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Italian Energy Efficiency platform

Transferring the Italian EE knowledge and practice to Morocco

SIE-RES4MED High level conference in Rabat

9 March 2016

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Section 1

The Italian experience in the Energy Efficiency domain

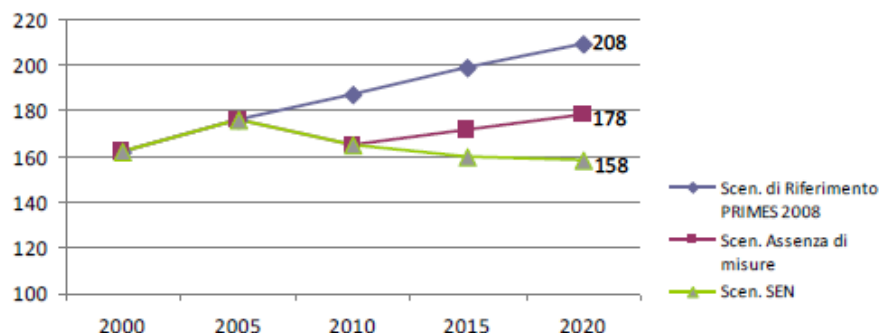
The Italian Energy Efficiency market

Main figures

Strategic objectives

- A significant increase in the efficiency of energy use is a primary goal of the National Energy Strategy.
- By **2020**, Italy aims at:
 - **overcoming the -20% objective** (-24%, 20 Mtoe primary energy, 15 Mtoe final energy)
 - **avoiding CO2 emission of 55 Mtons/year**;
 - **saving 8 billion Euro/year** for fossil fuel import.

Primary consumptions objectives (Mtoe)

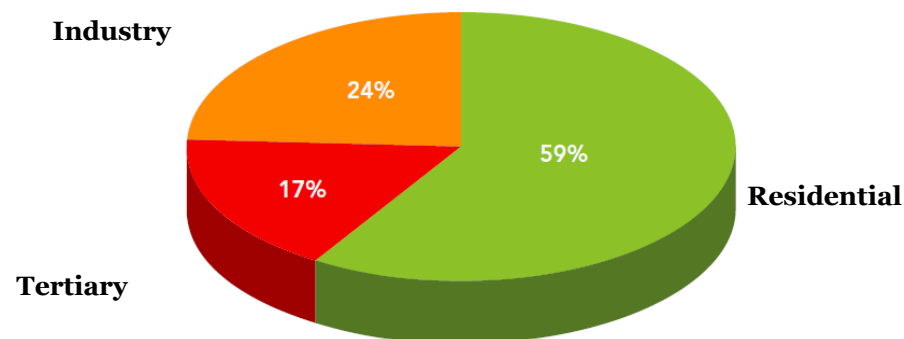


Source: National Energy Strategy (2013)

Market pool

In 2014, the overall value of the Energy Efficiency market in Italy has been estimated at around **5.2 billion Euro^(*)**.

Market pool breakdown (2014)



Source: Energy&Strategy group – EE Report (2015)

Investments needed to achieve the strategic EE goals are estimated at around **55-60 billion Euro**.

^(*) Estimated value of investments in efficient lighting systems, compressed air, inverters, electrical engines, cogeneration, windows, heating&cooling, monitoring&control systems

The Italian Energy Efficiency players

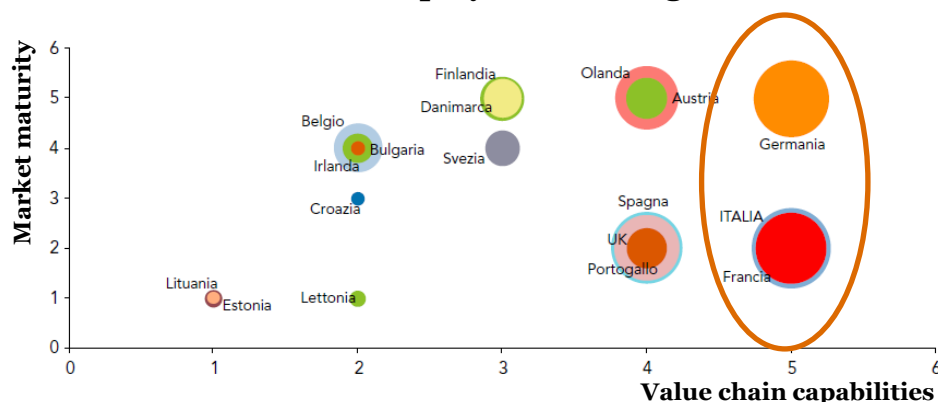
Capabilities and specialisation

Market players capabilities

Considering:

- the **number of market players**,
- the **range of technological solutions** provided
- the **contractual solutions** applied

Italian EE market players rank high in the EU list



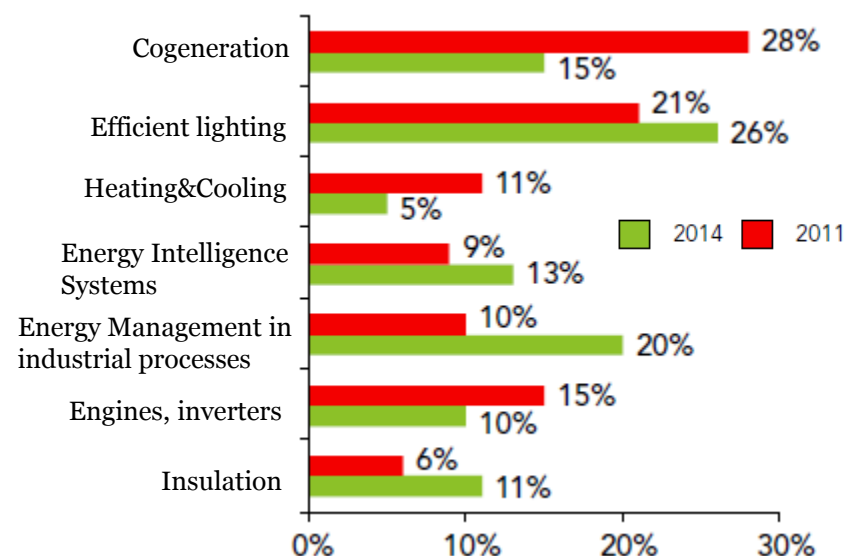
Source: Energy&Strategy group – EE Report (2015)

Some gaps are related to the stability of the regulation system and ease of financing, which are under attention.

(*) Bubble dimension = market potential

Growing complexity of intervention

As shown by a recent survey, the **level of complexity** of the technology solutions applied by Italian ESCos is **growing year by year**.



In such an evolution, ESCos are specialising themselves in customised interventions with **increasing risk management skills**.

Source: Energy&Strategy group – EE Report (2015)

