



*European Federation of Intelligent
Energy Efficiency Services*

Meeting 23rd November 2017

Roma

9.00 – 9.30

Ordinary General Assembly, Board of Directors

9.30 – 10.30

Presentation by ASSOESCO and Roundtable Discussion

10.30 – 11.15

EU Policy Update

Clean Energy Package

ETS Reform

11.15 – 11.30 Break

11.30 – 12.30

Eurostat Accounting Rules for EPC

QualitEE Project

12.30 – 14.15 Lunch

14.15 – 15.30

Interventions

Ing. Mauro Mallone, *Head of EE unit*, Italian Ministry of Economic Development

Ing. Livia Carratú, Expert, Italian Ministry of Environment

15.30 End of the meeting

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Associazione Italiana delle Energy Service Company



CONFINDUSTRIA SERVIZI
INNOVATIVI E TECNOLOGICI

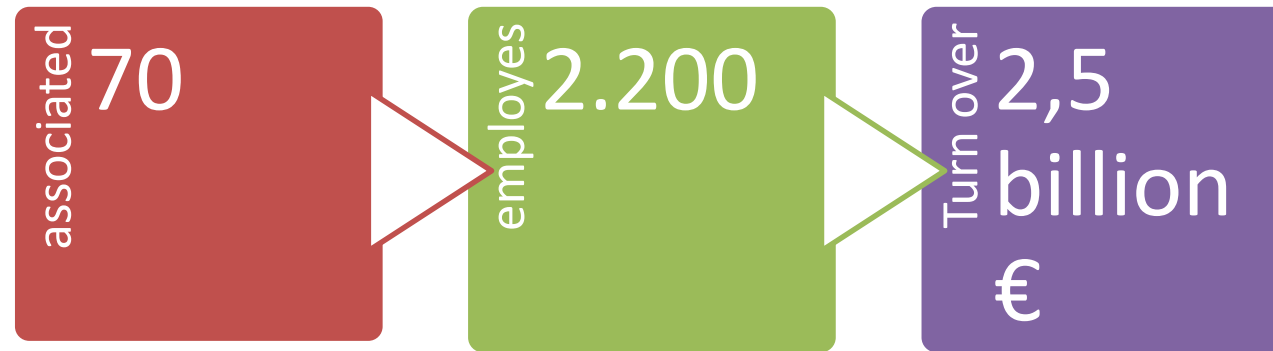
EFIEES Meeting

Roberto Olivieri, ASSOESCO's President

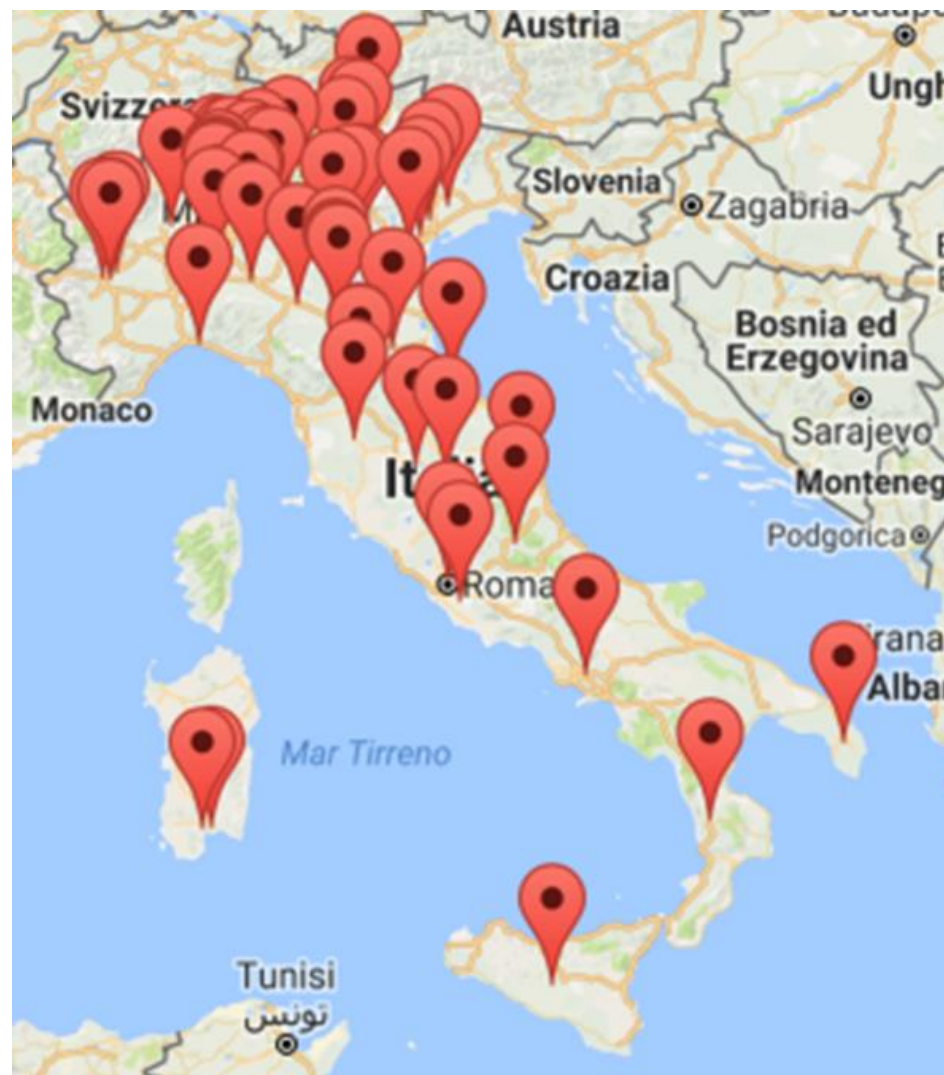
Rome, November 23^o, 2017

THE ASSOCIATION

ASSOESCO born in **2005** as **community of Italian companies**, that support realize and finance the **energy efficiency projects** to **reduce the environmental and economic impact** of the energy consumption for final users and for the Nation.



2 Million TEP saved yearly



Companies associated to ASSOESCO

Energy Service
Companies

Operators involved
in energy hardware
production

Operators involved
in energy
consultancy
services

**Common
Mission**

To support the energy efficiency

ASSOIESCO

Associazione Italiana delle Energy Service Company



CONFINDUSTRIA SERVIZI
INNOVATIVI E TECNOLOGICI



E.ON CONNECTING ENERGIES
ITALIA SRL



EDF FENICE



ELECTRA ITALIA S.P.A.



ALENS SRL



ESERGETICA SRL



COGENLAB SRL



ENERALP ESCO



IN.CO.TRADE S.R.L.



SARTEC - SARAS RICERCHE E
TECNOLOGIE SPA



ENERGIKA SRL



NRG.IT



G.M.T. SPA



TRIGENIA SRL



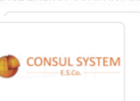
ADIGE ENERGY COMPANY S.R.L.



ESPIÙ S.R.L.



ENER-G



CONSUL SYSTEM



OMNIA ENERGIA



BARTUCCI



BIP



ELETTROGREEN POWER



AVVENIA



TEP ENERGY SOLUTION



YOUSAVE



YUPPIES SERVICES



AICE



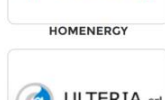
EFFICIENZA ENERGIA SRL



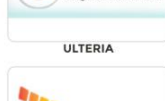
AERE SRL



HOMENERGY



ULTERIA



TERA ENERGY S.R.L.



SINERGAS



ENERGYNET SRL



X3SOLUTION SRL



SEA



2G ITALIA



TECNO SRL



SIME ENERGIA



GESCO S.P.A.



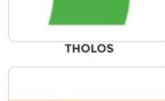
ECOLOGICAMENTE



SIENERGIA ESCO



THOLOS



SOLGEN



RENOVIS



RE-ENERGY



BOSCH ENERGY



CERTINERGIA



ALBINI ENERGIA



FEDABO



COMPENDIA



POWER VENTURES



NESCO



BRYO



ATLAS COPCO



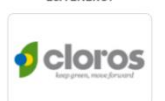
EPSI



ENERGRID



ESA ENERGY



CLOROS



ABSESTUDIO



GLOBAL E.S.CO.



ENPLUS



ENERGON



ASSOESCO is part of CSIT (Confindustria Servizi Innovativi e Tecnologici).

ASSOESCO collaborates with ASSISTAL (Associazione Nazionale Installatori di Impianti), ITALCOGEN (Associazione dei Costruttori e Distributori di Impianti di Cogenerazione) and ANIE (Federazione Nazionale Imprese Elettrotecniche ed Elettroniche) on the most important arguments about legislation and common interests.

From year 2016 it is a member of EFIEES (European Federation of Intelligent Energy Efficiency Services).

Main institutional relationship

MiSE Ministero dello Sviluppo Economico

MATTM Ministero dell'Ambiente e della Tutela del Territorio e del Mare

AEEGSI Autorità per l'energia elettrica il gas e il sistema idrico

GSE Gestore dei servizi energetici

ENEA Agenzia nazionale per le nuove tecnologie, l'energia e lo sviluppo economico sostenibile

CTI Comitato termotecnico italiano

CESI Centro elettrotecnico sperimentale italiano

Activities of ASSOESCO

1 INSTITUTIONAL

To represent the requests of the associated in front of the institutions and to promote the relationship

2 NETWORKING

To support the exchange and the knowledge between the associated

3 TRAINING AND INFORMATION

To inform the market, the stakeholders and the potential clients about energy efficiency opportunities

TECHNICAL COMMITTEES

Assoesco activated **Technical Committees**, which are the beating heart of the association.

Each committee is coordinated by a member of the ASSOESCO's board.

Their task is to study regulatory, technical and organizational issues of energy efficiency.

TECHNICAL COMMITTEES

Technical Committees are involved in the following issues:

- Economic incentives to energy efficiency
- Communication
- Regulatory
- Ethical code and internal rules
- On Site Generation
- Internationalization
- Energy Performance Contract and Financing

ASSOESCO actively participates to many events related to the energy efficiency issues





ESCO TECH FORUM



14 aprile 2016 | 10.00 – 18.30
Villa La Valera
Via Salvador Allende, 7
Arese (MI)
<http://www.lavalera.it/>

Il Networking Day avrà un pubblico molto selezionato: sono state invitate le oltre 60 Esco associate ad ASSOESCO, più circa altre 40 Esco italiane certificate, oltre ad operatori dell'efficienza energetica. L'evento, include una parte professionale, l'Assemblea dell'Associazione, e un pomeriggio rilassante di networking, finalizzato a creare un ambiente collaborativo.

10:00 REGISTRAZIONE ASSOCIATI
10:15 ASSEMBLEA DEI SOCI ASSOESCO

- Approvazione bilancio 2015 e preventivo 2016
- Approvazione codice etico
- Varie ed eventuali

10:45 REGISTRAZIONE NON ASSOCIATI
11:15 INTRODUZIONE
Roberto Olivieri, Presidente Assoesco

11:30 PRESENTAZIONI

- Presentazione Codice Etico Assoesco | Giovanni Bartucci, Consigliere Assoesco
- ESCo e internazionalizzazione | Antonio Ciccarelli, Consigliere Assoesco
- Esco Forum 12 Maggio 2016 | Vittorio Cossarini, Consigliere Assoesco

12:15 SPONSOR TIME
13:30 LIGHT LUNCH
14:45 SHOW COOKING
con partecipazione attiva di Cristiano Verger - Chef

17:00 HAPPY HOUR

Per informazioni, indicazioni su come iscriversi e confermare la propria partecipazione, è consigliabile contattare la Segreteria Organizzativa alla seguente email: segreteria@assoesco.org

ASSOESCO

Milano, Hotel Marriott – 17 Maggio 2017

In collaborazione con Media Partner **CITY LIFE** Sponsorizzato da

AGENDA - II ESCO TECH FORUM - 17 Maggio 2017

Gestione circolare dell'efficienza energetica con le tecnologie abilitanti: storage, previsione, misura, gestione

Chairman: **Roberto Maietti**, Direttore Responsabile City Life Magazine - Past
President **ANIE Automazione**

9:30 | Saluti di benvenuto
Vittorio Cossarini, Direttivo, ASSOESCO

9:40 | Programma della giornata e apertura dei lavori a cura di **Roberto Maietti**

10:05 | Case study e applicazioni dell'energy storage in mercati avanzati
Davide Alfonso, Project Manager for Energy Storage Solutions, E.ON

10:25 | L'utilizzo di Data Analytics nell'efficienza energetica
Carlo Corallo, Amministratore Delegato, ElettroGreen Power

10:45 | Soluzione di Energy Industrial IoT e Energy Big Data
Andrea Sasso, CEO, PHPower

11:05 | Coffee Break

11:25 | IoT e Predictivity nel mondo dell'energia
Fabio Massimo Marchetti, Business Development Advisor, VAR Sirio Industria

11:45 | Misura e verifica delle prestazioni e il protocollo IPMVP
Daniele Fornì, Responsabile Tecnico, FIRE

12:05 | Raddoppiare la redditività di qualunque sistema di storage con l'intelligenza artificiale
Niccolò Teodori, CEO, Elemize Technologies

12:25 | Il "Telecontrollo IoT" degli impianti: dall'efficienza dei sistemi al telecontrollo remoto attraverso le nuove tecnologie
Giuseppe Anastasi, Direttore Tecnico, Anastasi Consulting
Giuseppe Scaccianocce, Managing Director, Anastasi Consulting Singapore

12:45 | Q&A

12:50 | Chiusura dei lavori
Roberto Olivieri, Presidente, ASSOESCO

Roberto Olivieri

presidente@assoesco.org

www.assoesco.org

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+39 02 2117479

EDISON | FENICE ENERGY EFFICIENCY CAMPUS

EFIEES Meeting – 23rd November 2017



INDEX

- 1. ENERGY EFFICIENCY CAMPUS**
- 2. A CULTURAL HUB FOR THE TERRITORY**
- 3. ENERGY EFFICIENCY CAMPUS IN PILLS**
- 4. THE PURPOSES OF THE CAMPUS**
- 5. MASTER IN ENERGY EFFICIENCY AND SUSTAINABILITY**

1. ENERGY EFFICIENCY CAMPUS



The Energy Efficiency Campus is Edison-Fenice's cultural and informational hub.

