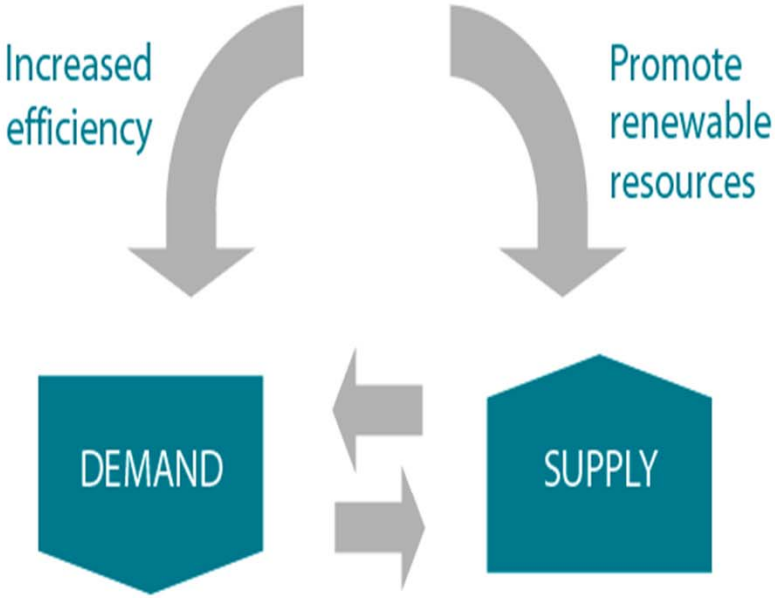
Energy Services models

Declan Meally
Sustainable Energy Authority of Ireland

Sustainable Energy Act 2002

Mission...

…To play a leading role in transforming Ireland to a society based on sustainable energy structures, technologies and practices



Key objectives

- **Energy efficiency first**
- **Low carbon energy resources**
- **Innovation and Integration**

Overview

- **The challenge**
  - Public sector energy costs
  - National targets
  - Proven opportunities
- **Strategy and progress**
  - Public sector energy partnership and networks
  - Structured energy management
  - Specialist advice, tools, training
  - Smart investment – retrofit case studies
- **Constraints and response**
  - Access to finance, expertise, time
  - The third party offering – shared savings model
  - Sharing, learning, replicating practical experience
- **Establishing the solution**
  - Tackling the barriers
  - Creating a healthy competitive market

