

ENERGY AGENDA & PROJECT MANAGEMENT

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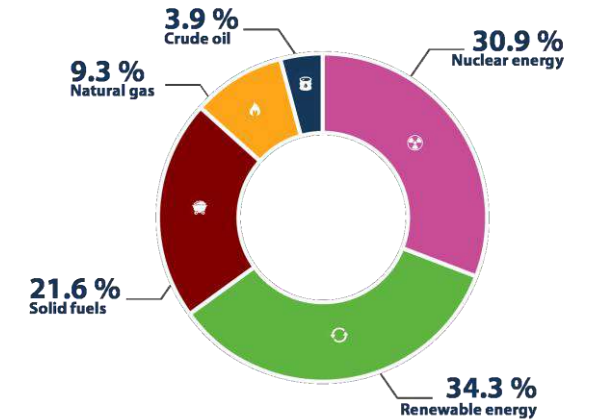
ENERGY

- **Production**

- Renewables
- Waste to Energy
- Biomass
- Nuclear



Share of EU energy production by source, 2018



Source: Eurostat

- **Reduction**

- Energy Savings
- Energy Efficiency
- Low Emissions



ENERGY & EUROPE




Regulation (EU) 2020/852: Facilitating Sustainable Investment for Environmental Protection

Environmental Objectives:

- a) Climate Change Mitigation
- b) Climate Change Adaptation
- c) Sustainable Use and Protection of Water and Marine Resources
- d) Transition to a Circular Economy
- e) Pollution Prevention and Control
- f) Protection and Restoration of Biodiversity and Ecosystems

ENERGY & UK

RIBA 2030 Climate Challenge target metrics for domestic buildings

RIBA Sustainable Outcome Metrics	Current Benchmarks	2020 Targets	2025 Targets	2030 Targets	Notes
Operational Energy kWh/m ² /y 	146 kWh/m ² /y (Ofgem benchmark)	< 105 kWh/m ² /y	< 70 kWh/m ² /y	< 0 to 35 kWh/m ² /y	UKGBC Net Zero Framework 1. Fabric First 2. Efficient services, and low-carbon heat 3. Maximise onsite renewables 4. Minimum offsetting using UK schemes (CCC)
Embodied Carbon kgCO ₂ e/m ² 	1000 kgCO ₂ e/m ² (M4i benchmark)	< 600 kgCO ₂ e/m ²	< 450 kgCO ₂ e/m ²	< 300 kgCO ₂ e/m ²	RICS Whole Life Carbon (A-C) 1. Whole Life Carbon Analysis 2. Using circular economy Strategies 3. Minimum offsetting using UK schemes (CCC)
Potable Water Use Litres/person/day 	125 l/p/day (Building Regulations England and Wales)	< 110 l/p/day	< 95 l/p/day	< 75 l/p/day	CIBSE Guide G