It operates on topics such as **energy efficiency** and **sustainability**, connecting the main territorial actors and stakeholders, such as:



- Manufacturing and tertiary trade association
- Industrial market (clients and prospects)
- Institutions
- Public Administration
- Technological and scientific operators
- Financial and administrative operators
- Academic and formative institutions

The Campus broadcasts the energy efficiency and sustainability culture organizing formative events, convention, seminars, workshops etc. with the patronage of Assoesco CONFINDUSTRIA-SERVIZI to expand:



PURPOSE: Not just technical and technological solutions but a systemic approach

2. A CULTURAL HUB FOR THE TERRITORY

PARTNERSHIP WITH THE STAKEHOLDERS



Creating synergies
in territorial contexts



POLITECNICO
DI TORINO



TORINO
SMART
CITY



ENVIRONMENT
PARK
Parco Scientifico
Tecnologico per l'Ambiente



Unione
nazionale
comuni comunità
enti
montani



Sharing practices on
these topics

- Energy efficiency and sustainability culture in territorial contexts
- Normative aspects, scenarios and regulatory impacts
- E.S.Co. business models and financial strategies
- Technological systems, Best Available Technologies & Best Practices
- RD&I strategies and start-up development
- Risk management and environmental topics

To answer to these
needs

- Being aware of normative obligations and financial and fiscal supports
- Performing energy and environmental audits with the aim of implementing sustainability
- Identifying base line and performance criteria
- Adopting the best systemic technological solutions
- Optimizing and digitalizing O&M
- Managing risks related to energy and energy trading
- Valorizing real estate assets
- Creating specialized chains of partner and suppliers

3. ENERGY EFFICIENCY CAMPUS IN PILLS

From 2013, the Energy Efficiency Campus has organized more than 40 seminars on these topics

ENERGY EFFICIENCY
MARKET STATE OF ART

ENERGY EFFICIENCY AND
SUSTAINABILITY STRATEGIES
FOR SPECIFIC PARTNERS

TRAINING ON ENERGY
SERVICES BUSINESS
MODELS AND FINANCIAL
APPROACH FOR PARTNERS

SUPPLIERS CONVENTION
AND TRAINING

ENVIRONMENTAL STATE OF
ART

STAKEHOLDER
RELATIONSHIPS AND
STARTUP AWARDS

LIGHTING AND EMS SPECIFIC
TECHNOLOGIES



4. THE PURPOSES OF THE CAMPUS



FOR THE
ASSOESCO
ASSOCIATION

become the ESCo reference point of expertise and training towards the market in the field of energy efficiency and sustainability

FOR THE
INDUSTRIAL
OPERATORS AND
THEIR SECTORAL
ASSOCIATIONS

become the benchmark of ESCo business models and technical systems for Large Industries and SMEs

FOR PUBLIC
ADMINISTRATIONS
AND INSTITUTIONS

become a reference point of dissemination on Best Available Technologies, EPC and financing models in the context of tenders/Public-Private Partnerships

FOR THE
ACADEMIC AND
SCIENTIFIC WORLD

connect market operators and scientific players to develop innovative solutions and to create new supply chains

5. MASTER IN ENERGY EFFICIENCY AND SUSTAINABILITY



POLITECNICO
DI TORINO

First edition in 2016-2017: 100 admission requests, 15 students admitted and 15 scholarships assigned.
The Energy Efficiency Campus is currently working in partnership with Polytechnic of Turin for a second edition of this Master Course that will take place in February/March 2018.

COURSE DETAILS

- Duration of the course: 9 months (Teaching and internship)
- Teaching mode: Teaching by 40% Polytechnic of Turin, 60% Edison-Fenice internal management experts
- Teaching headquarters: Energy Center + Polytechnic of Turin (Lingotto)
- Teaching structure: 500 teaching hours+ 250 internship hours
- Certification: 2° level Master Degree

AIM OF THE MASTER

- ✓ Creating energy efficiency **competences** in the future managing class, sharing **know-how** through training of new experts in energy supply, production and management
- ✓ **Training** on technological choices, investment analysis, O&M methods, risk performances and environmental impact, regulations, sustainability communication, certification
- ✓ **Value creation** through skills acquired during the training period
- ✓ **Development of innovation and sustainability culture**

CONTENTS

- Energy market and incentives
- Energy optimization solution
- Energy audit
- Operation and maintenance
- Energy efficiency and strategic finance
- Environmental sustainability and energy Internship



Energy Efficiency Campus



CONFINDUSTRIA SERVIZI
INNOVATIVI E TECNOLOGICI

EFIEES Meeting

Antonio Ciccarelli, ASSOESCo Vice President

Rome, November 23rd, 2017

Main Italian norms related to EPC

- **D.Lgs. 115/2008**
introduces the first definition of a performance contract in the field of energy and describes the way to implement energy management in buildings
- **D.Lgs. 102/2014**
new definition of Energy Performance Contract (EPC)
- **UNI CEI 11352:2014**
is the Italian EScO certification; it includes in annex B the minimum requirements for an EPC

EPC CONTRACT IN ITALY

Main barriers

Obstacles:

- Regulatory risk
- EPC Complexity VS simple approach for the customer
- Trust in a new approach
- Difficulty for the customer to compare offers
- Financial sector: no market ready solutions
- Long time contract duration
- Difficulty in approving savings M&V

Incentives compatible with EPC and ESCo approach

- White Certificates
- Tax deductions + possibility to give it to third parties (residential)
- Thermal energy efficiency measures

Stakeholders desiderata

What investors like:

- Decrease technical risk
- Decrease regulatory risk
- Decrease performance risk
- Decrease default risk (customer + EScO)
- Standardization

What customers like

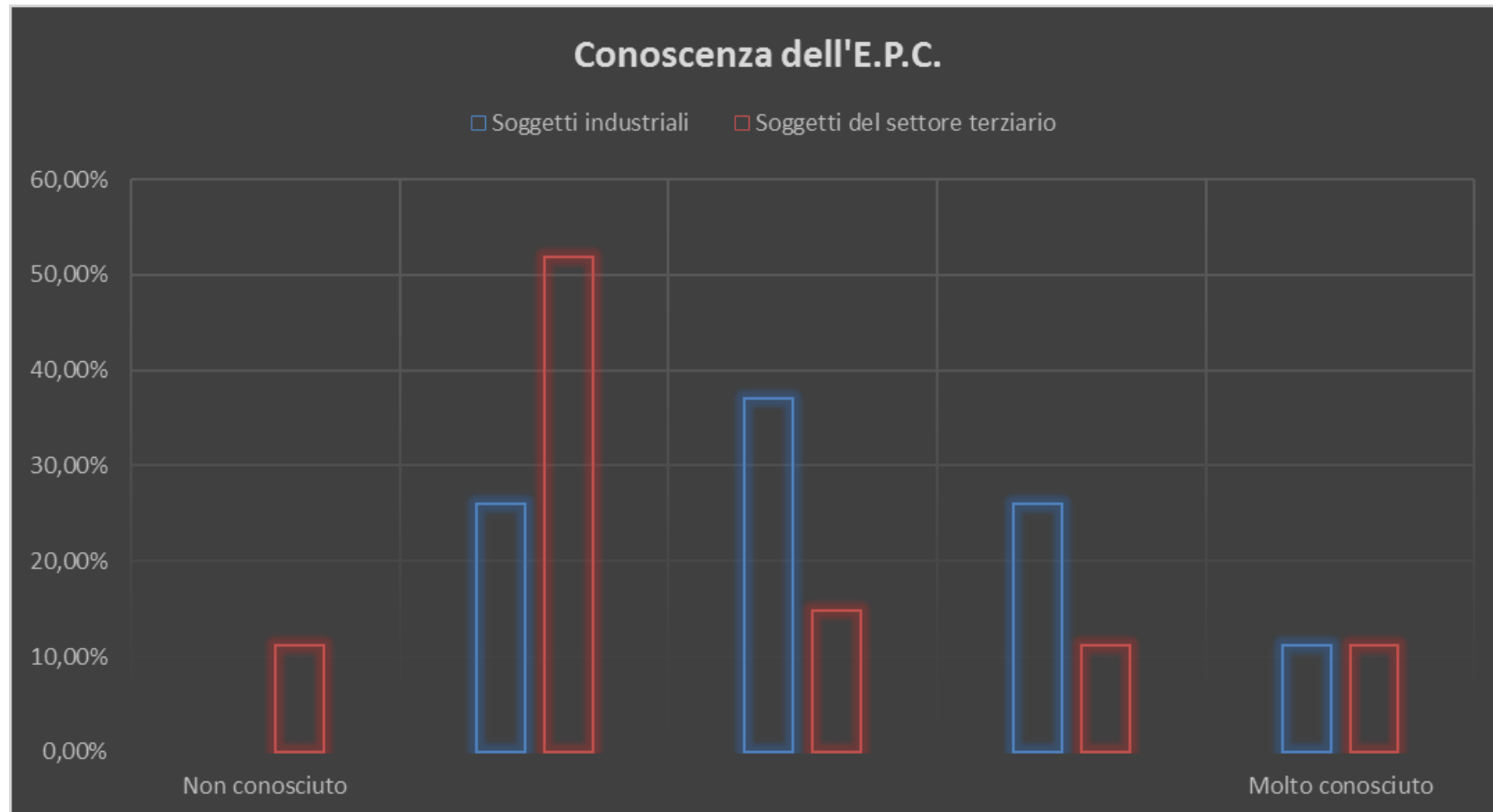
- Guaranteed performances
- New equipment
- Increased value of the property (in buildings)
- No more or less issues for O&M
- New measures in the industrial process
- Environmental improvement

Short description

- In September 2017, a survey was conducted among industry professionals to obtain a picture of the state of the art of EPC contracts from ESCo's point of view;
- 13 questions on main EPC issues in order to get feedback from the market;
- A picture of the EPC market was outlined