The policy drivers

National Energy Efficiency Action Plan 2009-2020 and SI 542 of 2009

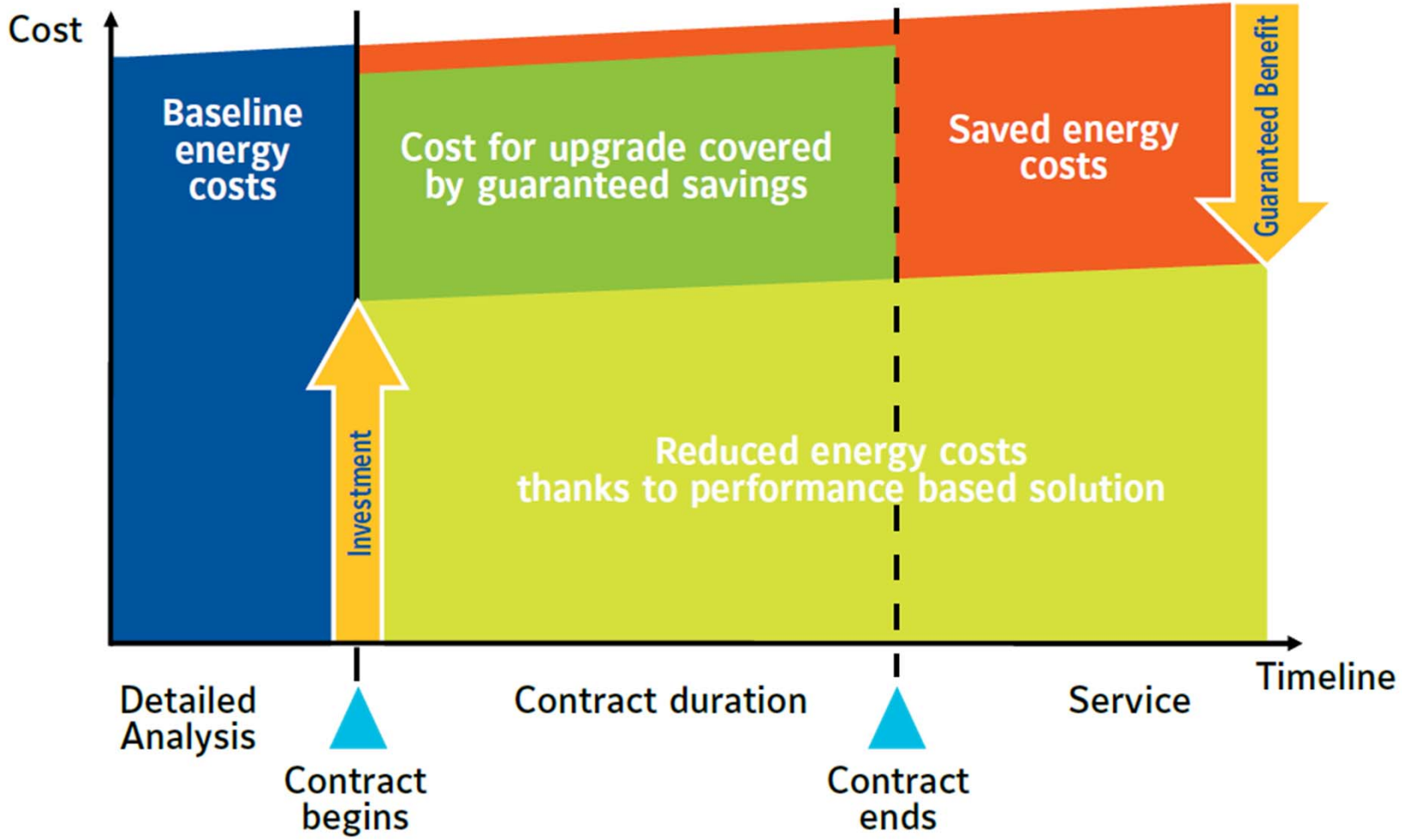
Responding to EU Energy Services Directive

- Overall energy efficiency improvement across all sectors: 20%
- **Overall energy efficiency improvement in public sector: 33%**
- This equates to:
  - a saving of **€165m/yr** at current prices
  - €1.2 billion net lifetime savings

- Public sector **leadership and exemplar** role
- Clear signal to support the development of energy services (ESCO) market

