



Consip's Approach to Energy Efficiency

Case study – The Integrated Energy Service Framework Contract (FC) - 3rd edition

Marco Dellomonaco

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Let's get started...

- About Consip
- Main features of the Integrated Energy Service FC 3rd edition
- ESCOs and EPC – Consip's point of view
- The Energy Efficiency approach in the Integrated Energy Service FC 3rd edition



Consip Corporate profile

- Consip S.p.A. is a public stock company set up in 1997 and owned by the Italian Ministry of Economy and Finance (MEF), its sole shareholder.
- Consip's mission is to make the use of public resources more efficient and transparent, by providing tools and skills to public administrations, in order to allow them to perform public purchases and at the same time stimulate a competitive participation of enterprises to public tenders.
- Consip obtained the ISO 9001:2008 quality certification for the “design, implementation and launching of framework contracts and e-marketplaces for the procurement of public Goods and Services, in its role as central purchasing body”.



Consip's Main Activities

Consip's activities involve three main areas:

- Implementation of the Program for the rationalization of public spending on goods and services through the use of ICT (Information and Communication Technology) and innovative procurement tools: framework contracts, emarketplace for public administration, framework agreements, dynamic purchasing system, ASP tenders (Central Procurement Area).
- Support to individual administrations along the entire procurement value chain, as well as in its role as the central purchasing body, according to specific bilateral agreements (Vertical Procurement Area).
- Implementation of specific tasks assigned by law or by *ad hoc* administrative acts (Other Initiatives Area).



Consip's Methodology

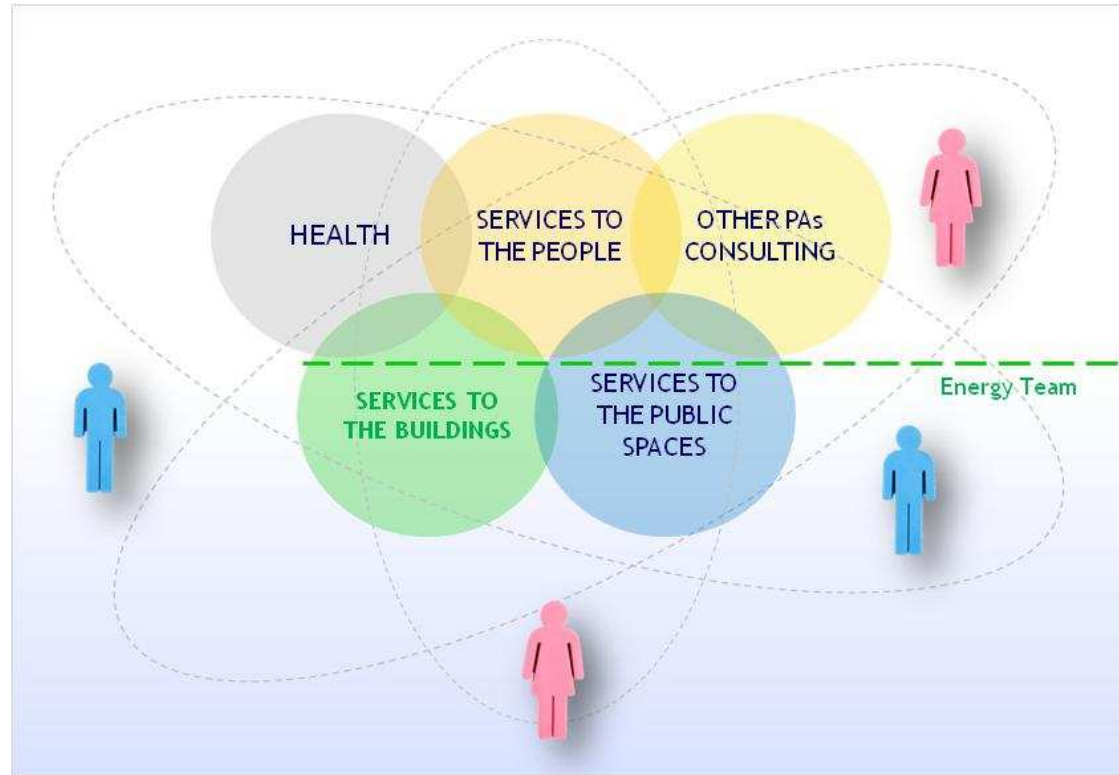
- Consip offers consultancy and project design services. The company handles projects including strategic designs. These projects have developed over time technical, legal and project management skills.
- Consip is a competence centre specializing in all phases of the procurement value chain; it stands beside public administrations both in the procurement strategic planning phase and in the real purchasing phase, by providing eprocurement tools, assistance and consultancy.
- Consip relies on about 300 employees, with an average age of 43 years. 83% of the employees are university graduates and 50% of them are women.
- The entire action of Consip is based on core values such as innovation, transparency, competence and competition.