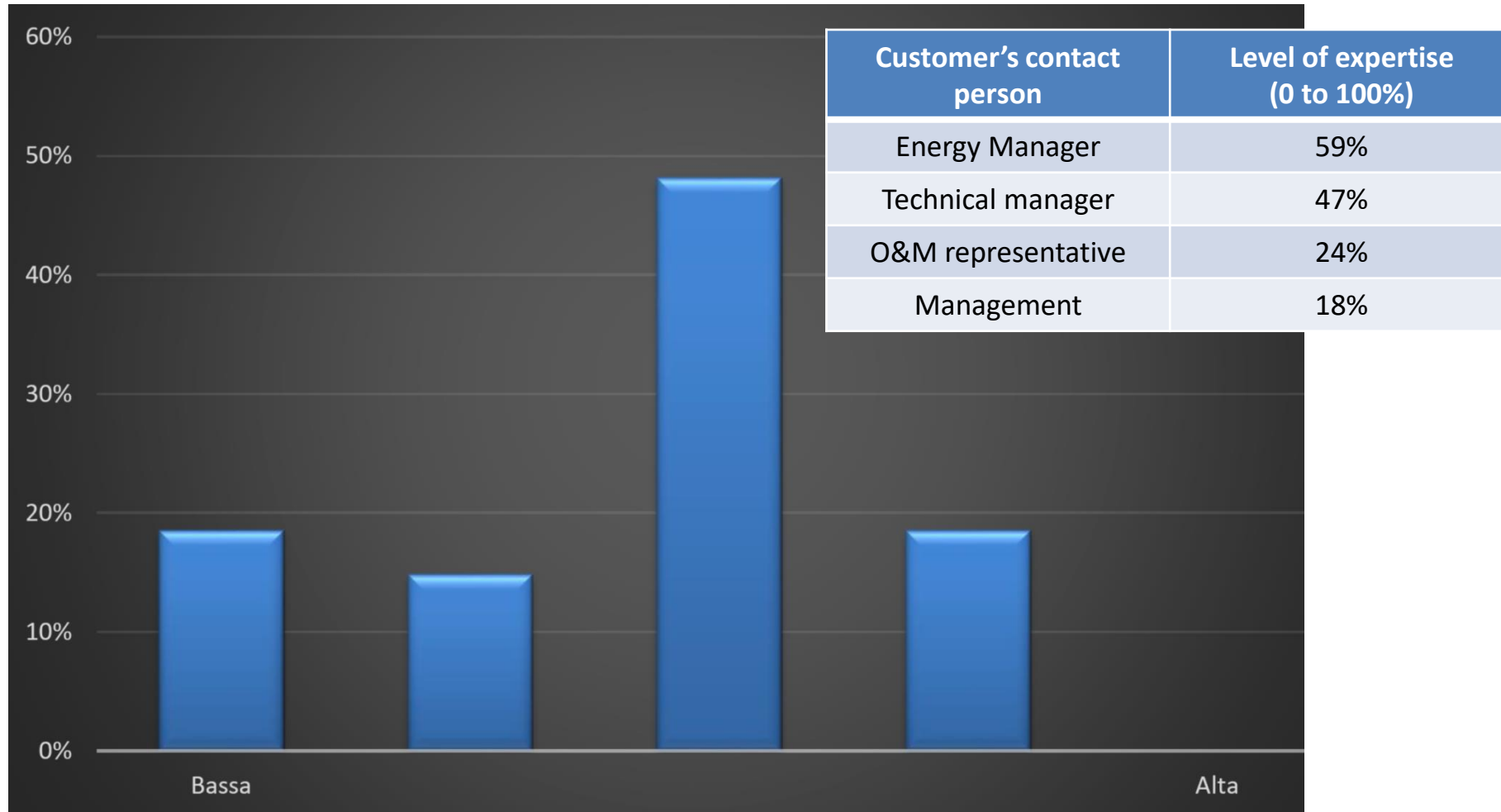
ASSOESCO SURVEY

Level of knowledge of customers on EPC



ASSOESCO SURVEY

Level of expertise of customer's contact person



EPC strengths

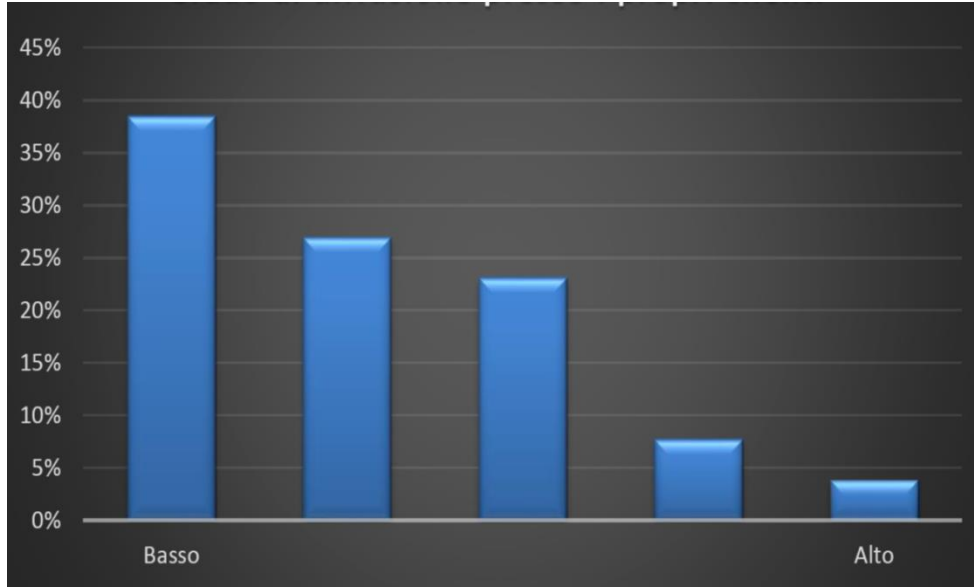
Third party investment	81%
Guaranteed savings	65%
ESCo preparation	23%
Outsourcing services	23%
No technical risk	8%

EPC weaknesses

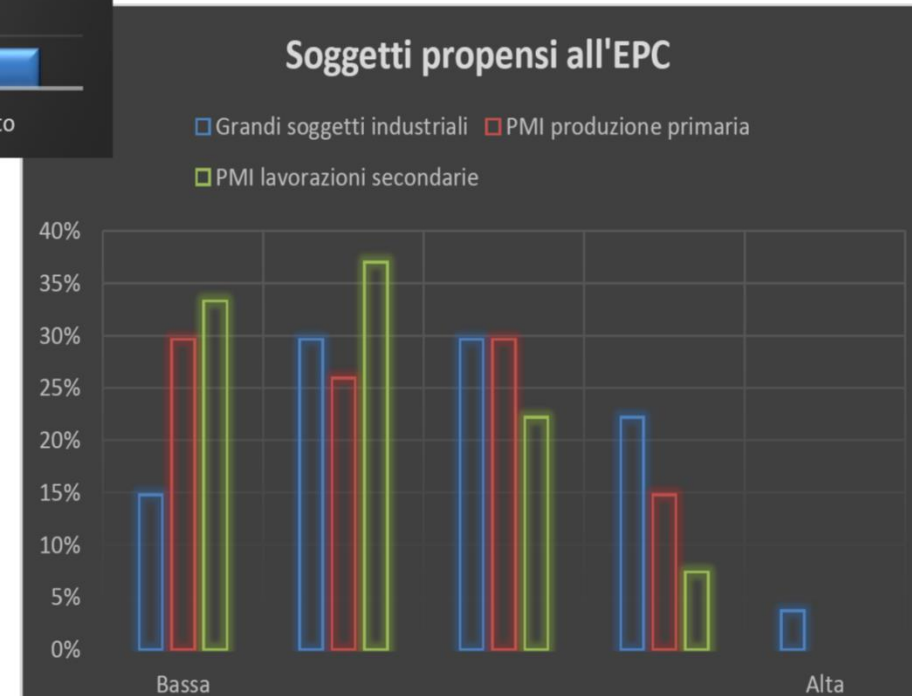
Contract complexity	52%
Complex savings calculation	30%
Financial requirements	26%
Long contract duration	17%

ASSOESCO SURVEY

EPC diffusion in customers

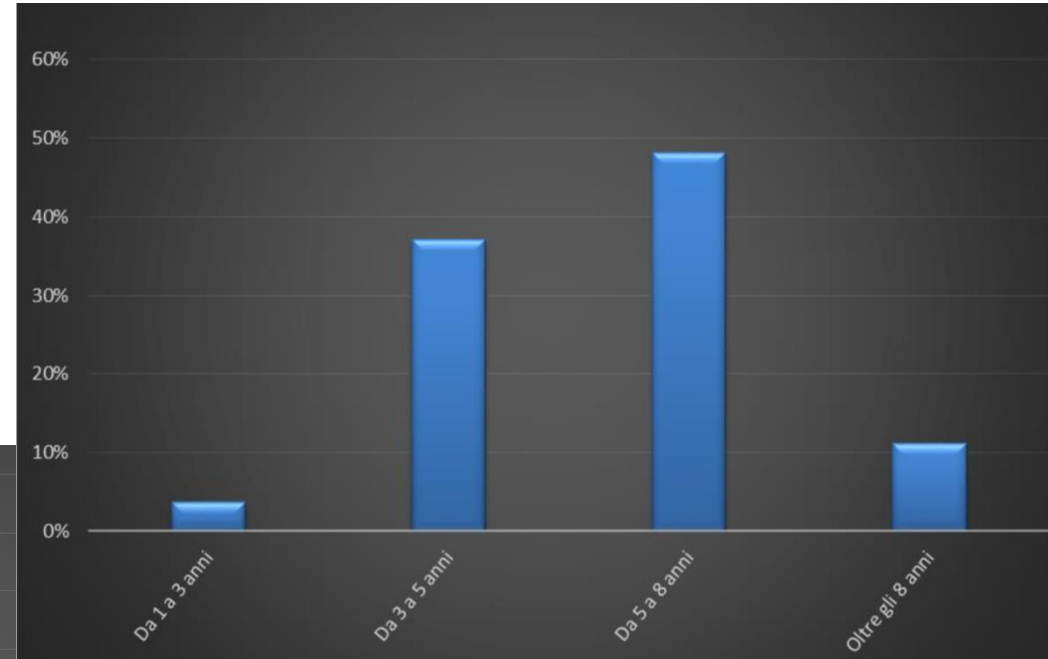
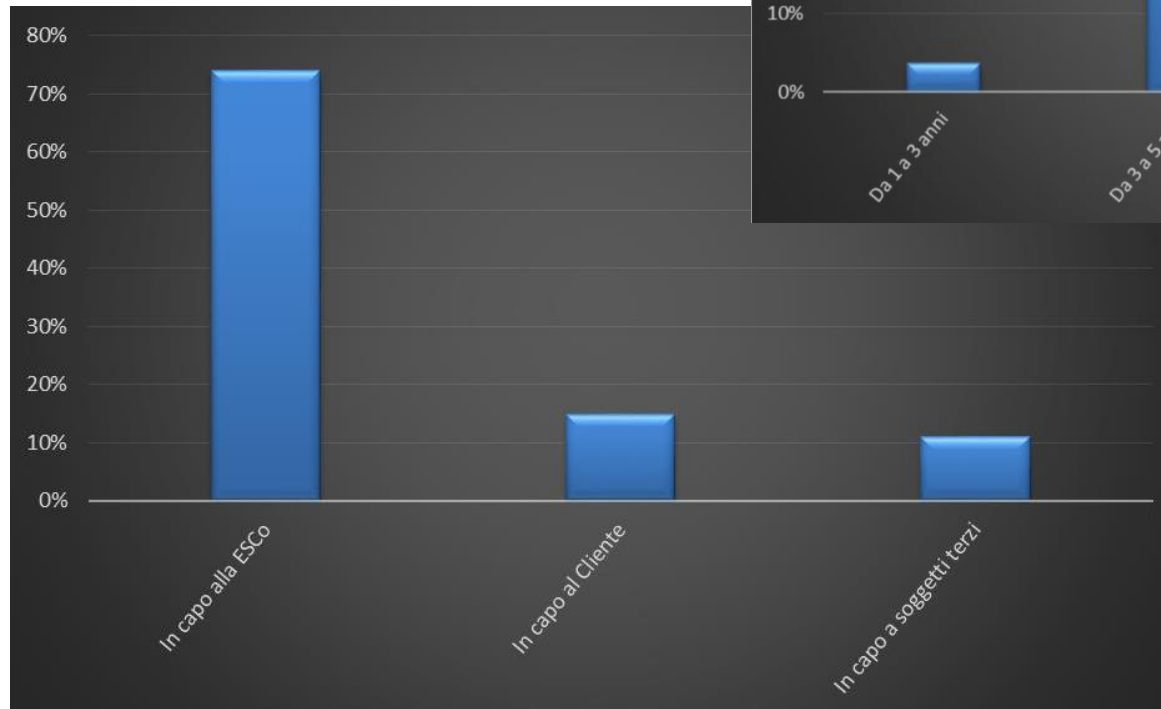


