



Ministero dello Sviluppo Economico

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(Italian Delegate European SET Plan)

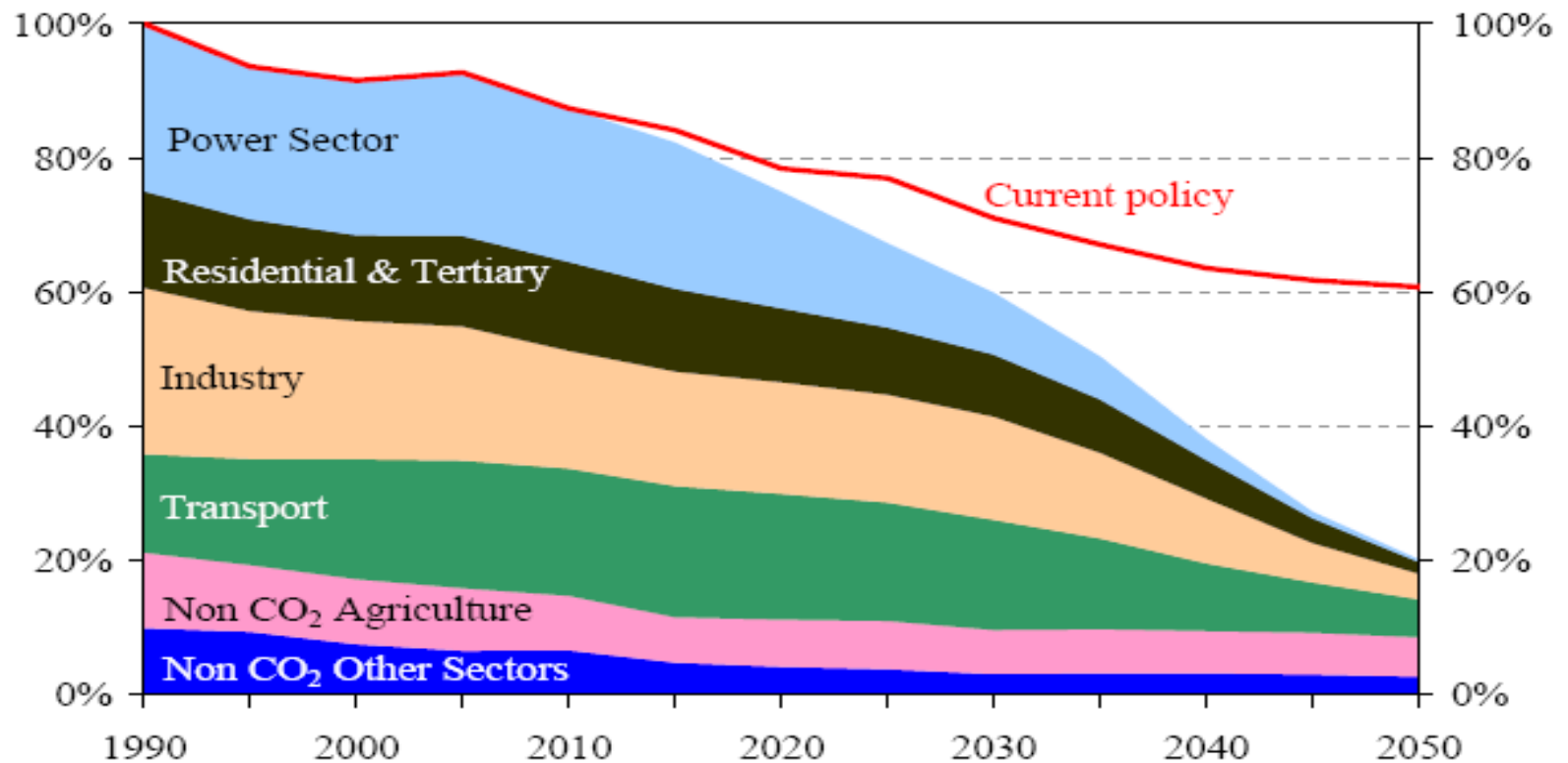
EU and Italian Policy on Smart City

European Smart City Conference

Green City Energy ONtheSEA– Genoa, 10 November 2011

The European Challenges

"A Roadmap for moving to a competitive low carbon economy in 2050"