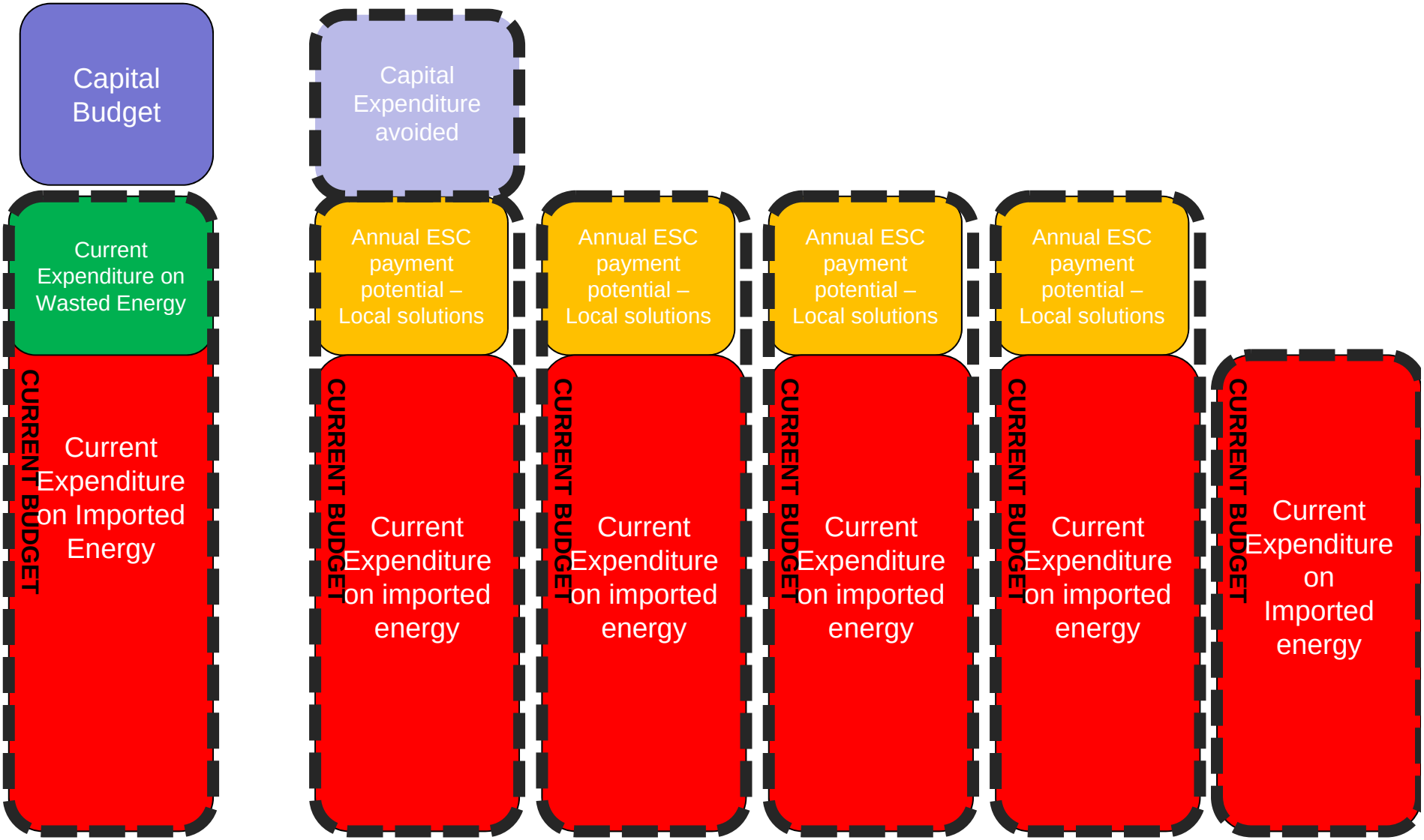
Programme for Government 2011 calls for introduction of **third party financing model** for energy efficiency investment in public buildings

The old model



Source: Institute for building efficiency (Johnson Controls)

The new “Business Improvement Service”