Customer's readiness to EPC



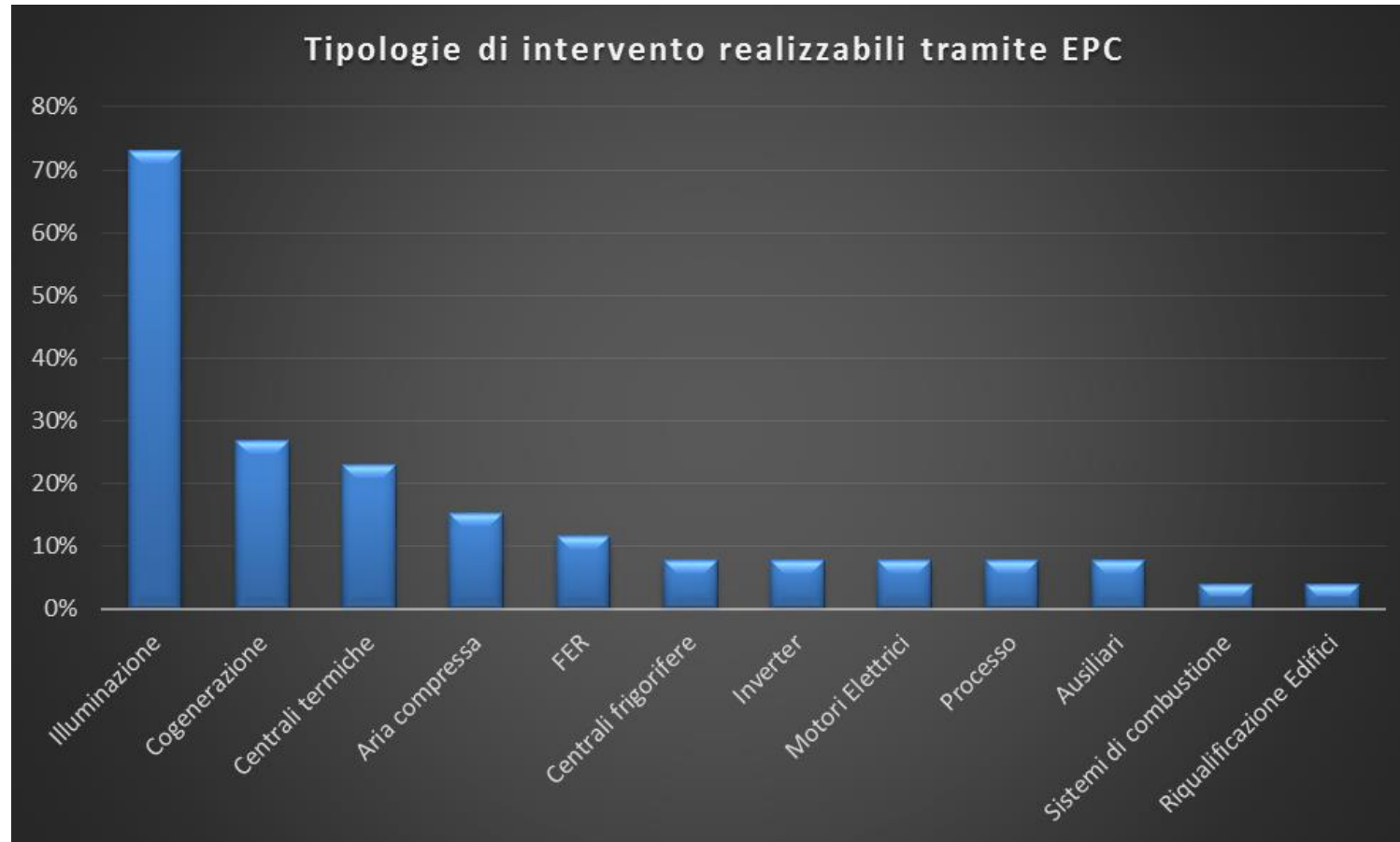
ASSOESCO SURVEY

Contract duration



O&M responsibility

Type of measures implemented



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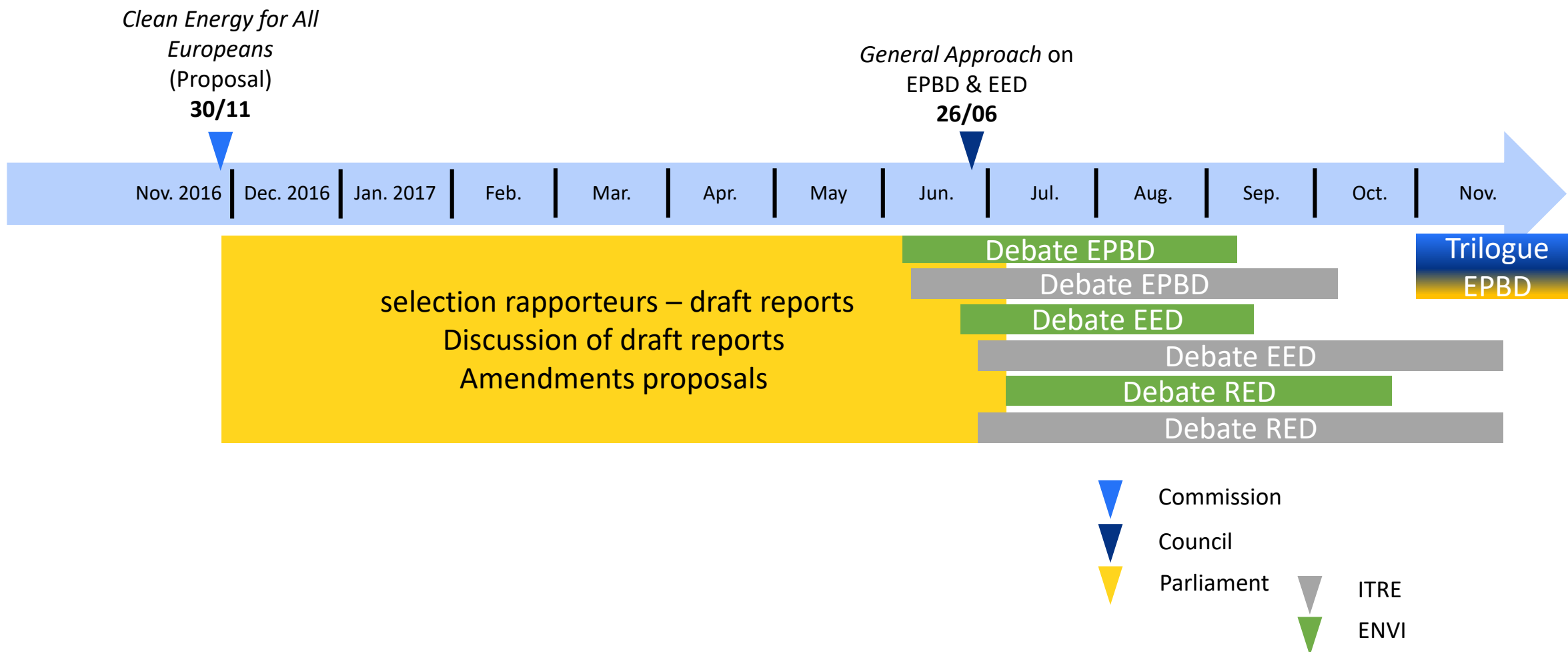
Ing. Livia Carratú, Expert, Italian Ministry of Environment

15.30 End of the meeting

Clean Energy Package

EPBD, EED, RED: Major steps and debates in 2017
(to date: 15th Nov. 2017)

What happened in one year?



Offensive topics & Defensive topics



1. Balance EE / RES
2. Role of EES and EPC
3. District Approach
4. Waste Heat
5. Right to Disconnect from inefficient DH
6. Third-Party Access to DH network

Balance between EE and RES (EED-RED)



- Efforts for RES and EE be subject to obligations and targets with the same nature



EED – Vote ITRE 28 Nov.



40 % binding EU target + national binding targets



30 % not binding EU target – no national targets

RED – Vote ITRE 28 Nov.

No targets in latest CAs, but



35 % binding EU – no nat. binding (+alternatives)



Still under discussion



General Approach on EED (26 Jun.)

- Adoption of a 30 % “headline” target – no nat. binding targets

RED revision by EE presidency

- Maintains 27 % binding EU target
- MS to define their contribution

Role of EES and EPC (EPBD)



WE PROMOTE

- Alternative and complementary solutions to renovation
- Exemption from regular inspections to buildings covered by EPCs
- Revision of accounting rules for EPC in public sector



European Parliament

ITRE Report (11 Oct.)

- More holistic approach to building renovation, including EPC (long-term renovation strategy)

Buildings covered by commitment on energy consumption (EPC)

- Should be exempted from the inspection requirement

Public accounting rules

- New Eurostat Guidance note



Council of the European Union

General Approach (26 Jun.)

- References to cost-effective approach to renovations and to 'deep-staged renovations'
- Possibility to provide users with "adequate advice" instead of inspection

Trilogue

- No extension of exemptions unless "adequate advice" is given on boilers

Trilogue in progress

District Approach (EPBD)



WE PROMOTE

- Reference to highly-efficient alternative systems, incl. DH and cogeneration
- Equal treatment between onsite and nearby renewables in EPB calculations



European Parliament

ITRE Report (11 Oct.)

- Mentions overall EPB at district level
- Re-inserted list of high-efficient technologies **but** based on RES
- No discount of RES production for EPB assessment
- Equal treatment onsite/nearby RES



Council of the European Union

General Approach (26 Jun.)

- List of high-efficient alternative technologies is removed
- EU PEF value by default
- PEF accounting RE supplied through energy carrier



Trilogue in progress

Waste Heat Recovery (RED)



WE PROMOTE

- Eligibility of WHR for the 1% yearly increase in the share of RES in H&C
- Recovery from industrial processes AND from tertiary sector
- Recovery through DH networks AND any other installation allowing this



European Parliament

Compromise proposal

- Rapporteur proposed raising yearly increase up to 2 %
- EP agrees – max 50 % of total increase
- Enlarged definition including WH from tertiary
- MS with 80+ % of RES/WH in H&C can choose yearly increase



Still under discussion



Council of the European Union

RED Revision – EE Presidency

- 1 % yearly increase becomes indicative
- WH from tertiary included
- MS with 60+ % of RES in H&C considered as fulfilling yearly increase requirement

Right to Disconnect from inefficient DH (RED)



WE DEFEND

- Disconnections complying with contractual terms and procedures (incl. penalties)
- Before disconnection, give DH systems possibility to improve their performances
- Ensure that this right does not imply switching to another operator (direct sale)



European Parliament

- Possibility to switch is removed from compromises
- RtD for customers producing RES-based H&C
- RtD from inefficient DH (5 years timeframe to improve)



Council of the
European Union

RED Revision – EE Presidency

- Possibility to switch provider is deleted
- No timeframe for DH improvement
- Upon request, customers to be provided with RES/WH through current system (may imply TPA)
- Disconnection to be conditional on the compensation for the undepreciated portion of assets needed to provide H&C to that customer
- RtD becomes “right to terminate the contract”



Still under discussion

Third-Party Access to existing DH networks (RED)



WE DEFEND

- TPA only allowed when technically and economically feasible
- TPA only allowed if no price rise for customers
- No direct sale



European Parliament

- TPA must be based on non-discriminatory criteria
- TPA denied when
 - Lack of necessary capacity
 - Puts system operation at risk
 - DH network is already efficient
 - Increase final energy price compared to local supply



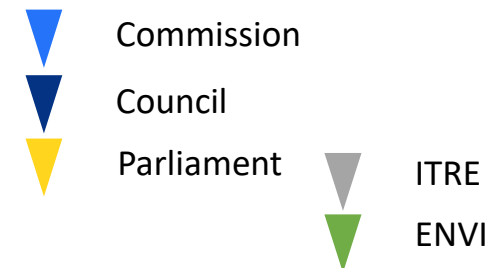
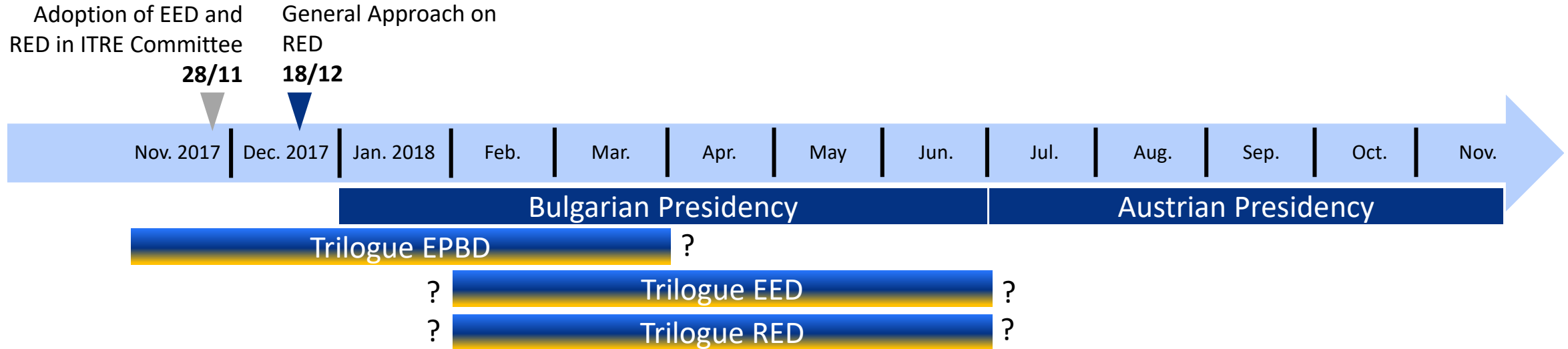
Council of the European Union

RED Revision – EE Presidency

- Obligation to grant TPA if needed to meet increased demand or customer request
- TPA denied when
 - Lack of necessary capacity
 - Puts system operation at risk
 - Increase final energy price compared to local supply
- MS exempted if
 - Efficient DH network
 - System becomes efficient by 2025
 - Small DH system



What's coming next?