SET Plan europeo

- *7 European Industrial Initiatives (EII) :*
 - Solar
 - Wind
 - Bioenergy
 - CCS
 - Smart grids
 - Nuclear (IV generation)
 - Smart cities

EU policy framework for Smart Cities and Communities Initiative

- Communication "Investing in the Development of Low Carbon Technologies"
- Communication "Energy 2020 - A strategy for competitive, sustainable and secure energy"
- Communication on the Innovation Union – European Innovation Partnership
- EU Council 4th February 2011 - 'energy saving solutions in cities'

Smart Cities 'philosophy'

- Identify common challenges
- Develop innovative, replicable solutions
- Bundle demand from cities
- Attract and involve business and banks
- Create markets

Building blocks

○ **Energy**

- Energy in cities
 - planning and modelling of flows;
- Energy networks
 - electricity and heating & cooling; improved components, systems and data flows;
- Buildings
 - insulation, holistic approach;
- Supply technologies
 - electricity and heating & cooling, local production

Building blocks (continued)

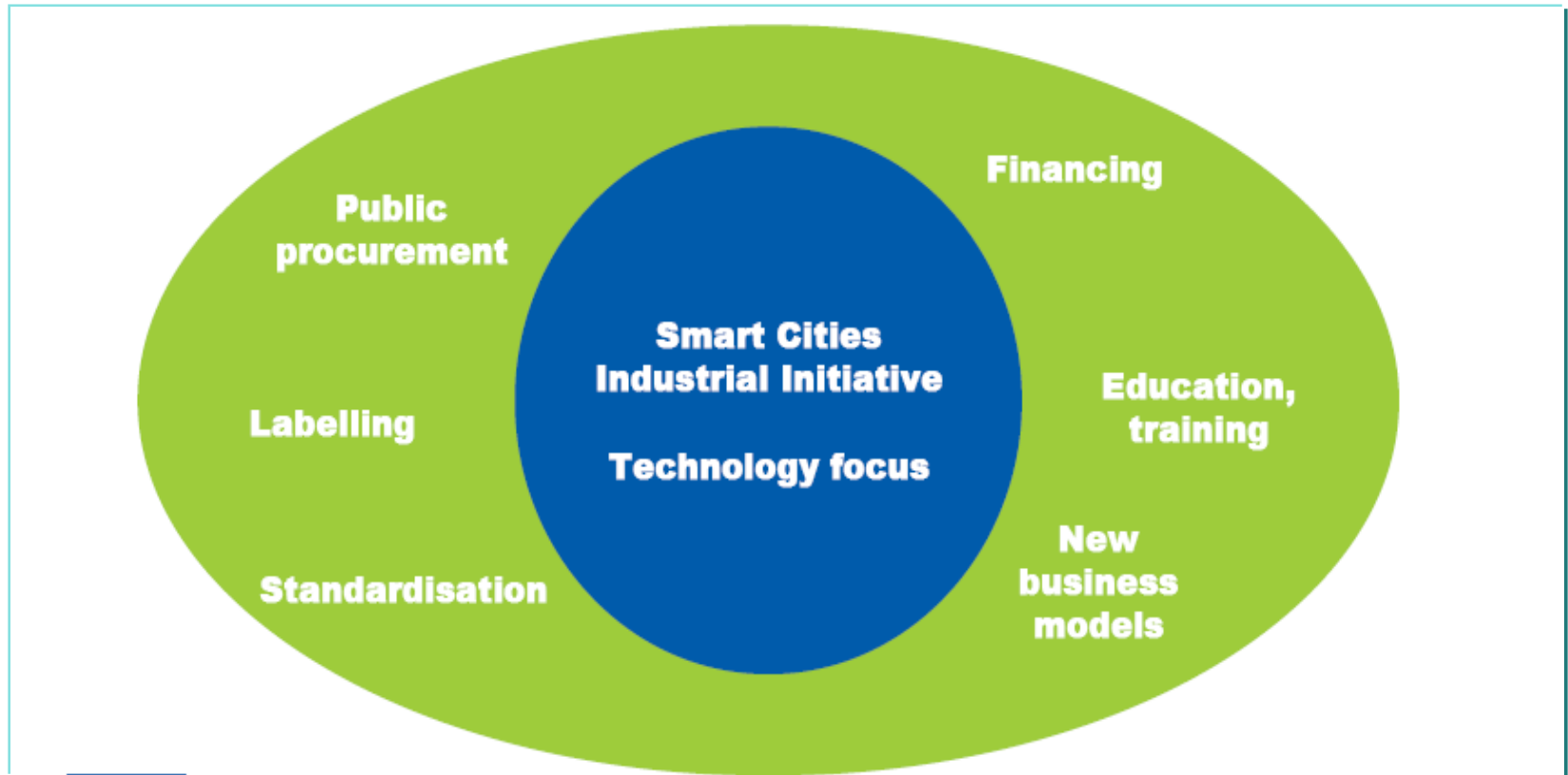
○ **Transport**

- improve interconnections, inter-modal and co-modal transport;
- improve public transport, non-motorised transport, passenger and freight logistics;
- low carbon vehicles

○ **ICT**