Real Estate Area: the Energy Unit

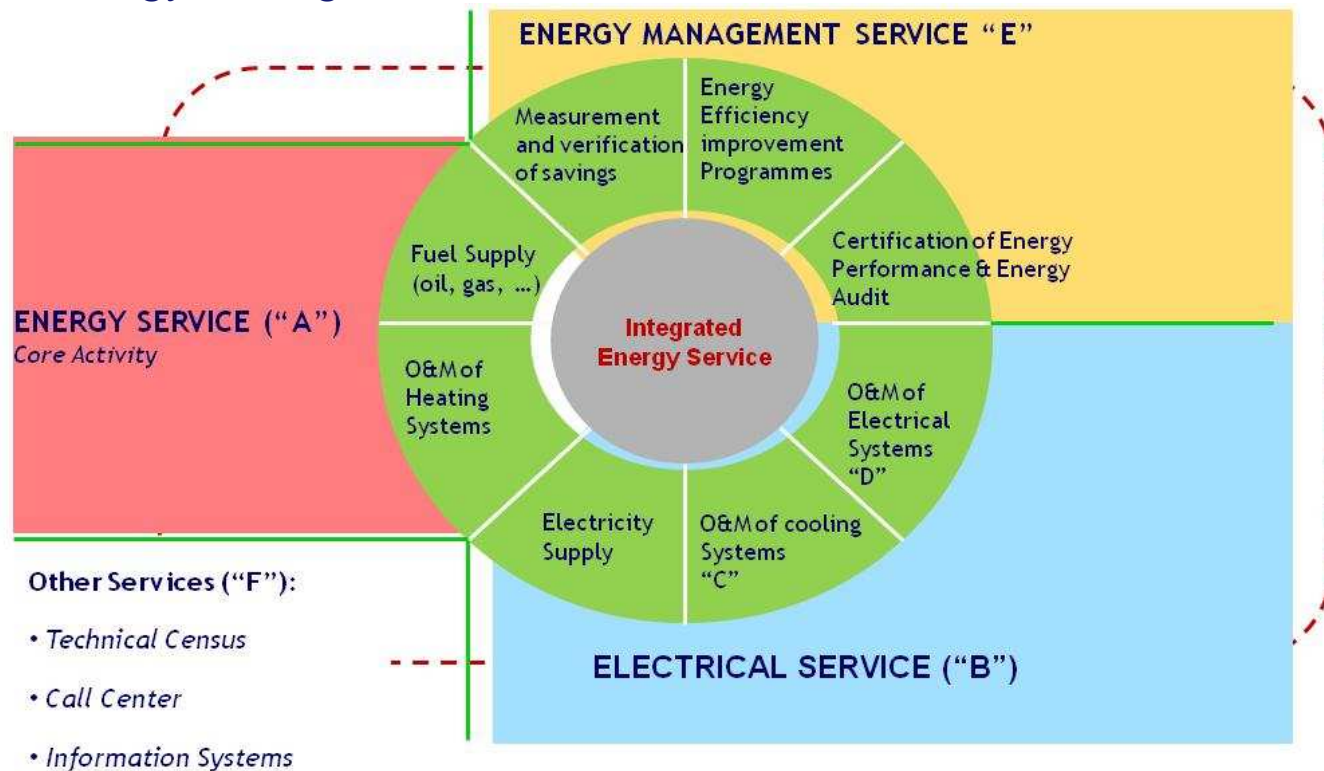
The Real Estate Area manages a large portfolio of projects. The projects are classified into 5 categories.