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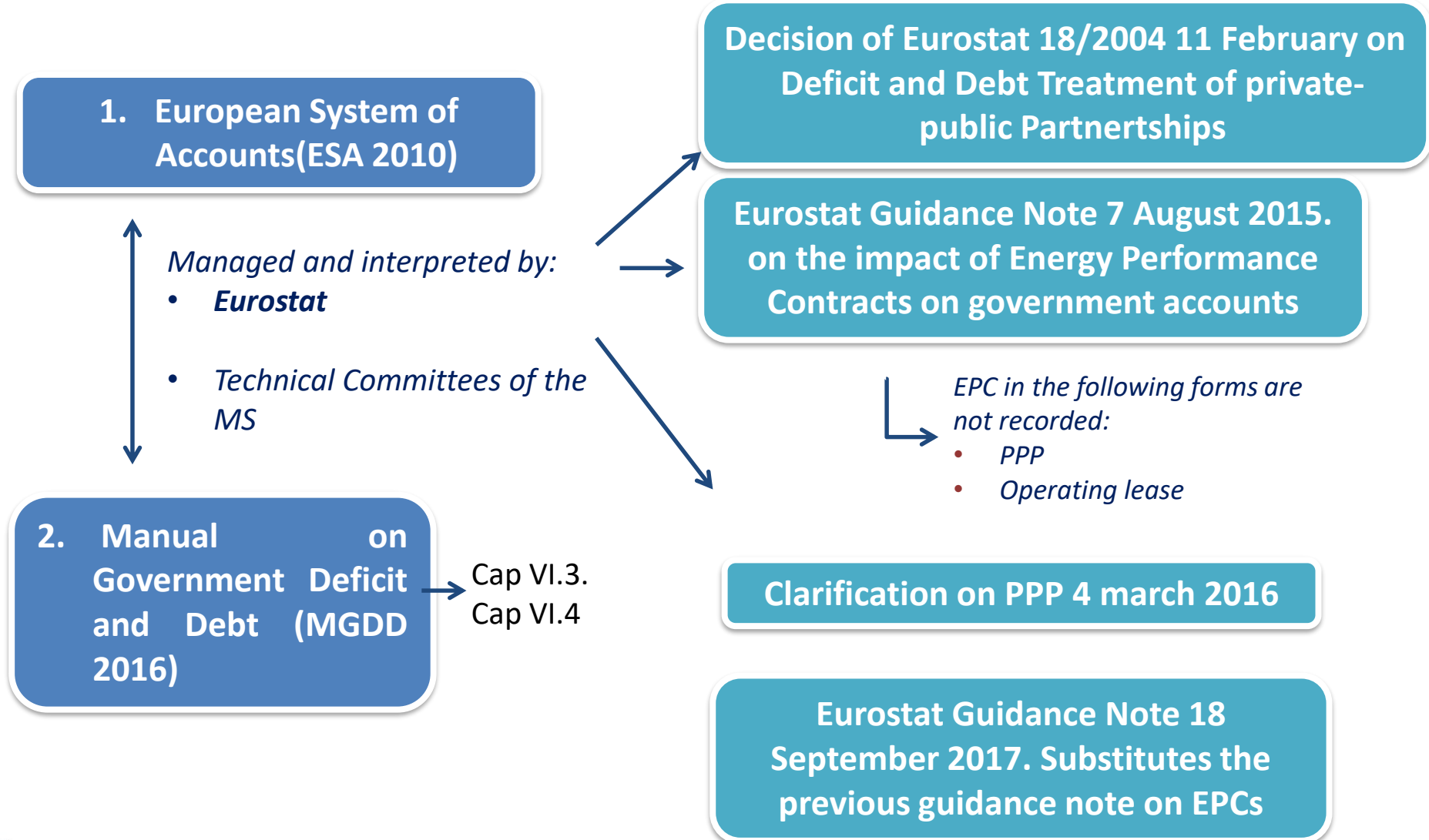


Latest Eurostat Guidance Note.

*Fco, Javier Siguenza
Secretary General
Calle Guzmán el Bueno, 21 4º dcha.
28015 Madrid (Spain).
Tel: (+34) 91 277 52 38
www.amiasociacion.es*



EPCs & EUROSTAT: Guidance Note September 2017



Public-private Partnerships PPP.

Service contract by a private partner caused by the use of specific assets built or considerably improved by the private partner.

Requisites for non-recording: VI.4 MGDD & ESA 2010

- ✓ *Long-term contracts with a duration of **at least** five years.*
- ✓ ***Two phases:** Construction and Operation.*
- ✓ *In case of renovation, the capital expenditure on the existing assets of the Administration must amount for at least **50% of the asset's value.***
- ✓ *The majority of the risk must be transferred to the private partner:*
 - ***Construction** risk.*
 - ***Availability** risk.*
 - ***Demand** risk.*

Concession

Contracts for infrastructure equipment that may be used for commercial purpose.

Requisites for non-recording: VI.3.1.5 MGDD and ESA 2.010. These contracts are not recorded excepting the following cases:

- ✓ *The public entity finances the majority of the construction or renovation costs.*
- ✓ *The private partner is controlled by a public entity.*
- ✓ *The private partner does not take the majority of economic risks.*

Operating Leasing

Three kinds of leasing for non-financial assets

a) Operating leasing. The economic property is not transferred and the legal owner is still the economic owner.

b) Resources leasing. Not applicable.

c) Financing leasing. The economic property is transferred and the legal owner is not considered the economic owner.

Frequently, the economic owner and the legal owner are the same. Shouldn't it be the case, the risk responsibility resulting from the usage of the entity in an economic activity as well as the benefits are transferred from the legal owner to the economic owner. In exchange for this, the legal owner receives payments by the economic owner for a different set of risks and benefits.

Requisites for non-recording: ESA 2010 + VI.3.1.4 MGDD + Guidance Note September 2017 (for EPCs)


EPCs according to Guidance Note September 2017

EPC Concept:

- *The ESCO invests in order to improve the energy efficiency of an existing public facility. HVAC, lighting, envelope, works...*
- *The improvements in energy efficiency by the ESCO are paid totally or partially with savings.*
- *The ESCO takes the risks regarding energy performance.*
- *The ESCO takes the risks regarding design, operation and management of the facilities.*
- *The ESCO guarantees the arranged savings. Verification system.*
- *The ESCO charges based on the energy savings.*
- *The ESCO decides the assets being installed and those being removed.*

EPCs according to Guidance Note September 2017

Impact of the Guidance Note on EPCs:

- *EPCs with initial investment are affected.*
- *EPCs that achieve energy savings without initial investment are not affected.*
- *If the ESCO takes the majority of the risks and rewards linked to the usage of the assets  economic owner of the assets.*
- *In this case, the Guidance Note describes how to record via operating leasing or sale and leaseback.*
- *Factoring effect.*

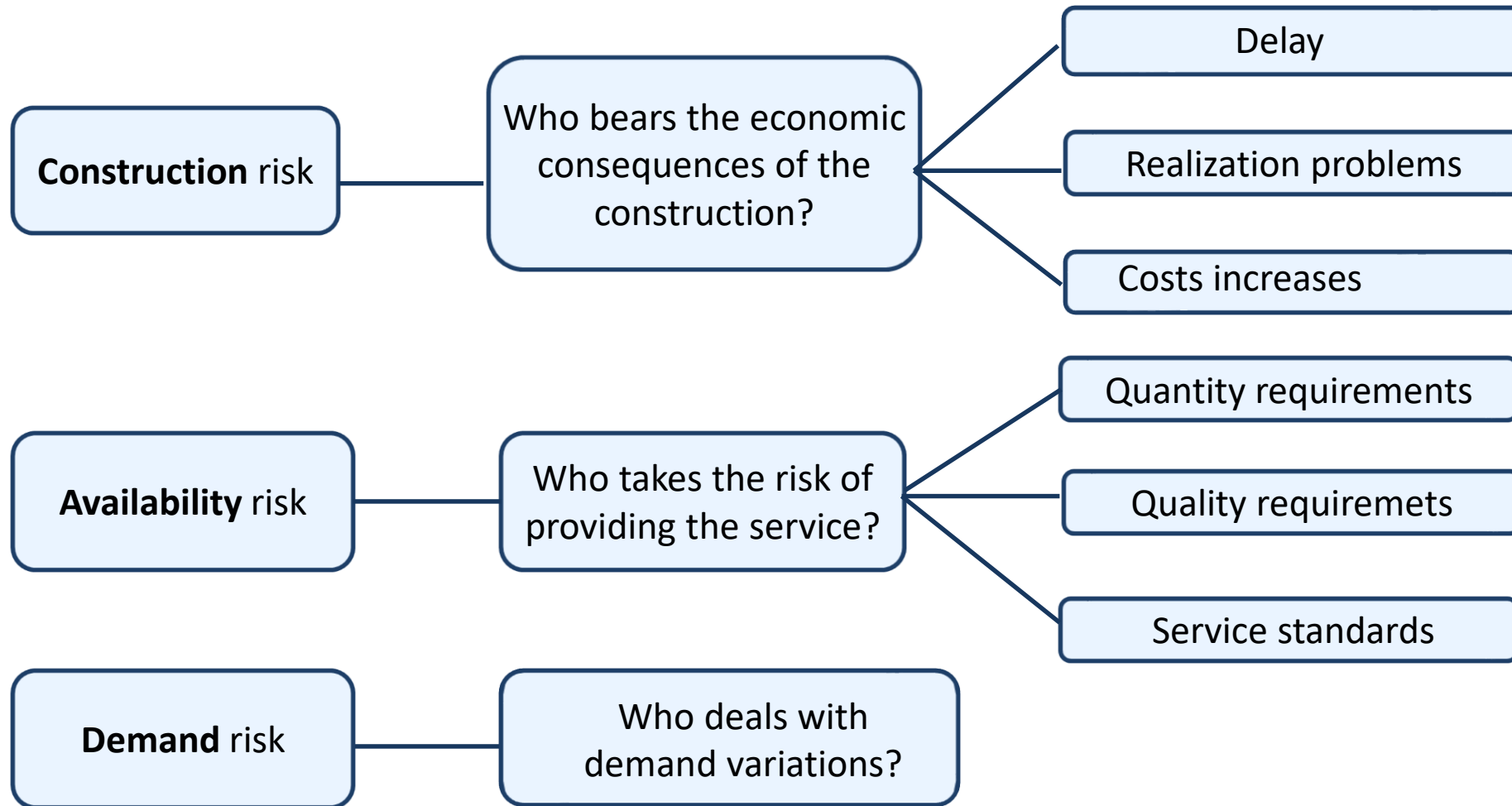
EPCs according to Guidance Note September 2017

Economic ownership of the assets:

- *If the ESCO is paid with the savings and is responsible for operation, it is considered to receive the benefits and take the risks.*
- *Internal discussion. It could be argued that the government also benefits from the new or upgraded energy equipment, which would question whether the EPC contractor actually takes over sufficient risks and rewards in the context of an EPC.*
- *Shared risks: Under certain circumstances, the Administration may be consider to benefit, which would lead to recording in Government Accounts.*

*Decision: If the ESCO takes the majority of the risks and benefits related to the usage of the assets in an EPC, **particularly performance risk, mantainance and renovation risk, the assets economic ownership corresponds to the ESCO.***

EPCs. Risk



EPCs. Risk



Operating leasing

According to ESA 2010 15.8, in the operating leasing model the legal owner is also the economic owner, who takes the economic risks and benefits from the economic output from the charges generated in the productive process.

What was the previous criterium by Eurostat?

- ✓ *Easily replaceable or removable assets*
- ✓ *The ESCO is responsible for replacing the capital goods in case of serious malfunction.*
- ✓ *The term of the EPC does not cover the total expected life-time of the EPC assets.*
- ✓ *There is no commitment from the government to own the equipment nor an option to acquire it at its residual value at the end of the contract.*
- ✓ *Criterium questioned*

Operating leasing

Criterion change

Decision:

- *Accounting treatment of EPCs should reflect economic reality and not the legal framework in which its realized.*
- *Eurostat considers that an operating lease treatment for EPCs is applicable if the EPC-contractor is considered to be the economic owner of the EPC assets.*
- *Operating lease treatment for EPCs is applicable for removable and non-removable assets.*
- *Only the payments (EPC fees) made by government will impact the Government Accounts.*
- *Long-term contracts.*
- *Assets transfer to Public Administration at contract termination is possible.*

Operating leasing

Criterion change. Motives.