- Cross-cutting applications related to energy or transport (e.g. ITS)
- Modelling of energy flows

Possible future of Smart Cities



Main characteristics

- Technology focus
- Priority for energy efficiency
- SET Plan time horizon : 10 years programme
- Competitive process based on calls for proposals
- Stakeholder platform
 - to provide input to the initiative
 - to facilitate knowledge sharing and replication

SET Plan Project financing

Common Roadmap (10y) and Implementation Plan (3y)

Public funding partners	Project typology	Instruments
EC	High EU added value	FP
EC and MS	Large projects, EU added value, shared interests	FP (ERA-NET+), NER300, Art 169, coord calls, ...
MS and MS	Localised shared interests	EERA, ad-hoc arrangements
MS	Supporting domestic industry	national programmes
EIB*	Industrial scale projects	EIB loans, RSFF, guarantees, equity

Common assessment, monitoring and reporting standards - KPIc

Ministero Sviluppo Economico

Dipartimento Energia

First Call for proposals

- **Budget Energy: 75 million €**
 - Demonstration of nearly Zero Energy Building Renovation for cities and districts
 - Heating and cooling technologies for large-scale systems for urban areas
 - Strategic sustainable planning and screening of city plans
- **In total ~ 10 projects of at least 3 cities**
- **Time frame: 19 July – 1 December 2011**