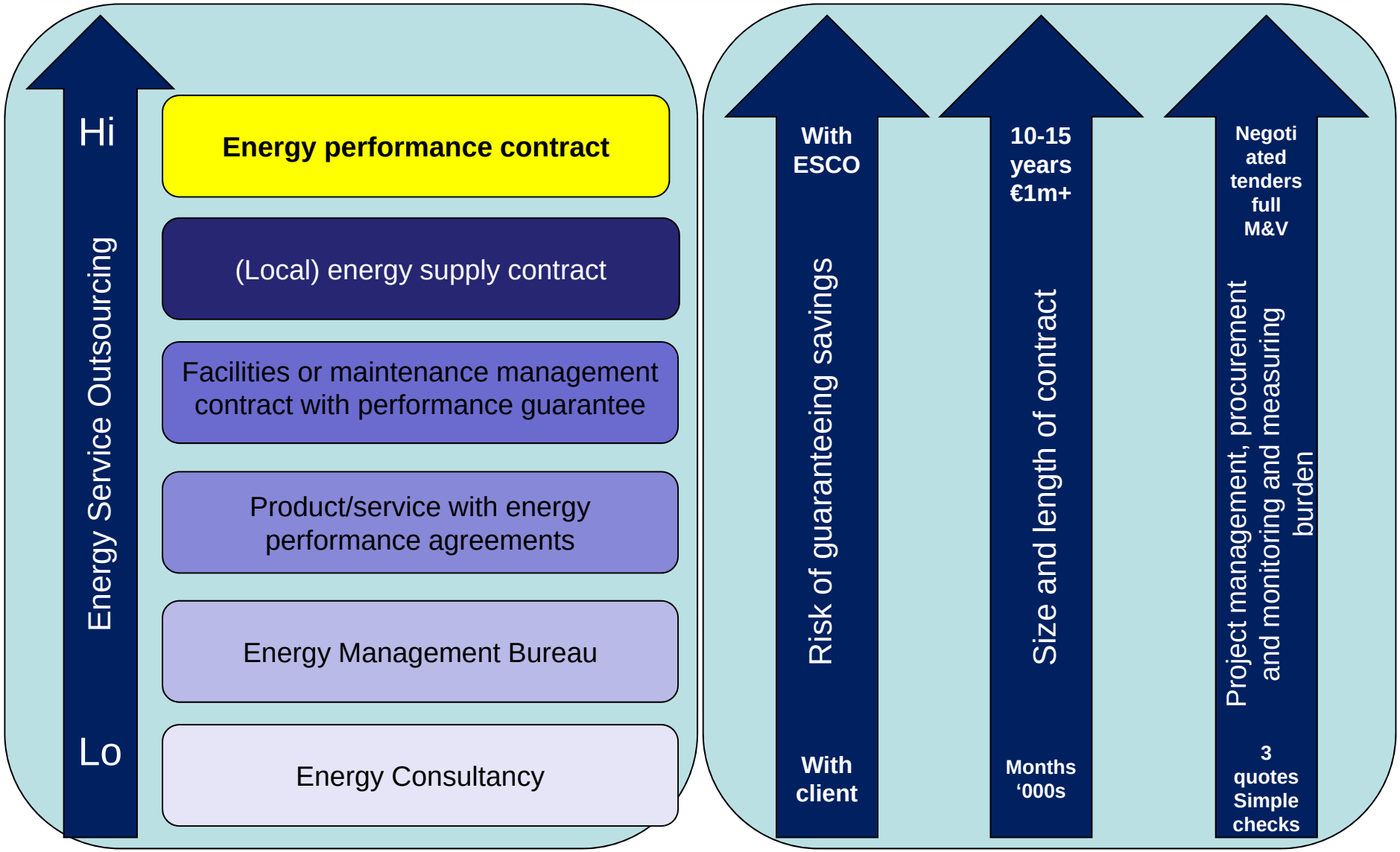
Energy Contracting

- Energy Supply contract – normal for many years
  - Utility Contracts
  - Guarantee of correct billing

