a background for EPC contracts**
- 3 Procurement**
 - *Guidelines and clarification of public procurement rules*
 - *Examples of tendering procedure with evaluation criteria (weighting) and pre-qualification*
- 4 Standardised principles for EPC contracts**

SUGGESTED ACTIONS...



5 **Financing – Incentives**

- *Flexible loan and leasing solutions*
- *User organisations allowed to keep energy saving in their own budgets*
- *Support/incentives for energy-efficient solutions*
- *Subsidies*
- *Tax exemption*
- *SMB*
- *Government guarantees under certain conditions*
- *Higher energy prices*

6 **Facilitating for government – federal, regional and local – to enter into multi-year agreements**

SUGGESTED ACTIONS...



- 7** **Energy Agencies** and Owners launch EPC procurements
- 8** **Retrofitting** through EPC arrangements in government buildings gives strong message
- 9** **Quality Certification** Schemes for EPC projects and stakeholders
- 10** **Simplified benchmarking** for measurement and verification
- 11** **Model projects**