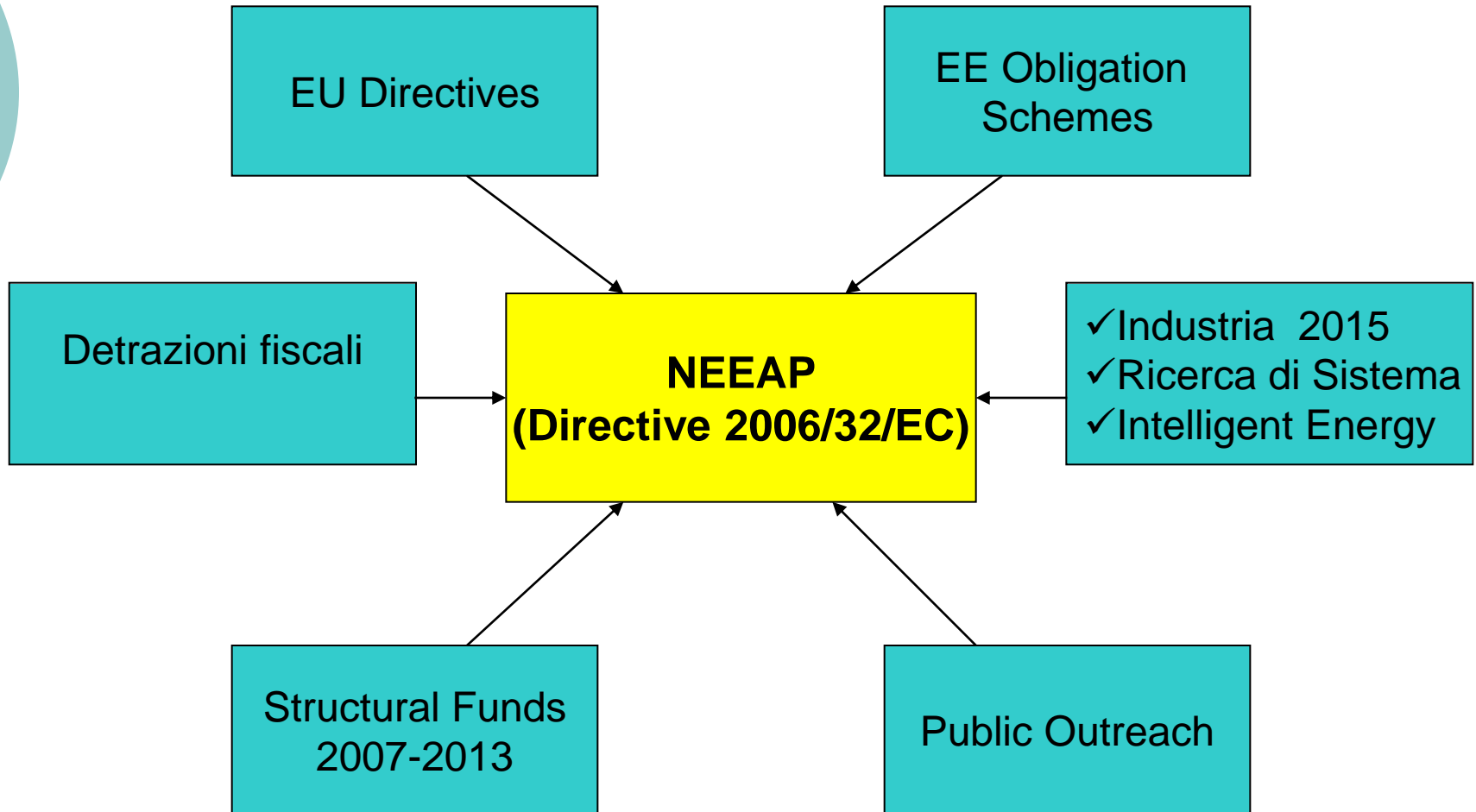
Main steps

- Public consultation: 300 answers
- 21 June: Launch Conference
- 19 July: First calls for proposals
- 2nd half 2011: Establishing Stakeholder Platform
- 28-29 November: SET-Plan conference in Warsaw
- 1 December 2011: Closure of calls