The Italian Energy Efficiency players

Sectorial specialisation and services

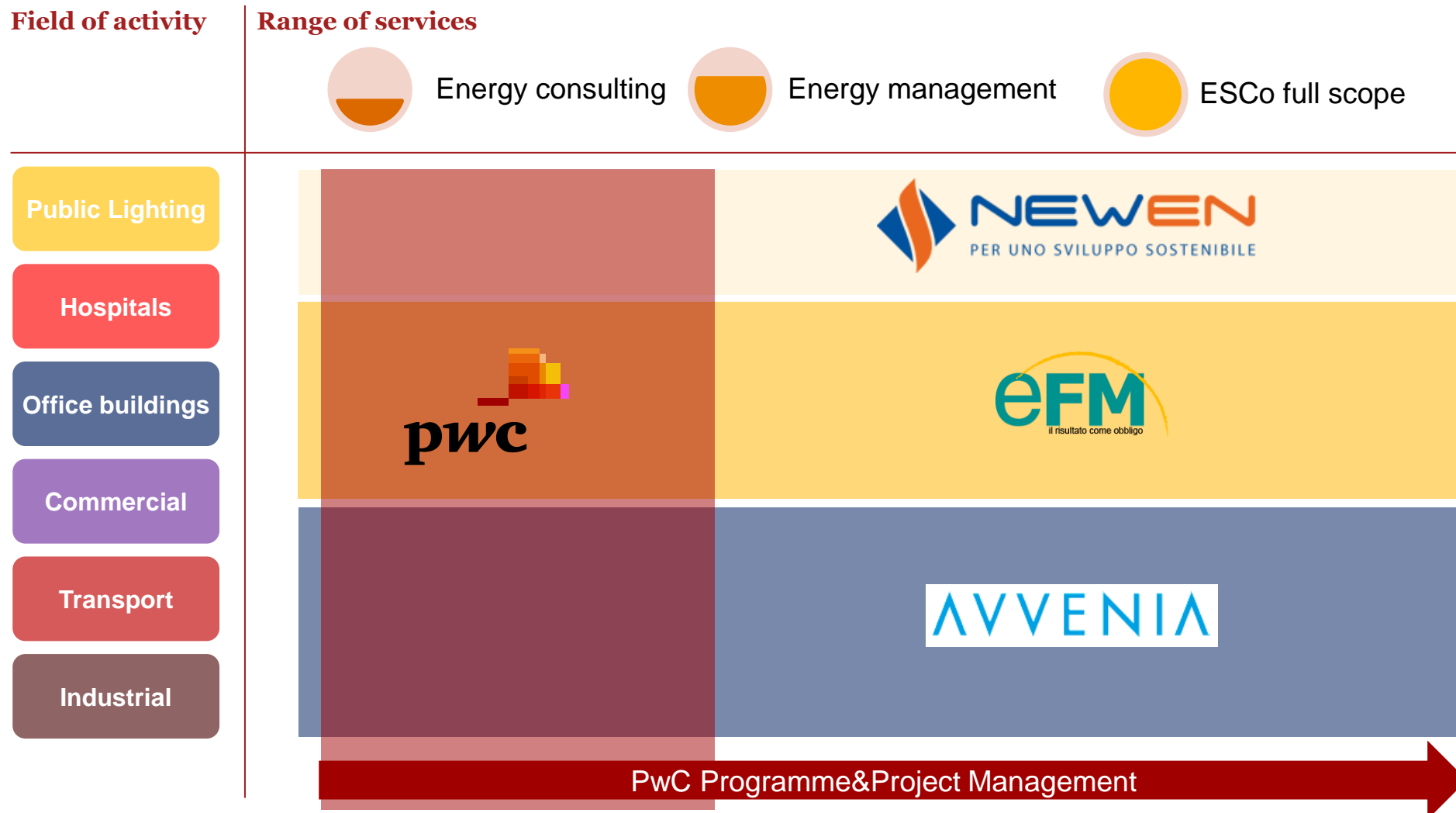
Field of activity	Range of services		
		Energy consulting	
		Energy management	
<div data-bbox="121 626 386 732">Public Lighting</div> <div data-bbox="121 753 386 859">Hospitals</div> <div data-bbox="121 880 386 985">Office buildings</div> <div data-bbox="121 1006 386 1112">Commercial</div> <div data-bbox="121 1133 386 1239">Transport</div> <div data-bbox="121 1260 386 1365">Industrial</div>	<ul style="list-style-type: none"> • Energy audits • Technical feasibility studies • Business planning • Financial modelling • Finance raising • Policy design, evaluation, implementation 	<ul style="list-style-type: none"> • Project design • Project implementation • O&M • Monitoring 	<ul style="list-style-type: none"> • Energy Performance Contracting (with financial risk taking)