The **Integrated Energy Service** belongs to the category of the “**Services to the buildings**”. The **Energy Team** operates across two categories: Services to the Buildings (i.e. Integrated Energy Service) and Service to the Public Spaces (i.e. Streets Lighting Service)



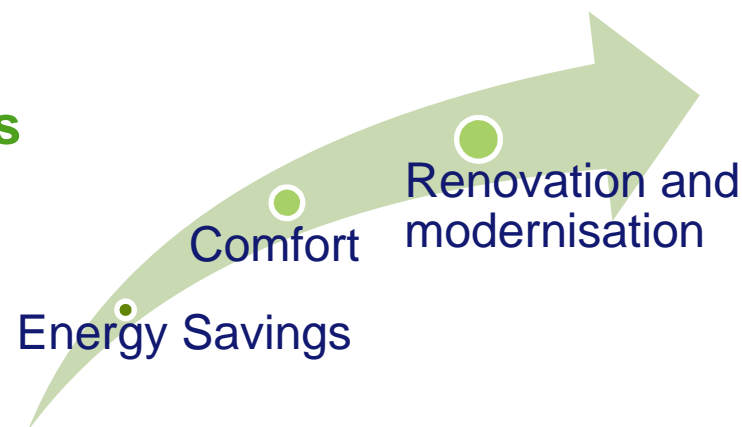
Main Features of the Integrated Energy Service FC

The Integrated Energy Service is a performance-based contract for the management of heating, cooling and electrical systems through which the supplier has to guarantee the following: a pre-determined “comfort situation”; energy savings and carbon dioxide reduction.



The Energy Service Companies (ESCOs) & the Public Sector *Consip's view*

The goal is to spread ESCO projects (Energy Performance Contracting) throughout the Public Sector. The result is:



Why is this important in public sector?

- To demonstrate the exemplary role of the public sector as stated in the Energy Service Directive (ESD)
- To reach the savings goal for Public Administrations stated in the ESD
- To satisfy the renovation and modernisation needs of the Public Building systems;



Barriers We Hope to Overcome



- Lack of awareness and information
- Lack of expertise for developing ESCO projects
- Lack of funds

- Tender procedures are perceived as unclear
- Tenders participation requirements seem too restrictive
- Life span of the contracts appears to be not long enough



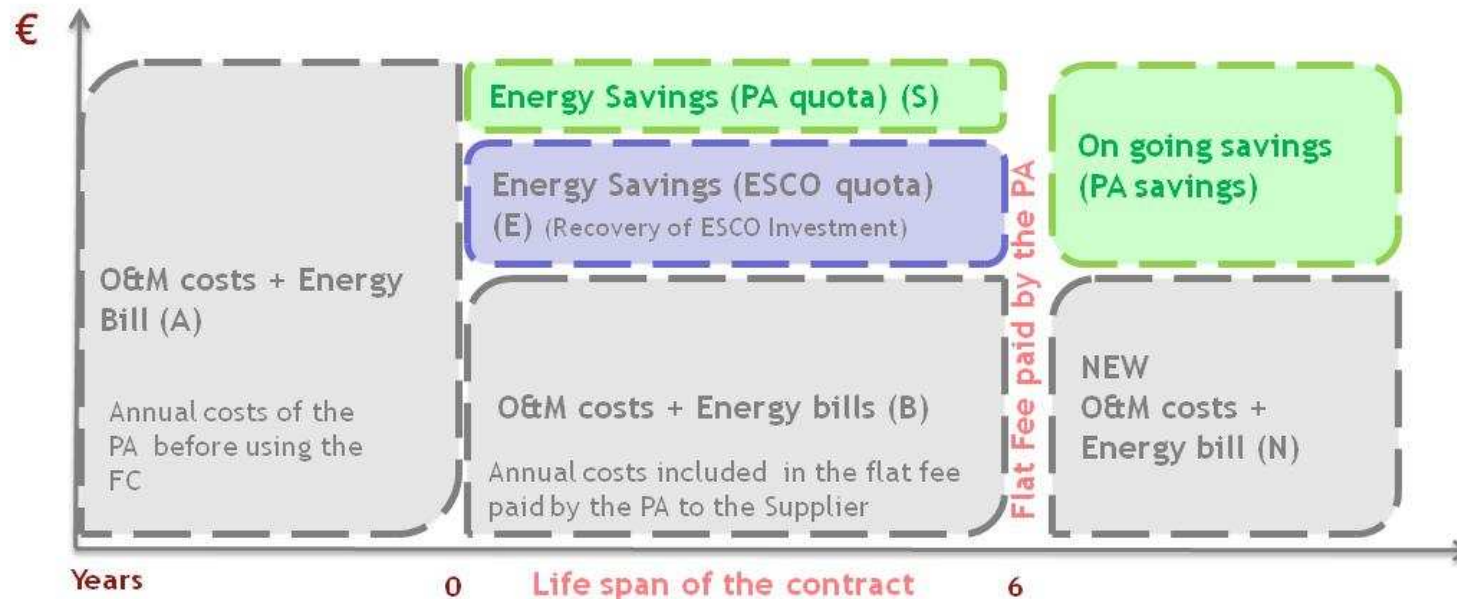
Thanks to its Framework Contracts in the energy field, Consip has helped public sector organisations overcome procurement barriers, improve the energy efficiency of their buildings (or public spaces) and at the same time support the economic growth of the ESCOs.



