

2° Centralized training session

**Thursday, 2 October – Consorci El Far, Moll de
l'Escar - Barcelona**

Initial work in the municipality of pordenone, italy - a technical experience

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Municipality of Pordenone is a medium-sized city and one of the state capital of Friuli Venezia Giulia Region. 52.008 inhabitants



Comune di Pordenone

Municipality of Pordenone is developing at the same time:

- ❖ SEAP+EnMS;
- ❖ Municipality Energy Plan (compulsory > 50.000 inh. in Italy) → defining an Energy Balance;
- ❖ Regulatory Municipality Plan;
- ❖ Urban Planning Mobility Plan;
- ❖ Acoustic Plan (noise reduction)
- ❖ Environmental impact evaluation



All those Plans will be integrated:

- ❖ SEAP+EnMS;
- ❖ Municipality Energy Plan + BIE;
- ❖ Regulatory Municipality Plan → Description of the territory (Chapt. 2 of the SEAP doc.);
- ❖ Urban Planning Mobility Plan → Transport Sector of BIE + SEAP measures;
- ❖ Acoustic Plan → Additional informations;
- ❖ Environmental Impact Evaluation → Integreted in CO₂ reduction and environmental monitoring phase

SOGESCA's activities in the Municipality of Pordenone:

- ❖ Support on the SEAP+EnMS development;
- ❖ Support on the Municipality Energy Plan development;
- ❖ Double check on Energy Audit on L.A. buildings already done by Cofely ESCo;
- ❖ Energy Audit on the 20 remaining L.A. buildings.

Starting situation in the Municipality of Pordenone - L.A. Buildings management status

- ❖ No information about real data LG consumption;
- ❖ No information on Energy costs per year;
- ❖ What are the buildings under Cofely ESCo (thermal enenergy supplier for LG Buildings) management;
- ❖ Buildings use (Municipality offices, Associations, Sport, Culture, other activities) → Who use what and when;
- ❖ Electricity consumption for each building (not present in the Energy Audit made by Cofely ESCo);



Starting situation in the Municipality of Pordenone – Public Lighting management status

- ❖ No information on how many electricity smart meter there are on the municipality territory;
- ❖ No information on the amount of the energy costs;
- ❖ Location of the electricity smart meter;
- ❖ Typology of lamps installed;
- ❖ State of the maintenance;
- ❖ Energy efficiency measures already implemented;
- ❖ Real data consumption per year.



Motivations 1/2:

- ❖ **Energy policy was not considered an important issues by the Top Management until... few months ago;**
- ❖ The administrative staff (personnel) not sufficiently trained and informed on energy issues;
- ❖ The accountancy office was in charge to register energy consumption;
- ❖ The organization of the maintenance sector was not coordinated by Public Works Sector;
- ❖ Only one person was in charge to solve problems related to energy consumption and to monitor everything.

Motivations 2/2:

- ❖ Data consumption registered in the Management Information System incorrectly;
- ❖ Occasional control on smart meter by the Maintenance staff delegated with incorrect data reported;
- ❖ No control on the energy suppliers contracts;
- ❖ No control on the activities of the Cofely ESCo which is the gas supplier for the L.A. buildings;
- ❖ No control on the Cofely ESCo Energy Audit on Public Buildings and on the energy efficiency measures provided by the contract.

How to solve all those problems using an ISO 50001 methodological approach:

- ❖ Involving the Top Management;
 - ❖ Defining the Energy Team;
 - ❖ Establishing in collaboration with the Top Management who have to do what and when;
- Sharing of responsibilities for each sector and for each member of the LG staff.

Involvement and commitment of the Top Management:

- ❖ Organisation of regular meetings with the Environmental Assessor;
- ❖ Involvement of the Administrative Secretary in the SEAP+EnMS process;
- ❖ Slow construction of the Energy Team involving the Assessor+Secretary;
- ❖ Explain to the Assessor and to the Secretary the importance to have an Energy Team.

Possible solution...