- *EPC contractor decides which assets are to be installed, replaced or changed, which is usually attributed to the legal owner.*
- *There are ambiguous distinctions between lessor and lessee in regard to legal and economic ownership.*
- *It collides with the figure of financial leasing.*
- *According to ESA 2010. 20.164, economic reality must prevail.*
- *In ESA 2010, a change regarding contract duration is included in comparison to ESA 1995. Long-term contracts may have operating leasing treatment. If these were short-term contracts, Eurostat would question the ownership given that by the end of the contract the Administration would be the owner.*
- *Non-removable assets. These are integrated in a global solution. The benefits are common and for practicality reasons they are not easily separated.*

Buy and leaseback model

- *Alternative approach to the operating leasing.*
- *Government purchases the EPC asset from the ESCO (EPC-contractor) at inception and, thus, obtains the legal ownership of the underlying assets, which leads to an imputed entry in the capital account.*
- *Simultaneously, the EPC-contractor leases the EPC assets back from the government via a financial lease. This means that the EPC-contractor is considered as the economic owner of the EPC assets, bearing both the economic risks and rewards of using the asset.*
- *No impact on net lending/net borrowing, immediate balance out.*
- *This approach was decided (decision) to be valid as long as the ESCO is the economic owner.*

Transfer of the EPC assets

- *EPC fees include pre-payments made for the acquisition of the EPC assets.*
- *EPC assets may be recorded in Government Accounts or not. Alternatives*

Decision (supported by the majority):

- ✓ *According to ESA 2010 15.17, EPC assets transfer at the end of the contract should be recorded.*
- ✓ *If EPC assets with a positive residual value are transferred without receiving anything in return, it is considered to be a gift, as there is no entry in the financial accounts.*
- ✓ *If these are transferred at a certain price, the transaction must be recorded in the government accounts and capital formation is recognized. Clarification needed.*

Factoring in EPCs

This agreement implies that the ESCO sells to a bank or to another financial institution, against a one off payment, the future EPC fees to be paid by the government.

This instrument may include a default risk hedge. In this case, it would be factoring without recourse.

Decision (discussion):

➤ *In case of factoring without recourse, the ESCO is deemed not to take the economic risks. Consequently, the Administration is the economic owner. In this case, the government records a GFCF expenditure for the full EPC capital expenditure at inception, with the imputation of the corresponding government loan liability.*

➤ *In conclusion, factoring with recourse is not recorded in Government Accounts.*

Conclusions

- *If the ESCO is the economic owner of the assets, both the operating lease and the buy and leaseback model are applicable.*
- *Eurostat considers that, **by convention, in order to facilitate the accounting imputations necessary for applying the operating lease and the buy and leaseback model**, for each EPC contract only the cash payment (i.e. the EPC fee) can be recorded in the government accounts.*
- *The initial capital expenditure made by the EPC contractor will not impact at inception the net lending/net borrowing or the (Maastricht) debt of government. .*
- *It is not applicable to agreements including factoring without recourse.*
- *It is not applicable for EPC contracts with other specific features that would clearly shift the risks and rewards to government or for which the duration of the EPC contract is considered to be too short to cover a meaningful part of the economic life of the underlying equipment.*

Next Steps

- *Eurostat and EIB are about to publish an operating guide.*
- *Doubts are being addressed. AMI.*
- *Contract models.*
- *Pilot projects and implementation of the rules.*

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Ing. Livia Carratú, Expert, Italian Ministry of Environment

15.30 End of the meeting



*European Federation of Intelligent
Energy Efficiency Services*

QualitEE Project

Update and Next Steps

Project's Current Timeline

Task	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
Online Survey									
EU Stakeholders' Interviews									
National Report									
Draft Guidelines									
European Workshops									
Website									
Communication Plan									

EES Market and Quality Analysis – Online Survey (FR)

- Targets
 - Service providers
 - Facilitators – Public or private organisation advising and accompanying clients in finding the right energy services (e.g. local energy agencies)
- 15 respondents (14 FR-1 BE)
 - 13 service providers
 - 2 facilitators - play a minor role on French market
- Answers obtained by phone calls

Online Survey – Findings on EPC Market

In general

- Difficult access to finance
- Main client: public sector
- Limited role of facilitators (FR)

Obstacles

- Low price of energy
- Complexity of EPC concept

Drivers

- Guaranteed savings
- Pressure to lower costs

Areas of improvement

- Technical-economic analysis / energy audit
- Reaching expected level of savings
- Transparency and completeness of contractual stipulations

Interviewing European Stakeholders



Ettore Piantoni
EE finance expert
CEN/CENELEC



Isidoro Tapia
EE finance expert
European Investment Bank



Toivo Miller
EE finance expert
European Bank for
Reconstruction and Development



Sarah Scaillet
General Administrator
Federal Pension Service



Dominique Boveroux
Director of Infrastructure
Erasmus University Hospital



John Conlon
Senior Director of Engineering
and Utilities Europe
Marriott Hotels International

Interviewing European Stakeholders - Findings

- Clients
 - Discovered EPC through their service provider – trust relation
 - Usually don't understand the concept very well at first
 - Don't really see the benefits of certifying EPCs (already contractual commitment)
- Financiers
 - Emphasise preliminary audit as crucial point for a successful project
 - Transparency must be ensured at each stage – emphasis on risk allocation
 - High standards of EIB and EBRD – external label/certification is not relevant

Next Steps

- **28-29-30 November**

QualitEE meeting, Prague

- Project updates from partners – Financial and technical guidelines, quality criteria, pilot projects, national certification frameworks, dissemination
- Presentation of outcomes of the Investors Confidence Project
- Discussion workshop – *Quality assurance and certification of energy efficiency services*

- **January 2018**

Dissemination of country reports on national EES market

- **February 2018**

European discussion workshops in Brussels – 2 half-days

- With ESP associations, policy makers, financial institutions
- To discuss draft guidelines for technical quality criteria and financial guidelines



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É ora di pranzo.

Buon appetito !



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EFIEES Meeting

Efficienza energetica nella SEN 2017: obiettivi e strumenti

Mauro Mallone

Roma, 23 Novembre 2017

Obiettivi della SEN 2017: competitività, ambiente e sicurezza

Obiettivi SEN 2017, coerenti con il piano dell'Unione dell'Energia

Competitività Ridurre il gap di prezzo dell'energia allineandosi a prezzi UE, in un contesto di prezzi internazionali crescenti

- **Soluzioni strutturali per recuperare gap di prezzo:**
 - Azzeramento / inversione spread gas fra PSV e TTF
 - Progressiva convergenza del mix generativo a livello UE e riduzione costo delle rinnovabili
 - Interventi a tutela dei settori industriali energivori
 - Riduzione spesa energetica per effetto dell'efficienza e dell'evoluzione tecnologica

Ambiente Raggiungere obiettivi ambientali Clima-Energia, in linea con gli obiettivi COP21

- **Nuovi obiettivi operativi al 2030** a livello UE e linee di tendenza al **2050**
- **Piano clima-energia** Italia dovrà tenere anche conto di:
 - Investimenti crescenti in efficienza energetica
 - Ulteriore impulso alle FER

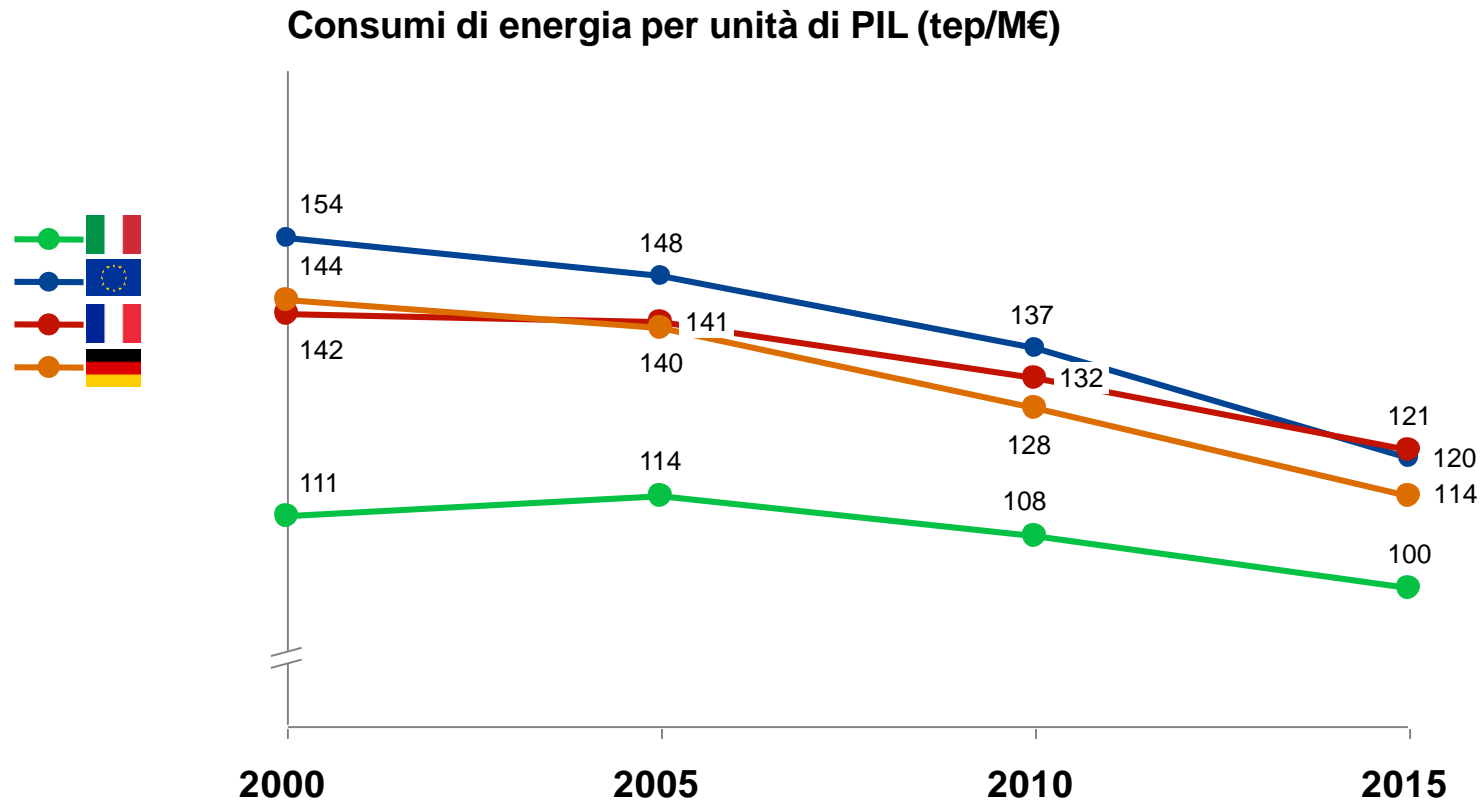
Sicurezza Migliorare la sicurezza di approvvigionamento e la flessibilità del sistema

- **Estensione obiettivi di sicurezza, adeguatezza e qualità** delle reti gas ed elettrica per
 - Integrazione di quantità crescenti di FER e nuovi scenari europei
 - Gestione dei flussi e punte di domanda gas variabili
 - Diversificazione delle fonti e rotte di approvvigionamento gas per motivi geopolitici

L'efficienza energetica concorre al raggiungimento degli obiettivi della Strategia

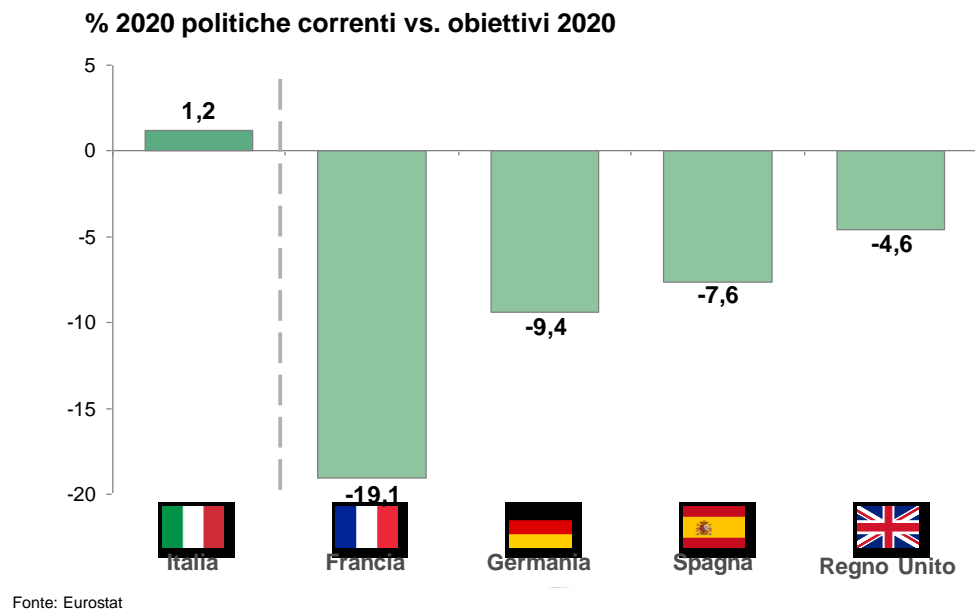
L'Italia ha registrato dal 2000 un'intensità energetica inferiore alla media UE, a Francia e Germania