SUSTAINABLE DEVELOPMENT GOALS



SUSTAINABLE DEVELOPMENT GOALS

17 GOALS TO TRANSFORM OUR WORLD



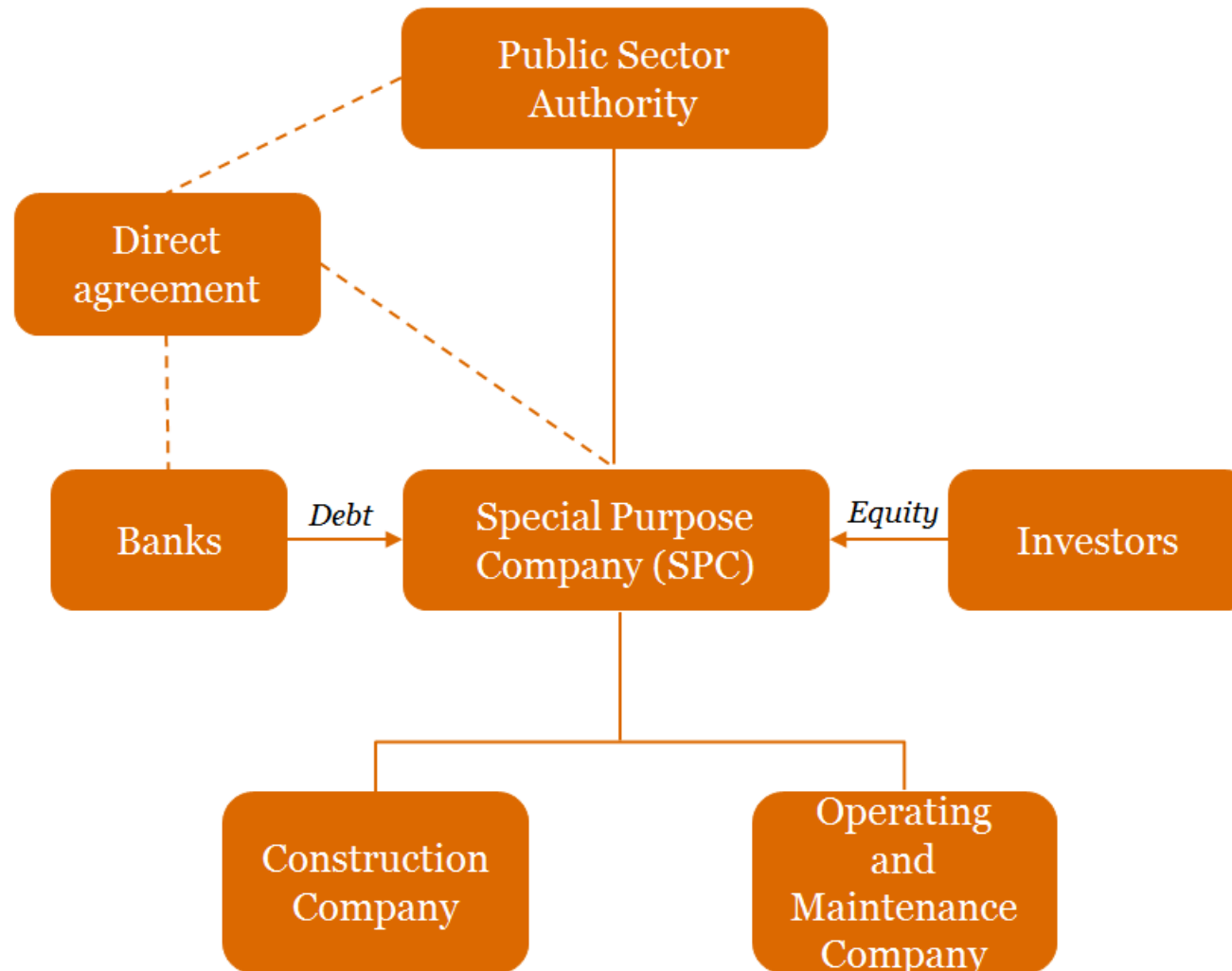
IPMA®
GREECE

international
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PRIVATE PUBLIC PARTNERSHIPS (PPP)

- PPPs – the Scheme
- Greek PPP Preparatory Framework [EBRD, Greek PPP Unit, MoF]
- the role of PM
- Active PPPs in Greece
- PPP Pipeline

PPP – THE SCHEME



PPP – GPPPF

- Client: **Ministry of Finance [Greek PPP Unit]**
- Sponsor: **European Bank for Reconstruction and Development [EBRD]**
- Advisers: **Six (6) SPVs shortlisted in 2022**
- Advisers Scheme: **Project Management; Financial Advisory Board; Technical Advisory Board; Legal Advisory Board; Environmental and Social Advisory Board**

PPP – THE ROLE OF PM

Project Management

- Reporting to the relevant Government authorities and the EBRD.
- Planning and managing the implementation of the Assignment.
- Monitoring the implementation of the Assignment.
- Working closely and coordinating with the Government, the Contracting Authority, the EBRD, and different consultants selected for the same engagement.
- Leading and managing discussions with the Government, the Contracting Authority, the EBRD and any other relevant stakeholders.
- Coordinating and collating data and inputs from the relevant stakeholders for the preparation of Deliverables.
- Ensuring the quality of the Deliverables shared under the Assignment are of the highest quality.
- Coordinating feedback on Deliverables from the Government and the EBRD.
- Coordinating feedback on Deliverables from the Government and the EBRD.
- Providing administrative support for managing and implementing the Assignment which could include but not be limited to translation support, interpretation support, supporting the preparation of documents required for the approval of relevant Government authorities, etc.

PPP – THE ROLE OF PM

Position	Qualification Requirements	Minimum Experience
<p>Project Team Leader</p> <p>The Project Team Leader will be responsible for: (i) the co-ordination of the consultant Project team; (ii) the interface with the PPP Unit and the Contracting Authority, the EBRD as well as all other relevant parties for the Project. He/she will also be responsible for the overall Project delivery, managing all processes and inputs necessary to reach successfully all milestones along the Project cycle;</p>	<ul style="list-style-type: none"> -University degree in law, finance, engineering or equivalent -Excellent command of English language -Excellent command of Greek language -Strong sensitivity to advise Public sector in PPPs in general and Academic Facilities or Facility Management PPPs in particular -Excellent communication skills -Significant availability for the next two years 	<ul style="list-style-type: none"> -10+ years of substantial team management practice in complex PPP Project Management -Experience in advisory Public Sector in academic facilities or similar FM PPP projects that involved private financing, including specific experience on at least two FM PPP projects within the last 10 years -Strong advisory track record in PPP/concessions -Experience in Greek or similar EU countries would be an important advantage. Direct experience working on a PPP project that has been qualified as “off-balance sheet” will be valuable under the European System of Accounts (ESA 2010).