Section 2

The Italian Energy Efficiency platform

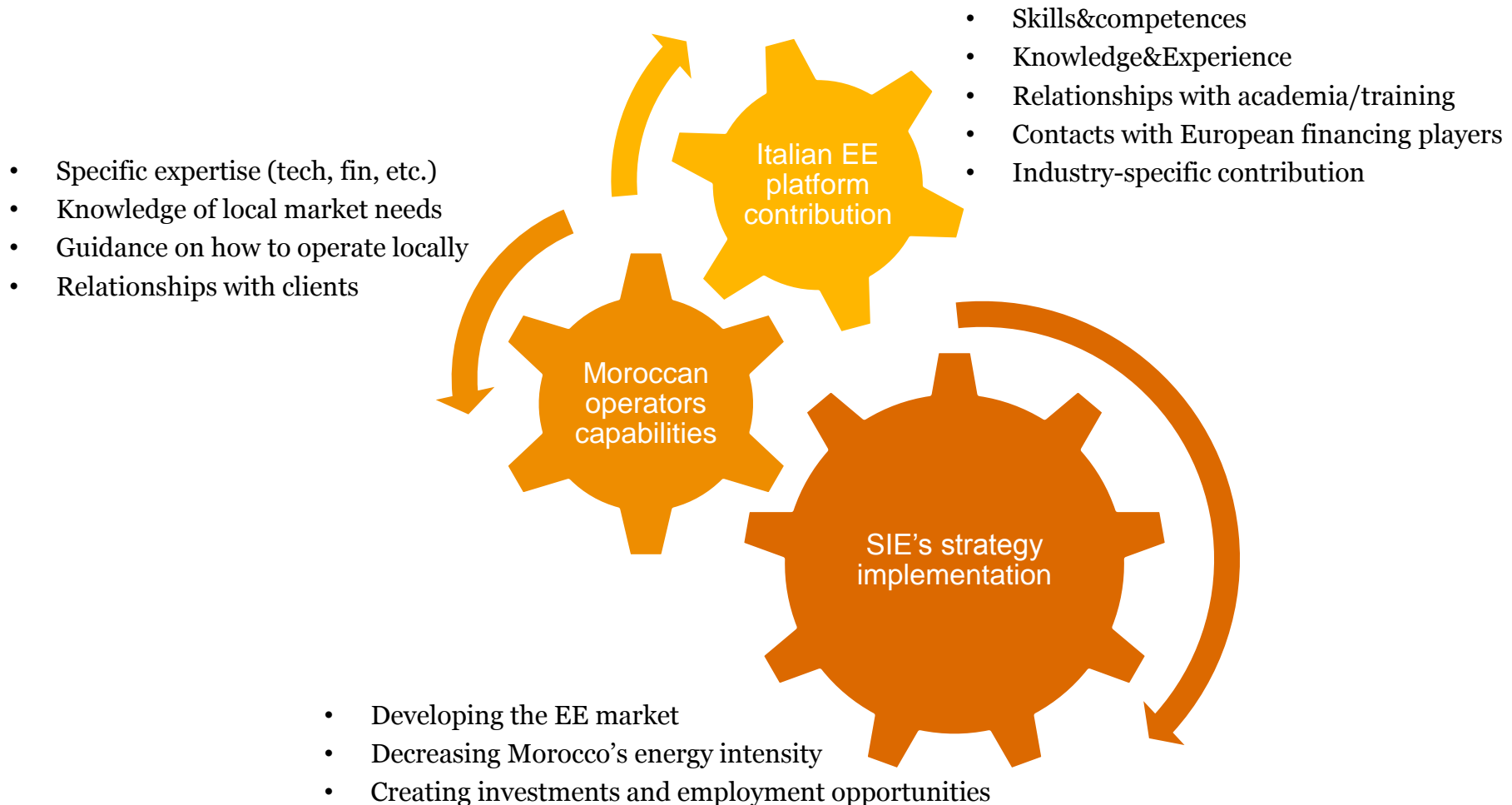
The Italian Energy Efficiency platform

We built a knowledgeable team to explore opportunities in Morocco



The Italian Energy Efficiency platform

Teaming with local actors: common benefits



Section 3

PwC's capabilities and experiences



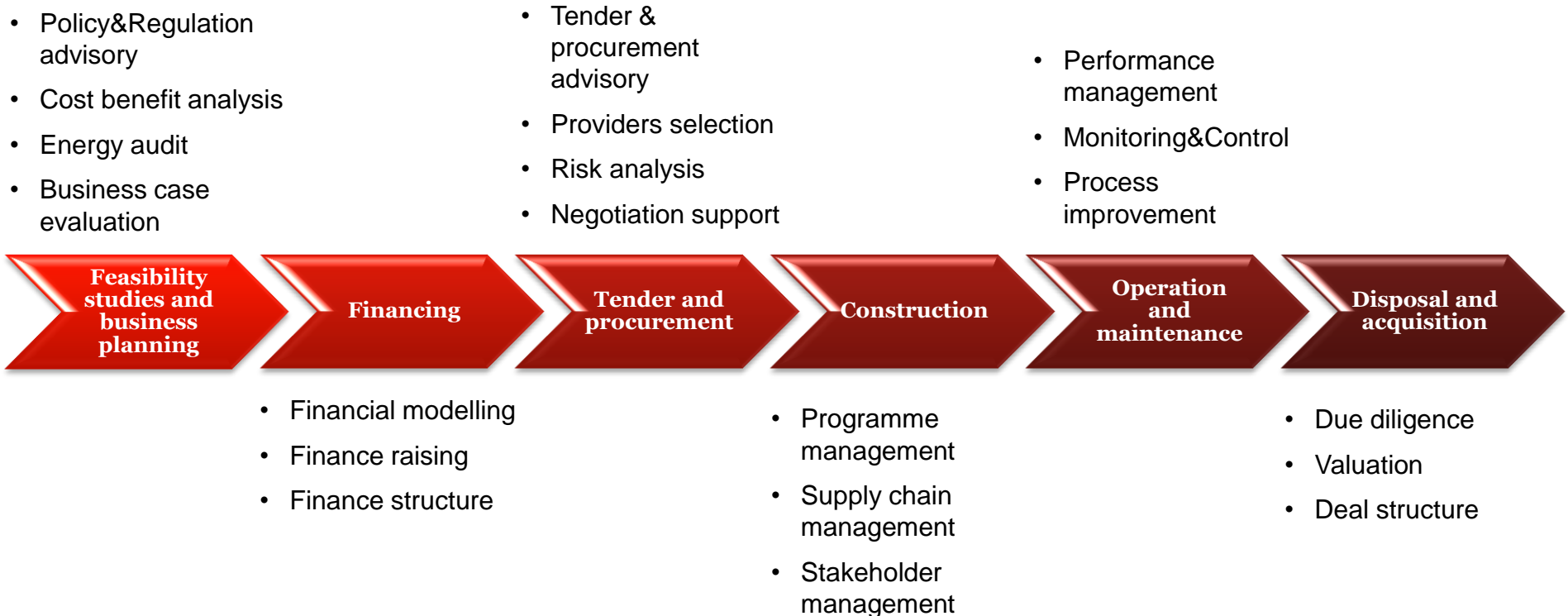
PwC

Who we are

- **PwC is a global leader** in the provision of professional **business consulting services**.
- Leveraging on the skills and experiences of more than **208,000 professionals** located in **756 offices** in **157 countries**, PwC operates with an **integrated and multidisciplinary approach**, combining **internationally widespread capabilities** with **local markets knowledge** in different sectors.
- The services offered are divided among the different **Lines of Service (LoS)**:
 - **Audit and assurance**, providing comprehensive audit and assurance services designed to deliver real value and underpin investor confidence;
 - **Advisory**, helping clients develop practical strategies to address their biggest challenges and turn ideas into action.
 - **Tax & Legal**, providing legal and tax services.
- PwC professionals are **specialised by industry** and organize their activities in **focussed teams**. Among them, the **Energy & Utilities group** has more than **4,000 specialists worldwide** and **11 Centres of Excellence**.
- In this context, the **Renewable and cleaner energy** one has been growing significantly in the last few years, collecting all the experiences in **RES and Energy Efficiency**.