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Barcelona per PPT/Pordenone/Energy
Team Pordenone.docx](file:///localhost/Volumes/AME/Materiale%20Training%20Barcelona%20per%20PPT/Pordenone/Energy%20Team%20Pordenone.docx)



Results:

- ❖ The Administrative Secretary is going to appoint the Energy Team in collaboration with the Environment Assessor;
- ❖ The coordination of the Energy Team will be under control by the Administrative Secretary and under the direction of the Environment Assessor;
- ❖ All the tasks will be divided by each LG sector;
- ❖ All the members of the Energy Team will be responsible for specific tasks.

*Results: Definition of roles and tasks which involve:
LG, Cofely ESCo and SOGESCA S.r.l.*

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COMUNE PN.docx](file:///localhost/Volumes/AME/Materiale%20Training%20Barcelona%20per%20PPT/Pordenone/Testi/01%20RUOLI%20E%20COMPITI%20GRUPPO%20DI%20LAVORO%20SOGESCA%20COFELY%20COMUNE%20PN.docx)



At the same time Municipality started its data collection on LG Buildings:

- ❖ In depth analysis on thermal consumption in Public Buildings through energy performance analysis carried out by Cofely ESCo
- ❖ [file:///localhost/Volumes/AME/Materiale Training Barcelona per PPT/Pordenone/Testi/Diagnosi/DIA Scuole Luglio 2014 tx 1 di 5/PN 05 01.pdf](file:///localhost/Volumes/AME/Materiale%20Training%20Barcelona%20per%20PPT/Pordenone/Testi/Diagnosi/DIA%20Scuole%20Luglio%202014%20tx%201%20di%205/PN_05_01.pdf)



At the same time Municipality started its data collection on LG Buildings:

❖ By SOGESCA S.r.l.:

- Double check on Cofely ESCo Energy Performance Analysis;
- Energy Performance Analysis for another 20 LG Buildings and facilities;
- Check list and suggestions on Cofely ESCo Energy Performance Analysis → Electricity consumption data and consumption reduction estimation



At the same time Municipality started its data collection on Public Lighting Systems:

- ❖ Initial census of light spots: characteristics and power installed for each light spot;
- ❖ Description of the energy efficiency measures already implemented through contractual obligation with the energy supplier (Consip);
- ❖ Results in terms of numbers related to the measures already implemented;
- ❖ Analysis of the indicators used;
- ❖ Definition of the Action Plan to implement energy efficiency measures for the next 3 years,



At the same time Municipality started its data collection on Electricity consumption in Private sectors obtaining information also on LG consumption:

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At the same time Municipality started its data collection on thermal energy consumption in Private sectors (gas consumption):

*file://localhost/Volumes/AME/Materiale Training
Barcelona per PPT/Pordenone/Testi/Dati da Italgas/13
PORDENONE - Volumi gas 2007-2013.xlsx*

At the same time Municipality is collecting other very detailed data in private and Public sectors:

- ❖ Geo-referenced information on Residential Buildings + LG Buildings with typology of the existing buildings (cottages, condominiums, built up area);
- ❖ Standard energy consumption by buildings typologies;
- ❖ Definition of potential measures to encrease energy efficiency.



At the same time Municipality is collecting data on RES already installed in the territory:

- ❖ PV plants already installed in Public and Private setors:

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At the same time Municipality is collecting data on RES already installed in the territory:

❖ Hydroelectric plants already installed:

[file:///localhost/Volumes/AME/Materiale Training Barcelona per PPT/Pordenone/Testi/elaborazione dati/idroelettrico/25 Officine Idrauliche PN 2011.pdf](file:///localhost/Volumes/AME/Materiale%20Training%20Barcelona%20per%20PPT/Pordenone/Testi/elaborazione%20dati/idroelettrico/25%20Officine%20Idrauliche_PN_2011.pdf)



At the same time Municipality is collecting data on RES already installed in the territory:

- ❖ No information about geothermal, biomass, biogas, solar thermal plants are available at the moment

Conclusions and suggestions:

- ❖ Identify the problems;
- ❖ Use a clear and usefull methodological approach according to SEAP+EnMS approach;
- ❖ Remember that very often, problems are not only related to data collection, but also to human resources;
- ❖ The only one way to achieve the gol is to work together as a **team**.



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SEAPs

ENERGY MANAGEMENT
FOR SUSTAINABLE
ACTION PLANS

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Questions?



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THANK YOU FOR YOUR KIND ATTENTION.

Coffee break

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