PPP – ACTIVE PROJECTS IN GREECE

- **Schools PPP (Initiatives: PV panels for Energy Production)**
- **Waste Management PPPs (Initiatives: Opportunity for Waste-to-Energy)**

- **All PPPs procured:-**
 - New Buildings: EPC – Grade A+
 - Technical Specifications for Energy Efficiency
 - Metrics for Energy Savings (win-win for Public and Private Authorities)

PPP – GREEK PPP PIPELINE

- Dams (Havria Chalkidiki; €105m, Enipeas Farsala and Tavronitis Crete)
- Waste Management in Attica Region (2 PPPs; €800m)
- Green Agriculture Development (8 projects; €596m)
- District Heating Network, Thessaloniki

- Building Infrastructure Projects (All PPPs in Practise)

ENERGY SERVICE COMPANY

- European Energy Efficiency Platform (E3P)
- ESCO Scheme
- Energy Services
- ESCO Project Elements

ESCO – E3P

Thematic Areas



Buildings



Urban Areas



Products



Industry



Transport and
Mobility



Energy Generation
and Distribution

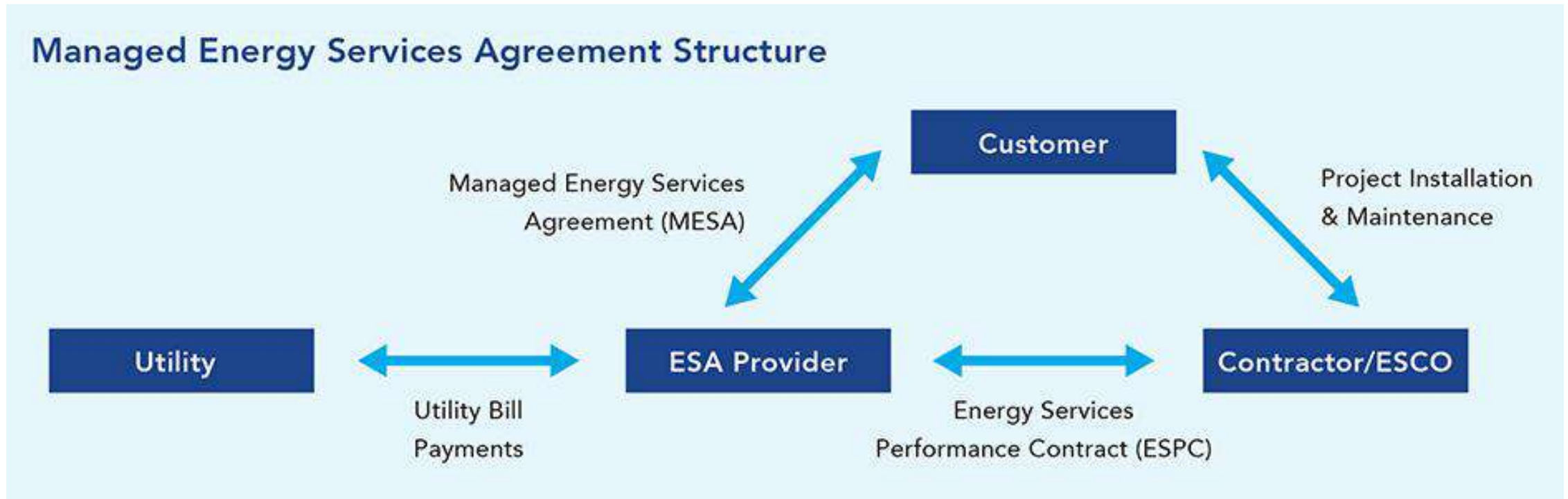
ESCO – THE SCHEME

An ESCO is a company that offers **energy services** which may include implementing **energy-efficiency projects** (and also renewable energy projects) and in many case on a **turn-key basis**. The three main characteristics of an ESCO are:-

- ESCOs guarantee **energy savings** and/or provision of the same level of energy service at lower cost. A performance guarantee can take several forms. It can revolve around the actual flow of energy savings from a project, can stipulate that the energy savings will be sufficient to repay monthly debt service costs, or that the same level of energy service is provided for less money.
- The **remuneration of ESCOs** is directly tied to the **energy savings achieved**;
- ESCOs can **finance, or assist in arranging financing** for the operation of an energy system by providing a **savings guarantee**.

Therefore, ESCOs accept some degree of risk for the achievement of improved energy efficiency in a user's facility and have their payment for the services delivered based (either in whole or at least in part) on the achievement of those energy efficiency improvements.

ESCO – THE SCHEME



ESCO – PROJECT ELEMENTS

- Site survey and preliminary evaluation;
- Investment grade energy audit;
- Identification of possible energy saving and efficiency improving actions;
- Financial presentation and client decision;
- Guarantee of the results by proper contract clauses;
- Project financing;
- Comprehensive engineering and project design and specifications;
- Procurement and installation of equipment; final design and construction;
- **Project management**, commissioning and acceptance;
- Facility and equipment operation & maintenance for the contract period;
- Purchase of fuel & electricity (to provide heat, comfort, light, etc.);
- Measurement and verifications of the savings results;
- Operation and maintenance.