Why an Energy Performance Contract?

Consip adopts, in this edition of the Integrated Energy Service FC, the “**Shared Savings**” typology of the Energy Performance Contracts (EPCs). This means:

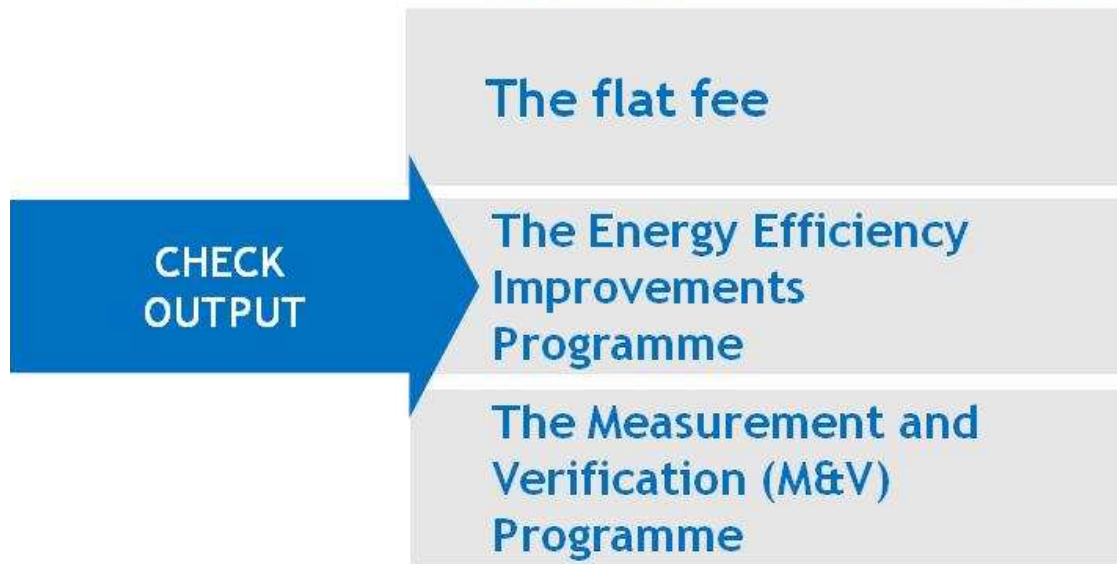
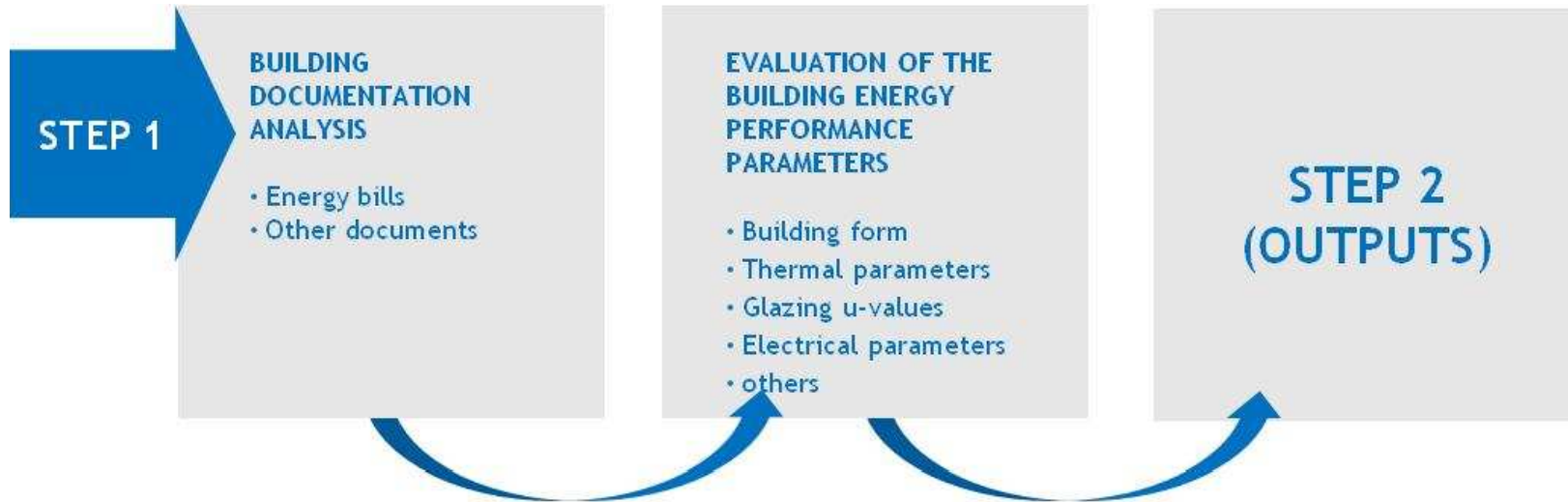
- ✓ Present and future guaranteed energy savings for the PAs
- ✓ No upfront investment or capital expenditure
- ✓ Risk transfer