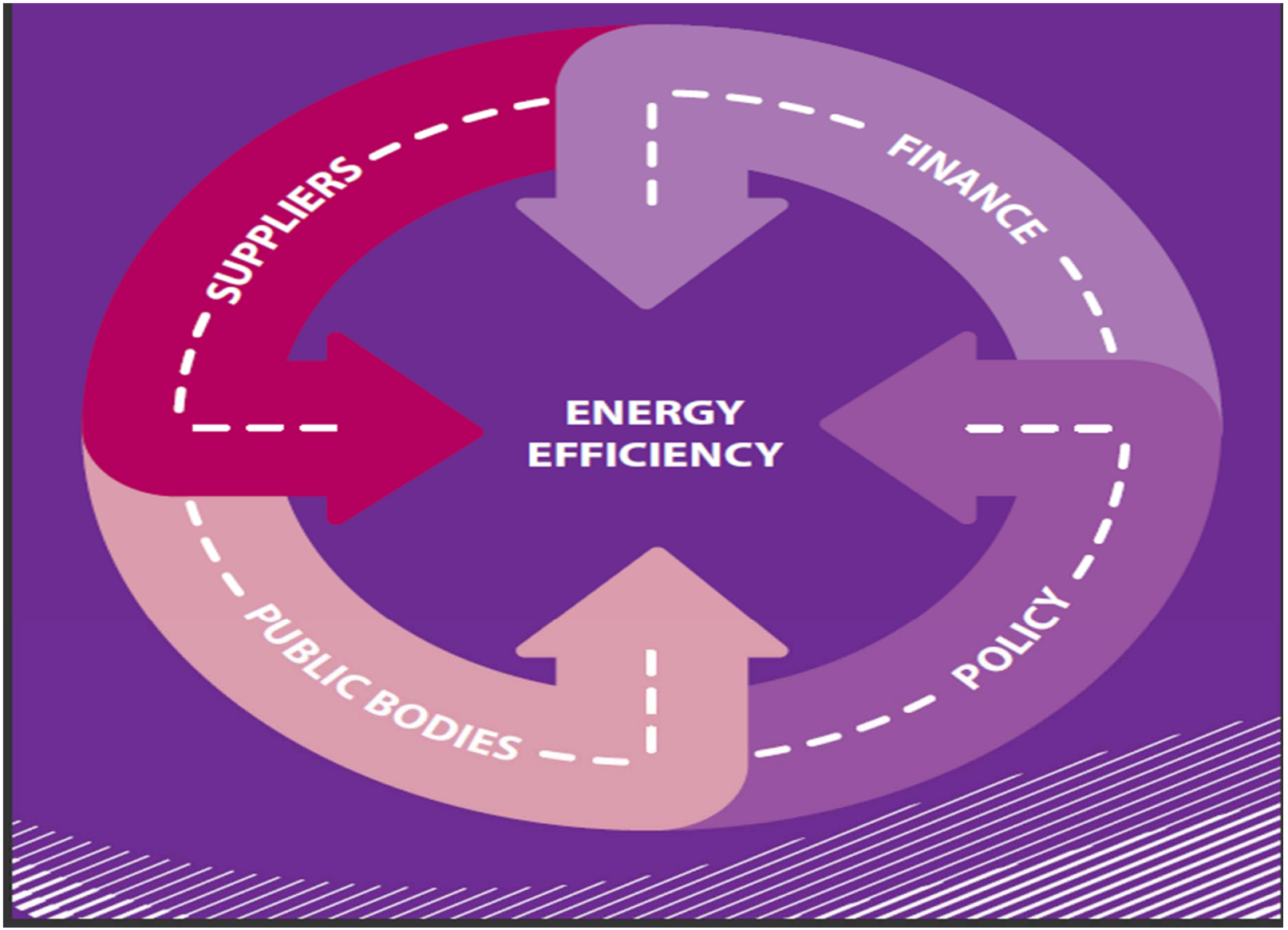
- Energy contracting = facilities management contract
  - No performance guarantee
  - Standard O&M contracts

- Energy Performance Contract – PPP contracts
  - Investment contract
  - Supply contract
  - O&M contract

The Energy Service Ladder



The Stakeholder Groups



The GAPs to address

Finance

They have – Loan funds

They need – Someone with an excellent credit rating the technical expertise to guarantee the energy wastage and loan payment potential.

Suppliers

The have – a good business model
They need to guarantee the payment potential of the client and take on the loan from the bank.
They need to partner with the Banks.
They need to provide auditable / verifiable energy data a skill set only available in some large ESCO's