Evoluzione intensità energetica 2000 – 2015 Italia vs. UE, Francia e Germania



Nell'efficienza energetica l'Italia ha ottenuto performance elevate negli ultimi anni grazie a sistema consolidato e mix di politiche attive

Consumi energetici vs Obiettivi al 2020



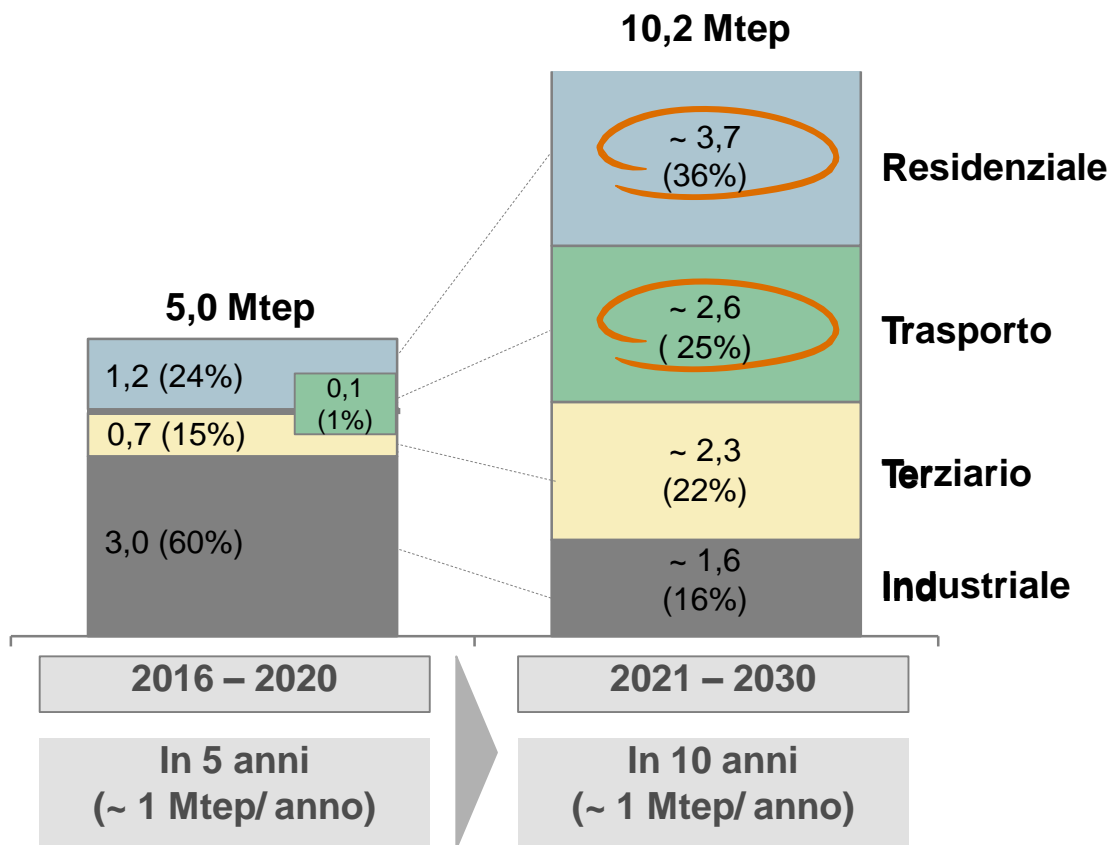
Principali Obiettivi al 2020

- I risparmi già ottenuti sono adeguati all'obiettivo minimo cumulato per il periodo 2014-2020 (1,5% annuo su volumi di vendita a clienti finali);
- Interventi programmati garantiscono il perseguimento dell'obiettivo di riqualificazione energetica del 3% annuo della superficie degli immobili della Pubblica Amministrazione Centrale.
- L'obiettivo di consumi di energia finale al 2020 pari a 124 Mtep sarà verosimilmente raggiunto. Le attuali stime prevedono consumi inferiori ai target per circa l'1,2%;

L'Italia è ben posizionata rispetto agli obiettivi di efficienza energetica

Obiettivi di efficienza energetica al 2030

Evoluzione risparmi da politiche attive



















Considerazioni

- Il cambio di mix settoriale è necessario per favorire il raggiungimento del target di riduzione CO₂ nei settori non-ETS
 - *impegno da concentrare su residenziale e trasporti*
- Questo mix pone le basi per il raggiungimento del target di riduzione CO₂ non-ETS in uno scenario di crescita costante dell'economia
 - *oltre 1% annuo di aumento PIL tra 2021 e il 2030*

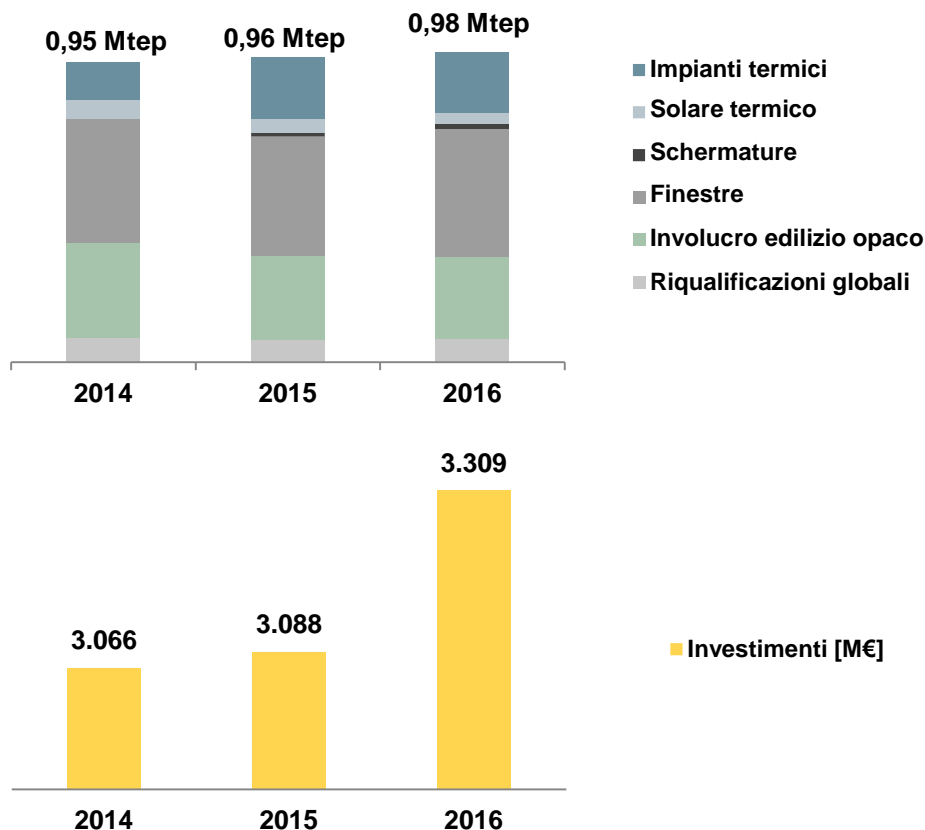
Necessità di mantenere l'attuale "passo" di riduzione dei consumi ma ri-focalizzando l'impegno su residenziale e trasporti

Principali strumenti esistenti per l'efficienza energetica

	Certificati Bianchi	Detrazioni fiscali	Conto Termico	Prepac	Standard e Normative	
Residenziale 						Il contributo dei meccanismi di regolazione alla riduzione dei consumi di energia è stimato in circa il 35%
Terziario - PA 						Il restante 65% è coperto dai meccanismi di incentivazione
Industria 						Gli investimenti mobilitati dai meccanismi di incentivazione nazionali ammontano ad oltre 5,5 miliardi di euro
Trasporto 						



Evoluzione risparmi ed investimenti



Considerazioni

- I risultati ottenuti negli ultimi anni mostrano un **crescita degli investimenti** ma risulta necessario potenziare l'efficacia del meccanismo

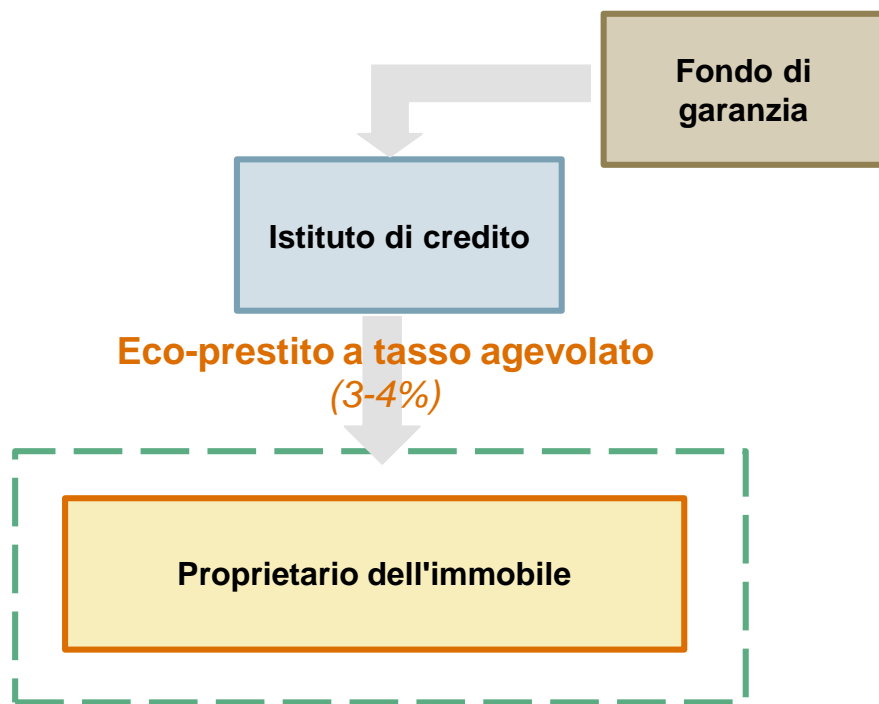
A tal fine sono attualmente in discussione diverse modifiche:

- 1 Riorganizzare lo strumento in **coerenza** con i meccanismi di incentivazione per l'antisismica e la ristrutturazione edilizia
- 2 Introdurre **massimali unitari di spesa** per tipologia di intervento - Limitazione dei costi di sistema per intervento
- 3 **Modulare percentuale in detrazione** in relazione al risparmio atteso dall'intervento - Possibilità di premiare gli interventi più efficienti e orientare il meccanismo verso interventi radicali sull'edificio (*deep renovation*) con miglior rapporto costo-beneficio
- 4 **Stabilizzare** il meccanismo delle detrazioni fiscali, per interventi che interessano l'intero edificio in maniera integrata
- 5 Introdurre misure specifiche per la riqualificazione edilizia ed efficienza energetica anche nel **Social Housing**, per prevenire la povertà energetica (fenomeno che interessa 4.8 milioni di persone)

Potenziamento ed ottimizzazione Ecobonus



Funzionamento del meccanismo



Considerazioni

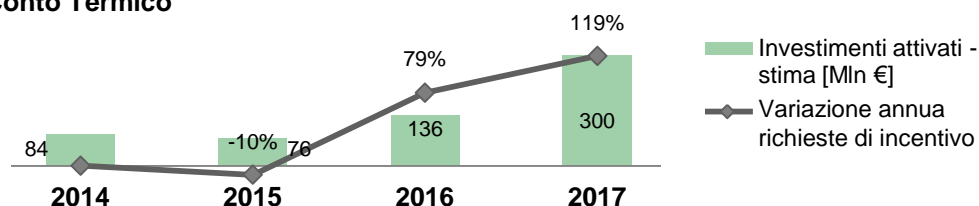
- Il fondo offrirebbe garanzie per interventi di efficienza energetica standard, senza necessità di valutazione puntuale dei singoli interventi da parte del soggetto finanziatore
 - *Lista degli interventi ammessi basata su parametri prestabiliti*
- Il Fondo di garanzia (dimensionato in ~ 50 milioni di Euro per coprire interventi per 600 Milioni di Euro) coprirebbe il rischio di insolvenza del proprietario dell'immobile