The PA enjoys an economic advantage since the acceptance of the FC.

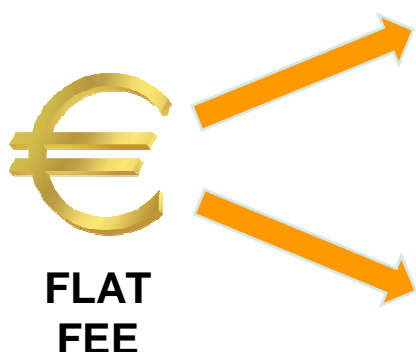


The Energy Check



OUTPUT 1: The Flat Fee

How much should a PA pay for the services?



HEATING QUOTA = E (energy quota) + M (Maintenance)

The component “E” is obtained through a mathematical algorithm based on the ISO 13790. Thanks to this algorithm, the ESCOs are able to calculate the energy needs of the buildings. This represents the “energy baseline”.
The component “M” is obtained by computing the technical elements really present in the buildings.

ELECTRICAL QUOTA = E (energy quota) + M (Maintenance)

The component “E” is obtained through a mathematical algorithm based on the historical consumptions. Thanks to this algorithm, the ESCOs are able to calculate the energy electrical needs of the buildings. This represents the “energy baseline”.
The component “M” is obtained by computing the technical elements really present in the buildings.

The flat fee, both for the heating quota and for the electrical quota, is updated according to:

- ✓ *Prices variations of the fuels;*
- ✓ *Volumetric variations;*
- ✓ *Climatic variations.*



OUTPUT 2: The Energy Efficiency Programme

The ESCOs must reach the Energy Savings Goals (both thermal and electrical) for which they had engaged themselves during the tender process.

2000

Consp Published a FC for the management and the maintenance of Heating Systems.

No energy saving goals.

2006

In this edition the energy saving goals were introduced.