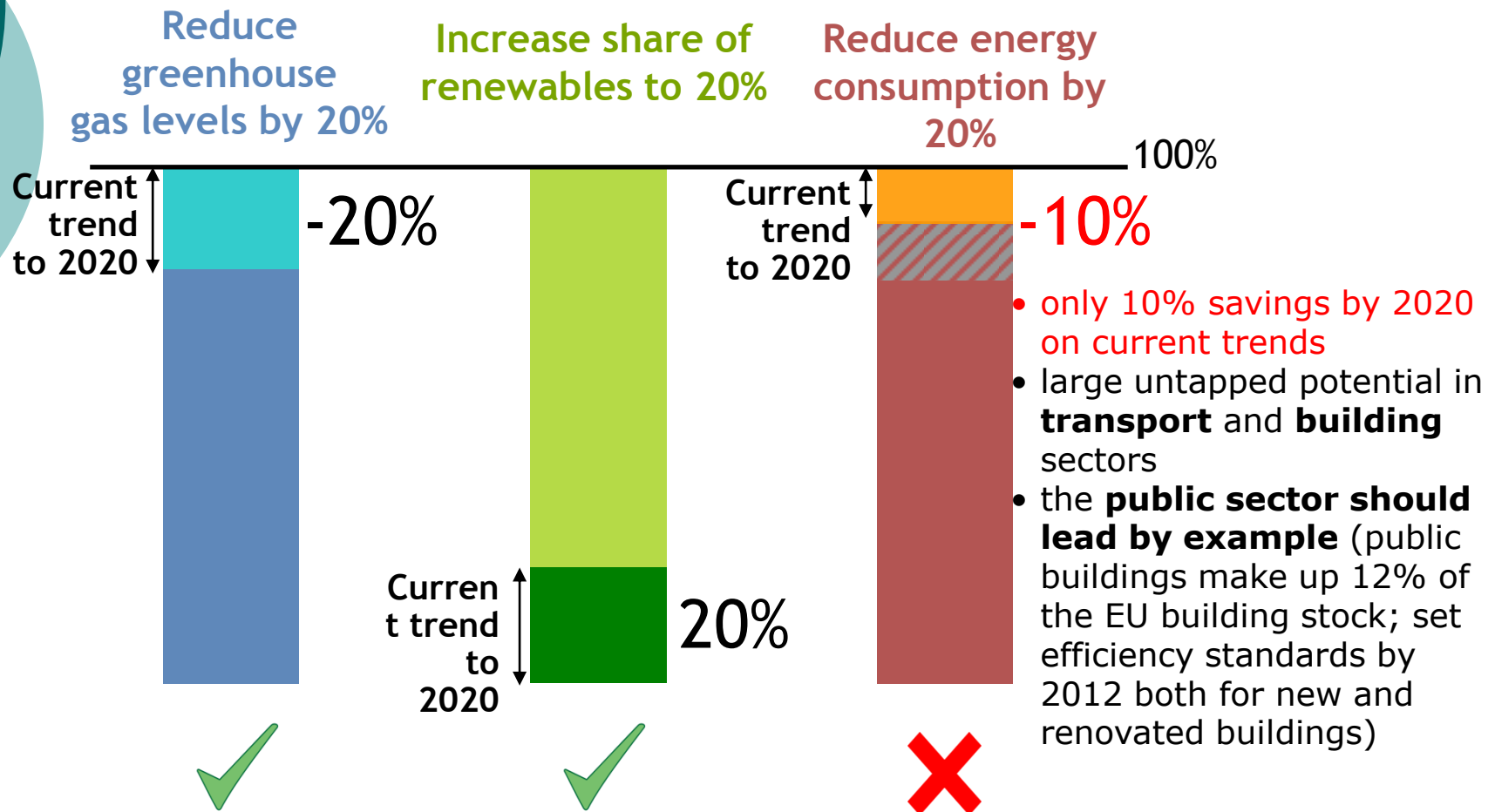
Italian Smart Cities approach

- Strong interest of Italian main cities
- Energy efficiency is the first priority of the Italian approach
- Smart cities initiatives should be particularly focussed on a massive adoption of energy efficiency technologies, able to transform buildings, energy networks and transports in the perspective of a low carbon economy