Public Bodies

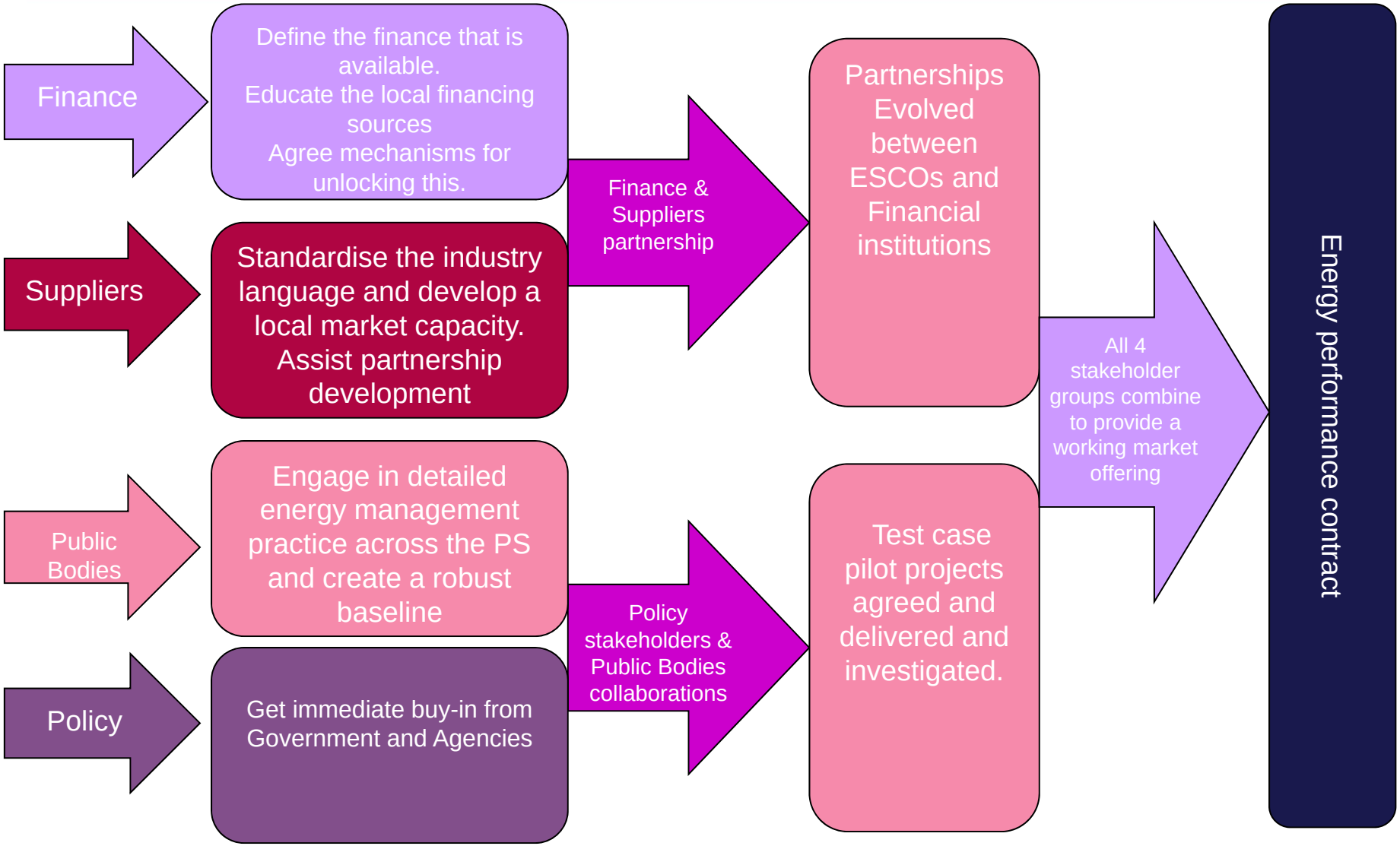
They have : A current budget with significant energy wastage and the ability to pay bills regularly.
They need is the capacity to identify the wastage and the ability to procure and manage an EPC contract
They need comfort that ESCOS can do the job and will work with local businesses to deliver the services.

Policy

We have: NEEAP and EU ESD
We need: Ring fencing of current energy budgets
Permission to use the EPC contracts and to sign "loan guarantees" for long term service contracts

Energy performance contract

ESCO Roadmap



Priming the pump

	SEEEP 2009	EEF 2010	BEW 2011
Grant support €M	4.9	8.3	(11.5)
Number of Projects Approved	91	66	99
Energy Savings GWh	52	228	304
Tonnes CO_2 saved	10,753	47,140	63,800
€M Saved	2.6	8.7	12.1
Payback Years (average)	4.6	2.5	4.6
Government Contribution	41%	37%	27%

Summary

- Energy contracting is in place in basic forms for many years
- Access to finance is now the key driver
- PPP seems to be the best fit for the next model of EPC
- We need to build capacity in **all** sectors to deal with this.

SUSTAINABLE ENERGY AUTHORITY OF IRELAND

Thank you