10 million € ordered = reduction of primary energy need of at least **5 Tons of Oil Equivalent (TOE)**

2009

- EPC approach
- More challenging energy savings goals

10 million € ordered = reduction of primary energy need of at least **300 Tons of Oil Equivalent (TOE)**

2012

- Shared Saving approach
- ESCOs must reach the energy saving goals in the buildings of each PA
- Verification of the savings using a M&V System.
- Savings in the Electrical field

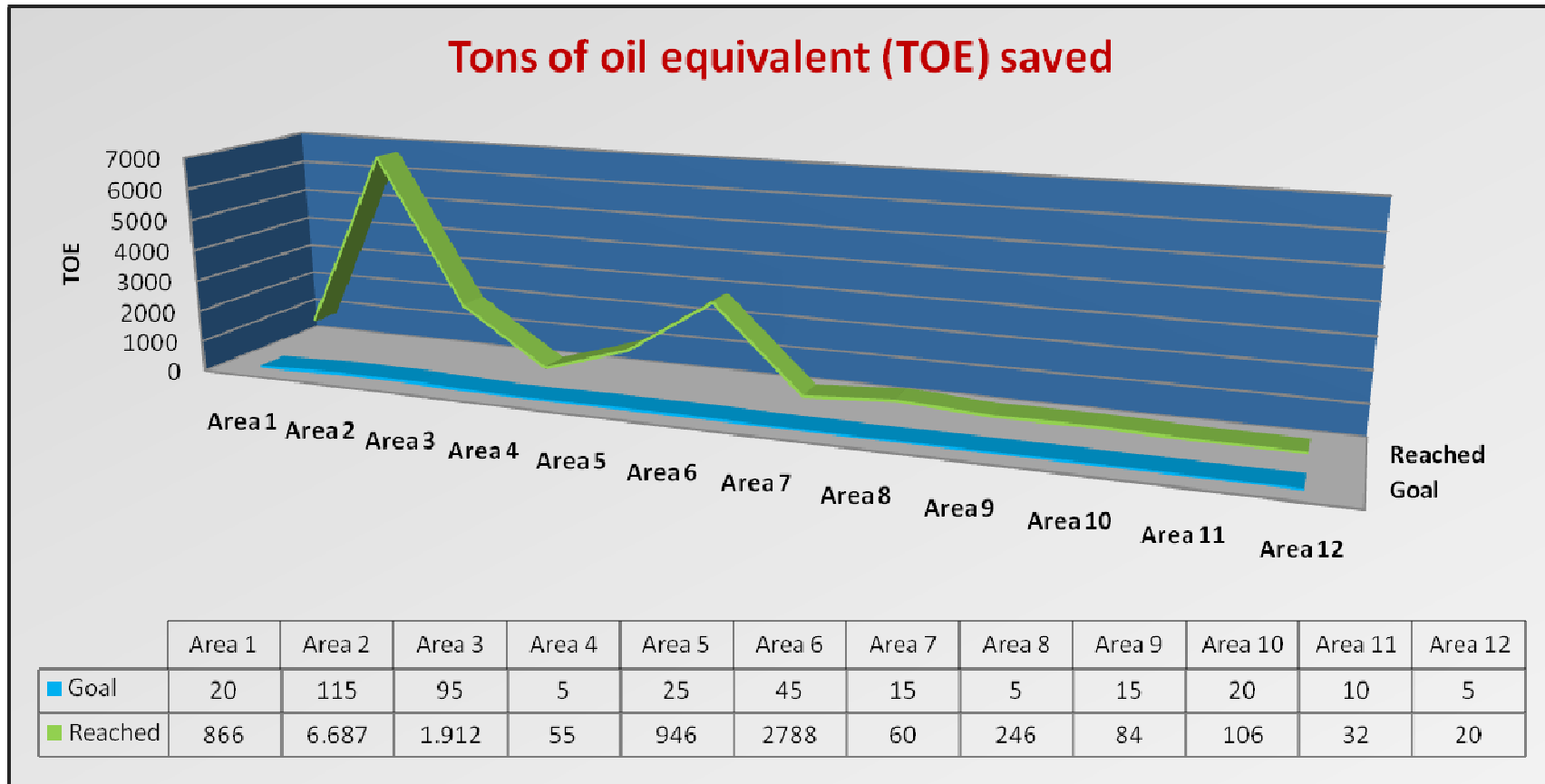
25% less of the thermal consumptions

20% less of the electrical consumptions

The results were measured through Energy Efficiency Titles, “White Certificates”, awarded to the ESCO by the Electrical Energy and Gas Authority.