Our services in the Energy Efficiency domain



In our experience, a strong project management is key to deliver benefits

PwC Programme&Project Management



Main experiences/clients

**Top-tier 3
Italian bank**

**Energy
Efficiency
Management
project**
2015



**Support to
energy audits**

2015



**Support to
energy audits**

2015



**Support to
energy audits**

2015



**Evaluation of
IEE II-PDA
facility**
2015



**Support to
energy audits**

2015



**FWC on finance
raising for
innovation
projects**
2014



**Impact
assessment of
EE policies
beyond 2020**
2014



**Evaluation of
the EEEF**

2014



**Support to
JESSICA
implementation**

2012-2014



**Support to audit
model design**

2012-2013



**Support to
energy contract
negotiation**

2011

Lessons learnt in PwC's works for...PwC

From assessment to implementation: strong PMO needed

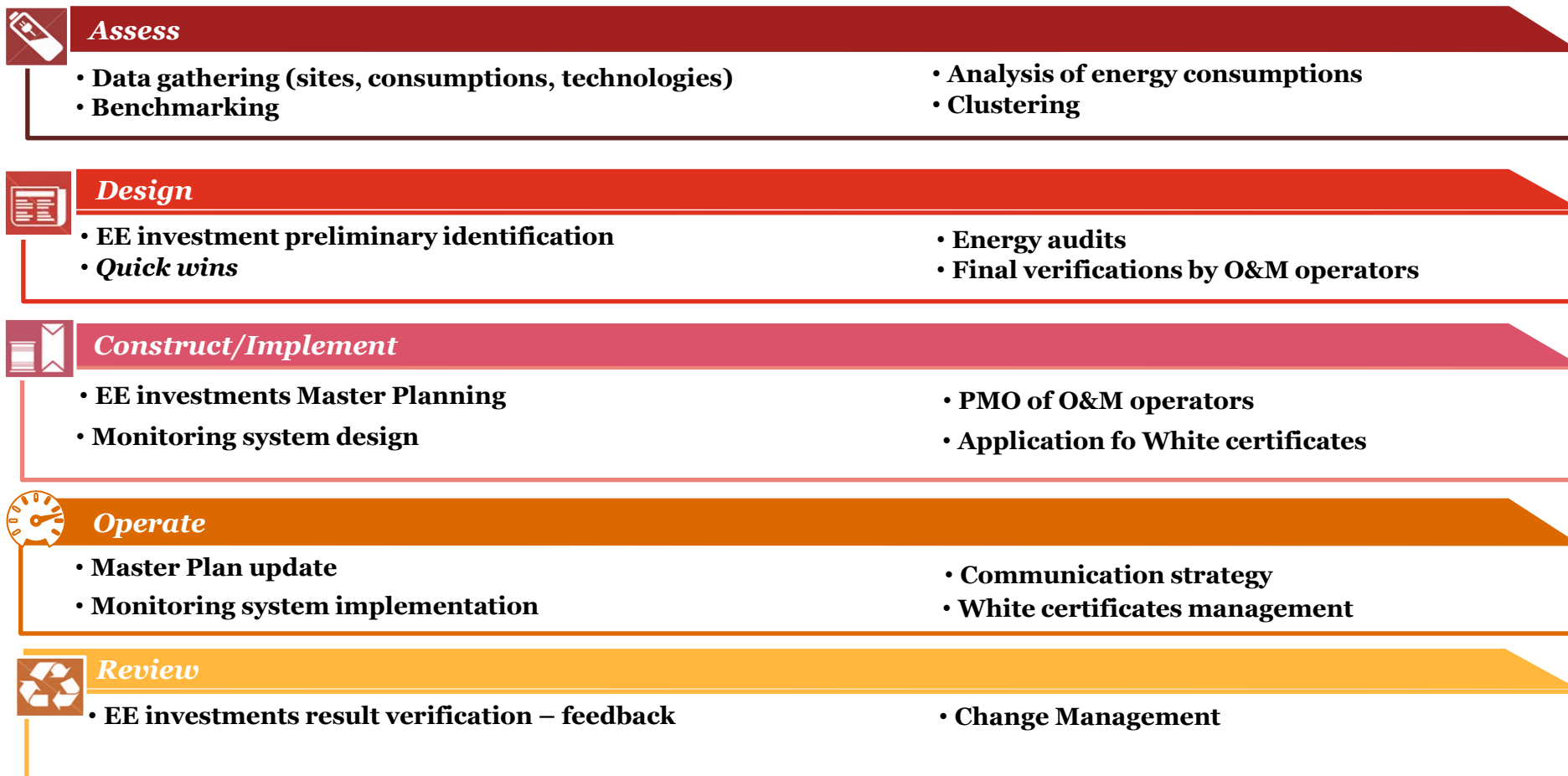
Start measuring early	Create a baseline, consolidate as you go
Adopt a 'do-learn-do' attitude	Manage asymmetries, try out, learn, refine
Get buy-in from staff	Involve people at different levels, EE is a process
Engage providers in change management	No brains without hands
Assess buildings individually	Any building is different, tailor analyses before generalising
Establish joint agenda between operational and real estate teams	Coordination is key: otherwise EE remains on papers
Demonstrate the value of changes up front	Make a good EE project design to get the Board approval



Our approach transferred to clients

A recent experience in a Top-tier bank in Italy

5 intervention phases



Thanks for your attention!



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