Ampliamento della platea dei soggetti che potranno beneficiare delle detrazioni fiscali

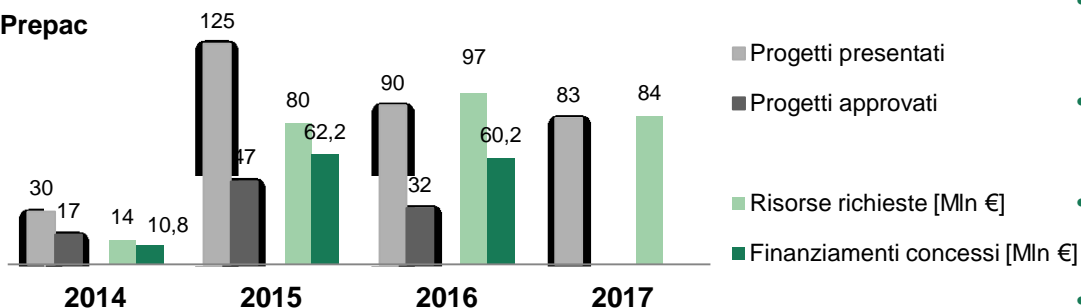


Risultati ottenuti

Conto Termico



Prepac

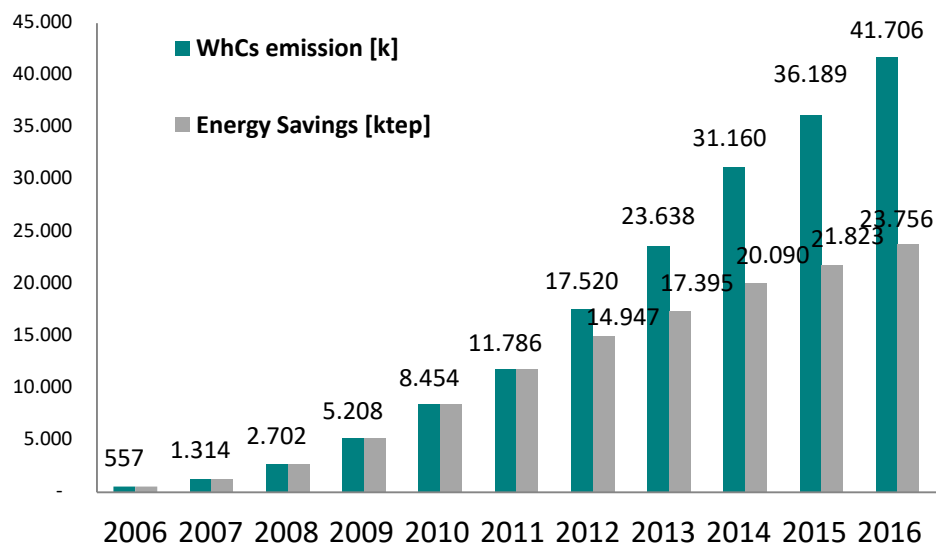
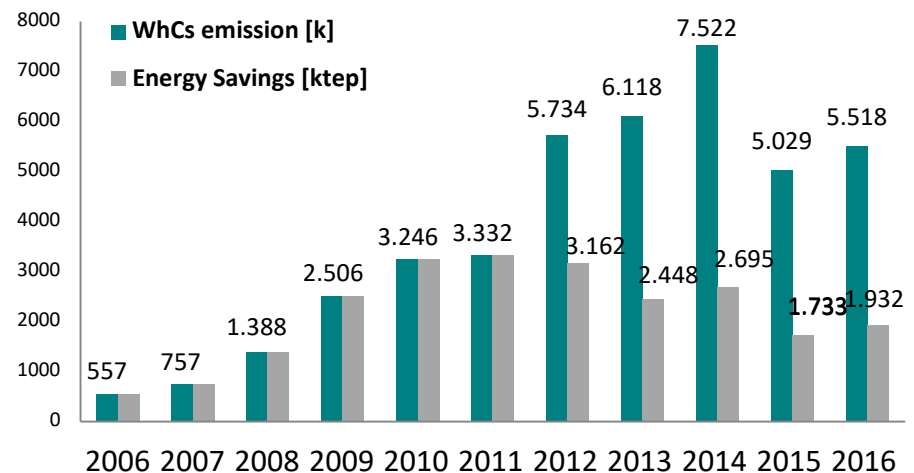


Considerazioni

- I risultati ottenuti negli ultimi anni tramite gli strumenti di promozione disponibili mostrano **investimenti crescenti** anche nel settore dei servizi. Tuttavia, per raggiungere i target la SEN prevede:
 - l'adozione di nuovi **standard minimi di prestazione** per l'edilizia pubblica
 - la diffusione dell'applicazione dei **Criteri Ambientali Minimi** alle gare di appalto di acquisto di beni e servizi
 - L'attivazione di un programma per efficientare le reti di **illuminazione pubblica**
 - l'adeguamento degli attuali strumenti di sostegno alle esigenze degli **edifici commerciali**
 - l'industrializzazione degli interventi favorendo la **standardizzazione e l'aggregazione dei progetti**
 - l'introduzione di **obblighi di efficientamento energetico** in occasione delle ristrutturazioni
 - la diffusione dei contratti **EPC**



Risultati ottenuti

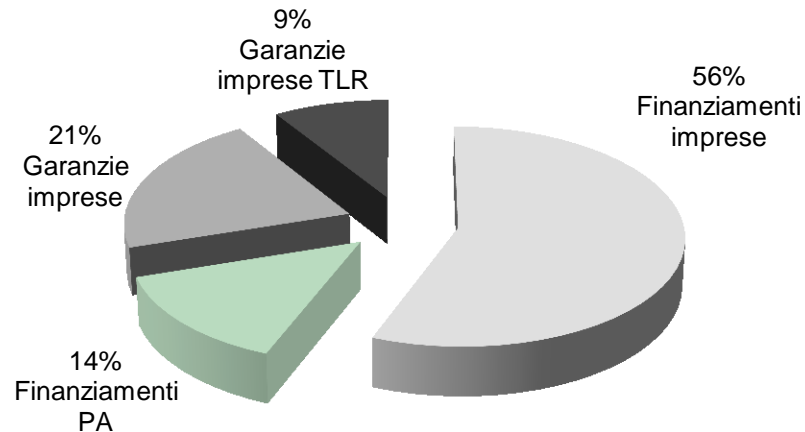


Considerazioni

- Nel 2016 sono stati emessi circa 5,5 milioni di certificati bianchi equivalenti ad un risparmio di 2 Mtep
- Dall'avvio del meccanismo dei certificati bianchi sono stati certificati **24 Mtep di risparmi di energia**
- Potenziamento e semplificazione del meccanismo dei certificati bianchi
- Creare le condizioni per garantire una maggiore stabilità del mercato dei certificati bianchi
- Promozione dell'efficienza energetica nelle PMI rinnovando le iniziative di cofinanziamento degli audit energetici e dei sistemi di gestione dell'energia



Ripartizione risorse del Fondo



Considerazioni

- il Fondo è finalizzato a sostenere interventi di efficienza energetica realizzati dalle imprese e dalla Pubblica Amministrazione, su immobili, impianti e processi produttivi
- Il Fondo, di natura rotativa, si articola in una sezione per la concessione di garanzie su operazioni di finanziamento, ed una sezione per l'erogazione di finanziamenti a tasso agevolato
- L'attivazione del Fondo darà un impulso agli investimenti privati
- Attesa una mobilitazione di investimenti nel settore dell'efficienza di oltre 800 milioni di euro con le risorse già disponibili (effetto leva previsto è pari a 5,5)

Il Fondo sarà operativo entro la fine dell'anno corrente



Fattori abilitanti

Rafforzare i fattori abilitanti per accrescere il mercato dei servizi di efficienza energetica

Rinforzare le misure volte al **cambiamento comportamentale** da parte di cittadini, imprese e PA

Strutturare e monitorare il processo di **qualificazione** degli operatori di settore, con particolare riferimento alle ESCo e alle imprese di costruzioni

Rivedere le regole di contabilizzazione del debito pubblico in caso di interventi di efficienza energetica (p.e. **EPC**)

Adeguare la normativa sugli **Aiuti di Stato** per facilitare gli investimenti in efficienza energetica

Rafforzare le attività di controllo del **rispetto di standard e normative**

Continuare a **semplificare il processo autorizzativo** per l'accesso ai meccanismi di incentivazione (p.e. standardizzazione interventi)

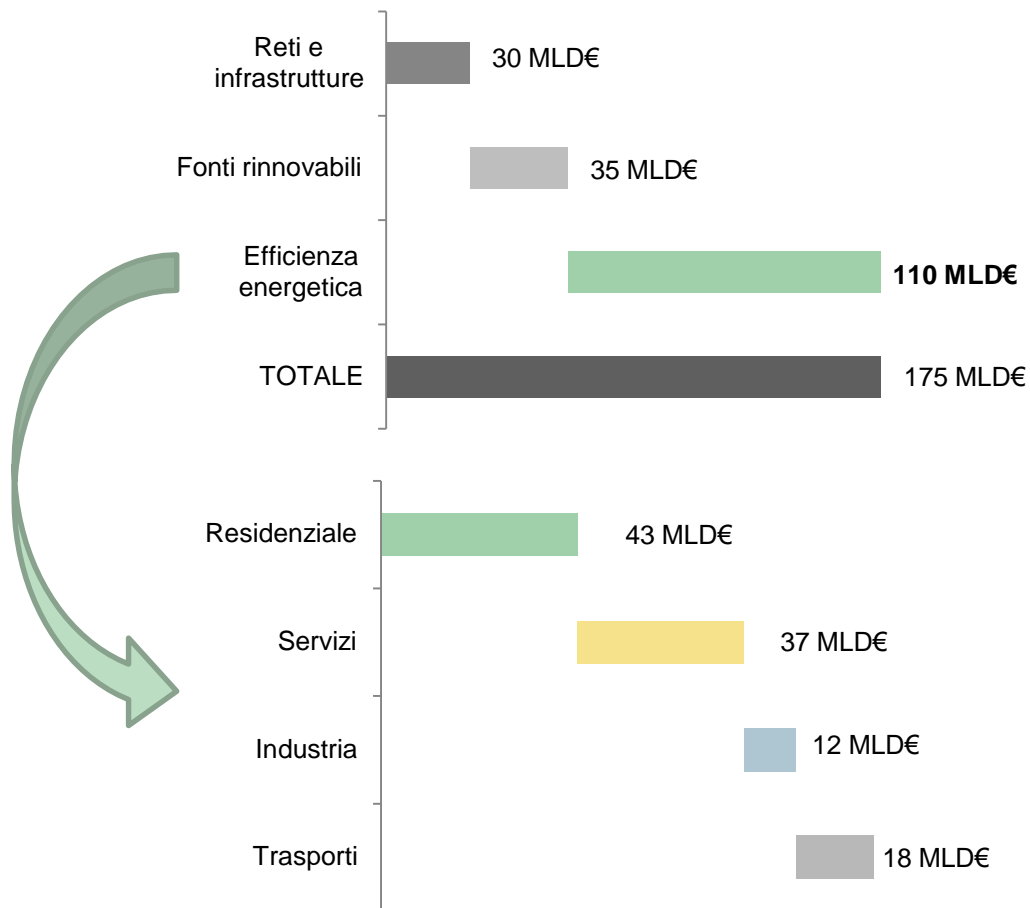
Incrementare gli **investimenti in ricerca** per lo sviluppo di soluzioni tecnologiche in grado di sostenere la transizione energetica

Migliorare **la governance**, tramite l'implementazione di un modello che stimoli il contributo attivo da parte di tutte le Amministrazioni pubbliche centrali, delle Regioni e delle Municipalità al raggiungimento dei target di efficienza energetica nazionali

Maggiore enfasi agli interventi soft

Conclusioni

Investimenti aggiuntivi previsti dalla SEN



Considerazioni

- L'Italia è sul binario giusto per il raggiungimento dei target energetico-ambientali al 2020
- La nuova sfida: traguardare gli obiettivi al 2030 fissati dalla SEN 2017 appena approvata
- Il livello di investimenti aggiuntivi necessari per raggiungere gli obiettivi è impressionante
- Stimati circa 110 miliardi di euro per l'efficienza energetica
- Necessario continuare ad affinare e potenziare i meccanismi esistenti e individuarne di nuovi in modo di stimolare maggiori investimenti privati

Il ruolo delle ESCO è importante per accelerare il processo di transizione energetica

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