



## **Facing Resource Efficiency in Italy**

Promoting Resource Efficiency in Central and Eastern Europe

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## PRES URCE RE Policy in Italy: national level

- Up to now, Italy does not have a specific resource efficiency program or strategy but many national policies are linked to the goals set in the Roadmap to a Resource Efficient Europe.
- Some topics on which polices, legislation and incentives have been strengthen: waste reduction and prevention, circular economy, energy efficiency, renewable energy, smart cities, SMEs clusters, eco innovation and competitiveness of districts and industrial areas.
- Goals are set mainly in the energy field
- No specific institutions have been identified to give support in the development and implementation of RE programs.





## **Stakeholders:**

- National institutions: defining policies and strategies
- National Agencies/research centers: technical support to Ministries and agency functions
- Regional Institutions: In the context of a national strategy they can implement independent measures
- Private bodies: support directly companies in the implementation of RE measures, access to incentives, etc..





## Stakeholders of RE policy at national level

 Ministry of the Environment and the Territory and the Sea Defence (MATTM): guidelines for environmental protection, waste prevention and sustainable production and consumption policies (PCS)

 Ministry of the Economic Development (MISE): guidelines for renewable energy and energy efficiency policies







## **National Agencies/research centres**

- ENEA (Italian National Agency for New Technologies, Energy and Sustainable Economic Development)
- supports the Ministry of the Environment and of Economic Development in defining strategies and technical solutions;

#### Research activity and agency functions on:

- Energy: white certificates, energy managers training, energy efficiency and renewable energy, energy certification and management of governmental incentives (55%);
- Ecoinnovation: ecodesign, green economy, Life Cycle Assessment, eco-labels, EMS, GPP);
- Industrial areas management;
- New technologies and technology transfer;
- Prevention and reduction of waste, air and water pollution;
- Water efficiency.





## **National Agencies/research centres**

- ISPRA (Italian National Institute for Environmental Protection and Research):
  - Manages and supervises the actions of control and monitoring of pollutant emissions and waste generation
  - Offers the technical support to the Italian
     National Ecolabel Ecoaudit Committee





## Other national institutions

# **AEEG** (Governmental authority for electric energy and gas):

 promotes a rational use of energy with measures aimed to the diffusion of renewable energies systems and energy efficiency technical solutions

## **Sustainable Development Foundation:**

 promotes solutions for the decarbonisation of the economy and for a sustainable mobility





## Other national institutions

## "General States" of Green Economy:

- •promoted by the Ministry of the Environment in 2012, it is an association of 63 companies and organizations (public and private) working on several topics: Eco-innovation, Material and Recycling, Energy efficiency, Environmental services, Sustainable mobility, Agricultural production, Water.
- •For each topic, a specific technical working group makes proposals to support the development of national policies and implementing measures





## **Private institutions/intermediaries**

- There are several associations/intermediaries, many of them specific for a sector or a territory. They can be very active in implementing measures and giving technical and scientific support to companies (training, consultancy, services, access to incentives...)
- Some examples:
- Green Building Council: works to train professionals, sets standards for green buildings at national level, provides the local context for market transformation towards green technologies and promotes LEED standard and certification in Italy.





## **Private institutions/intermediaries**

#### Chambers of commerce:

- •support and assist enterprises in the field of environmental practices and management (in particular EMAS).
- manage the registers for waste handling and traceability
- support the technology transfer.
- •Sector/district specific technological centers for companies: provide services and research activity to firms in the field of technology and environment. Sometimes they can be proactive with respect to public institutions (i.e. Cosmob for furniture sector of Marche region, Ceramic Centre for the ceramic industry of Emilia Romagna, etc..).





## **Private institutions/intermediaries**

Associations of companies and Industrial associations

For example CNA (National association of SMEs):

- CNA is involved as an independent political player in the setting up of economic development policies aimed at increasing the competitiveness
- activities concerning innovation, technologies, training and promotion of cleaner production
- **ISNOVAFIRE**: the main goal is to promote energy efficiency, by supporting technically its members
- Federlegno arredo: association of industries of wood furniture sector
- Etc..





## **Networks**

- EU Networks (EEN network Friend Europe, EEN Network bridge)
- Italian Network of LCA: aimed at promoting the dissemination of LCA methodology through the creation of a network to exchange knowledge, information, methods and good practices on LCA state of the art and perspectives in Italy
- CARTESIO Network: aimed to reach and disseminate joint solutions in cluster sustainable management





## RE at regional level – example of Emilia Romagna region

- Emilia Romagna is one of the most active region in Italy in initiatives concerning Resource Efficiency in SMEs.
- Energy and Environment Technology Platform of the Regional High Technology Networks of Emilia-Romagna: to develop networking between companies in order to reduce waste production and resource consumption
- Emilia Romagna's High Technology Network laboratories and centres, incubators and enterprises have combined into the Tecnopoles. Venues where know-how is transferred to the business sector and where the access to innovation and to new technologies is favoured and developed by the entire Emilia-Romagna public research system.