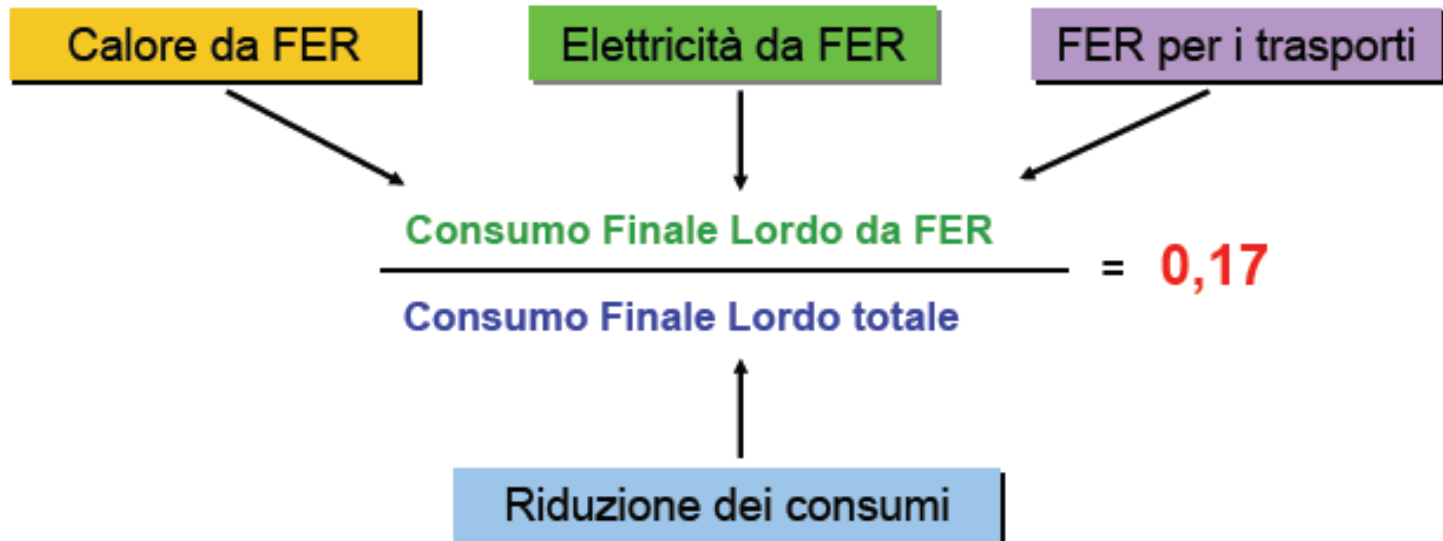
Italian Action Plan on Energy Efficiency