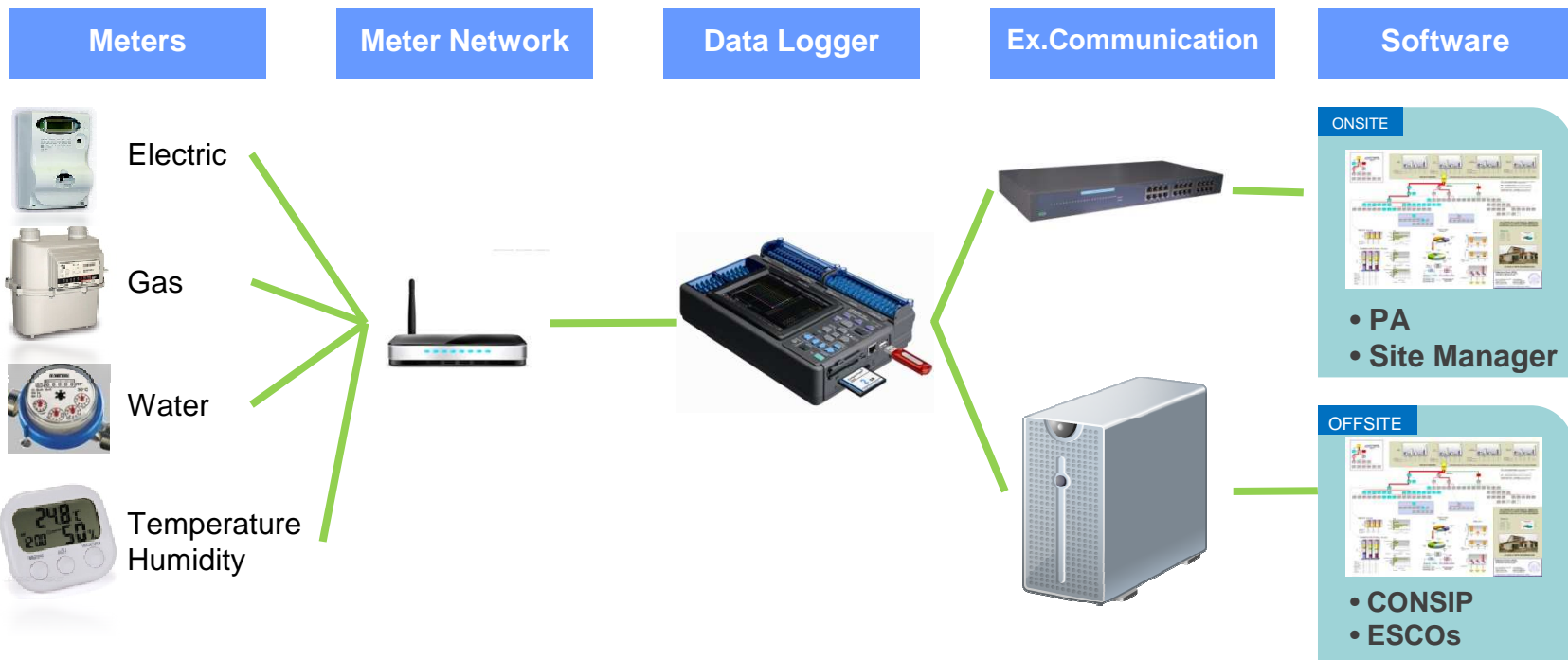


The results of the first edition



OUTPUT 3: The Measurement and Verification (M&V) Programme

The M&V programme is an innovative aspect of the actual edition of the Integrated Energy Service FC. While in the two previous editions of the FC, the results of the energy efficiency programme were certified by the Italian Electrical Energy and Gas Authority: in this edition we've asked our suppliers (ESCOs) to implement a M&V System of energy savings.



What we want!

- ❑ Increased energy savings in the public sector
- ❑ Reduced energy consumption and therefore reduced carbon emissions
- ❑ Enlarged ESCO markets
- ❑ Continued improvement in our efforts toward Energy Efficiency



THANK YOU

Marco Dellomonaco

Consip S.p.A.
Via Isonzo 19/E – 00179 ROMA
Tel. +39 06 854 49 586
Email: marco.dellomonaco@consip.it