# RE at regional level – example of Emilia Romagna region

- The government of Emilia Romagna Region has realised a Regional Energy Plan in 2007 for: promotion of efficient energy use, energy savings, development of renewable energy sources, requalification of transmission grids, development of new technologies, energy certification of buildings and development of energy management services.
- The plan sets the energy savings goals for each sector (buildings, transports, industry).
- A regional law has established that from 1st July 2008 the Energy certification for both new and restructuring buildings is mandatory.
- The province of Bologna has realised a strategic plan which analyses the energy
  use within the territory and the future possible scenarios for the reduction and
  diversification of energy production, whit a special focus on renewable sources
  and energy savings.





### **Instruments**

• Ecolabel: Italy is the European leader for the number of licences of products (31% of the European total).

EMAS and ISO 14001

 EPD (ISO 14025) according to "Environdec system" (including RE indicators?)





## Instruments

- Product Environmental Footprint (PEF) is a Life Cycle
   Assessment (LCA) based method to calculate the
   environmental performance of a product. It has been
   developed by the European Commission's Joint Research
   Centre based on the most robust existing, extensively tested
   and used methods. The system will be operating after a 3
   years testing phase.
- Energy labels (i.e. electric consumptions of electronic equipment's, or energy efficiency of a house)
- Energy Star
- LEED Certification





## **Instruments**

- The European Food Sustainable Consumption and Production Round Table's Draft "ENVIFOOD Protocol": environmental assessment of food and drink products.
- Adopted on 21 November 2012, it will contribute to helping businesses and consumers understand the environmental impacts of food and drink products and support informed choices, thereby fostering more sustainable consumption and production patterns.
- The pilot project was launched on 27 March 2013 with 21 organisations agreeing to test the draft Protocol. Participants include a wide range of food and drink manufacturers, trade associations and research institutes





#### **Instruments**

## **QUAM:**

- National environmental certification scheme under development for products characterizing clusters, based on Life Cycle Assessment Methodology.
- Specific environmental criteria (based on LCA studies) are set for a specific sector. The product and the related cluster can obtain the certification
- Specific criteria on RE could be introduced.





### **Instruments**

- Water Footprint: volume of freshwater appropriated to produce the product, taking into account the volumes of water consumed and polluted in the different steps of the supply chain.
- Carbon footprint: amount of greenhouse gases emissions caused by an organisation or a product.
- *Ecological footprint*: amount of biologically productive land and sea area necessary to supply the resources a human population consumes, and to assimilate associated waste. Using this assessment, it is possible to estimate how much of the it would take to support humanity if everybody followed a given lifestyle.







- Italian National Energy Efficiency Plan (PAEE, 2011): defines targets and incentives for energy efficiency in the private and public sector
- Italian National Renewable Energy Action Plan (2010): defines targets and economic incentives for renewable energy production
- Law 10/91 about the legal obligation to nominate an energy manager for the companies with more than 10000 tep consumed and for the public administration with more than 1000 tep consumed





- Heating and cooling support scheme (Legislative Decree in 2011): scheme of support (also financial) for small-scale projects of energy efficiency improvement and production of thermal energy from renewable sources. Eligible projects concern:
- energy efficiency improvements in existing building envelopes (thermal insulation of walls, roofs and floors, replacement of doors, windows and shutters, installation of solar screens);
- replacement of existing systems for winter heating with more efficient ones (condensing boilers);
- replacement and, in some cases, construction of new renewableenergy systems (heat pumps, biomass boilers, heaters and fireplaces, solar thermal systems, including those based on the solar cooling technology).







- White certificates, also known as "Energy Efficiency Certificates" (EEC), where introduced into the Italian legislation in 2004;
- EEC are tradable instruments giving proof of the achievement of end-use energy savings through energy efficiency improvement initiatives and projects.
- Electricity and natural-gas distributors are required to achieve yearly quantitative primary-energy saving targets, expressed in Tonnes of Oil Equivalent (TOE) saved. Each certificate is worth one tonne of oil equivalent (toe) saved.





- Legislative Decree no. 15 of February the 16<sup>th</sup> 2011, transposition of the European Directive 2009/125/CE on Ecodesign of energy related products.
- Legislative Decree 2005/08/19 no. 192 transposition of the European Energy Performance of Buildings Directive 2002/91/EC (EPBD) about the improving of energy efficiency in the construction sector. The law introduces also the certification for the energy building performance needed to make effective every lease or purchase agreement of a house.





#### **Green Public Procurement**

**Italian National Action Plan on GPP (PAN GPP 2008)**: definition of the environmental criteria for the public procurement of the following categories:

- furniture
- construction
- waste treatment
- street furniture
- public lightning
- electronics
- footwear and textile products
- - food service (canteen)
- cleaning service
- transport







## Thank you...

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