How to reach the 2020 targets



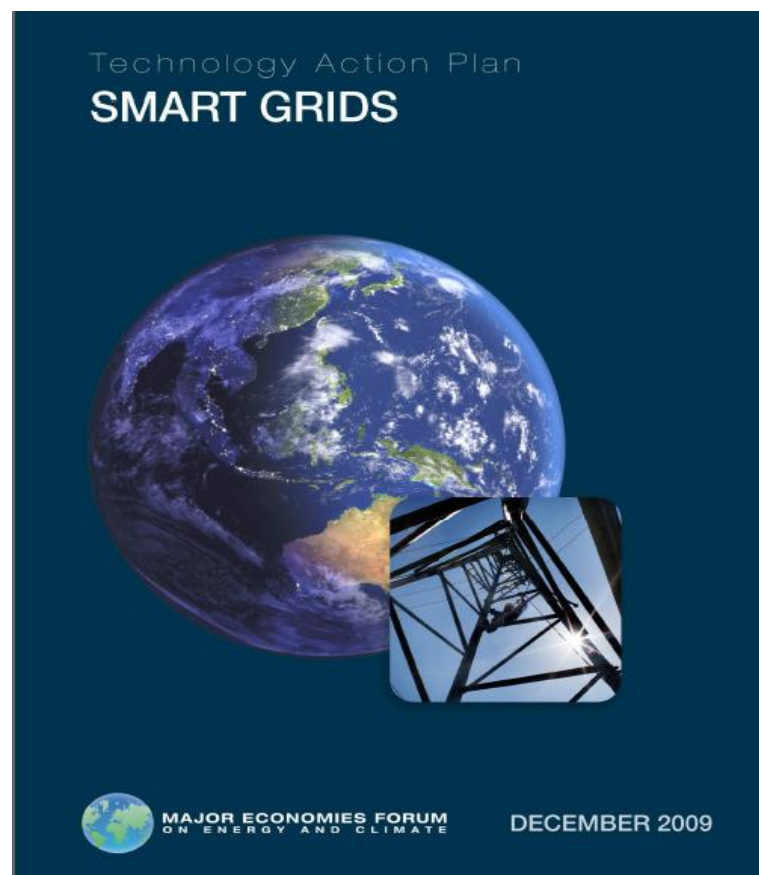
Italian Action Plan on Renewables



**Fondamentale una strategia complessiva.
Politiche integrate, efficaci ed efficienti.**

Italian Leadership on Smart Grids

- ❑ Major Economies Forum launched on 2009 7 Technology Action Plans (TAPs)
- ❑ Italy and Korea leaders of TAP on Smart grids, approved in Copenhagen in 2009
- ❑ ISGAN (International Smart Grid Action Network) launched at the Clean Energy Ministerial meeting on July 2010, is now an Implementing Agreement of the IEA
- ❑ ISGAN provides a framework for high-level government coordination to enable Smart Grid development



www.majoreconomiesforum.org

The Interregional Operational Programme I.O.P.

The Interregional Operational Programme (I.O.P.) "**Renewable Energies and Energy Saving**" - EFRD **2007-2013** co-financed by National Resources and the **EU Structural Funds**, is jointly planned by the Ministry of Economic Development (MiSE), the Ministry of Environment (MATTM), the economy and social Partnership and 4 Italian Regions ('Convergence' Objective).

✓ Budget: **1600 M€**.

✓ Objective: "Increase the share of energy consumption derived from renewable sources and improve energy efficiency, promoting local development in the Convergence Regions".

✓ Convergence Regions:

- ✓ **Calabria**
- ✓ **Campania**
- ✓ **Puglia**
- ✓ **Sicilia**



The I.O.P Programme Strategy

The I.O.P. objective is implemented facing up the bottlenecks which hamper the success of policies (*i.e.* Energy Networks weakness). The I.O.P. strategy has to be distinguished from the financial needs.

Programme keystones:

1. Complete the ordinary policy Incentives Scheme.
2. Lead **financial resources to new generation,** consumption and research **models,** able to strengthen economic and employment system to promote the general *acceptance and convenience for the implementation of interventions.*

I.O.P. Projects

Task: the Ministry of Economy Development is responsible for a relevant part of the Programme for a total budget of 461.5 M€, of which 208 M€ for “Interventions for the strengthening and innovation of transmission network to improve the use of _____ renewable sources and small & micro co-generation”

Objectives: Upgrade energy transmissions networks in order to promote the use of the distributed generation from RES and small & micro co-generation; Remove obstacles deriving from the lack of solid infrastructure; Design actions strictly related to the exploitation of potential renewable sources

Implementation: Projects are defined with Agreements between each Region, Ministry and Enel Distribuzione S.p.A

Projects description: 4 projects to maximize MV grid receptivity also by means of innovative grid management with a mixed active/passive customer type

Intelligent Energy Europe – Mobilising local energy investments

- **Technical assistance (TA) for public authorities** on energy efficiency and/or renewable energy projects (identified in their SEAPs), to secure bank loans and/or EU grants (e.g. from cohesion or structural funds).

Special conditions :

- ↗ *Applicants may come from one country or more*
- ↗ *Individual public authorities (e.g. municipality, city, province, region) or groupings of neighbouring authorities*
- ↗ *Applicants must commit to CO₂ reduction targets*
- ↗ *Applicants must submit technical details and costs of their proposed TA and their investments*
- ↗ *Investment costs must be \geq 15 times TA costs*
- ↗ *Min. investment 6M€, within 36 months of signature*

European Local ENergy Assistance ELENA - IEE

- EC-EIB cooperation to support local and regional authorities to reach 2020 targets
- Grant facility: managed by EIB and funded by EU budget (CIP/IEE programme)
- Application to Energy Efficiency, local renewables, clean transport
- Market replication focus
- Investment leverage required (ratio 25)

Main issues

- Preliminary activities are needed in order to verify feasibility of Smart City Programs:
 - Sustainable Energy Action Plan (SEAP) and Covenant of Mayors
 - Technologies inventory
 - Project financing approach: financial sustainability is a key issue



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