



Ministero dello Sviluppo Economico

CSLF Technical Group Meeting

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The situation in Italy: the weaknesses

HIGH ENERGY PRICES

- UNFAVORABLE ENERGY MIX
- HIGH COSTS OF NATURAL GAS - CONTRACTS
- HIGH INCENTIVES TO R.E.S. – THE HIGHEST IN EUROPE
- SYSTEM INEFFICIENCIES AND BOTTLENECKS – COUNTRY TOPOLOGY

DEPENDENCE FROM IMPORTS

- 82% PRIMARY ENERGY IS IMPORTED
- LIMITED ENERGY PORTFOLIO – FOCUSED ON FOSSIL FUELS
- INSUFFICIENT SYSTEM RESILIENCY TO EXTERNAL STRESSES (E.G. GAS)

DIFFICULT FINANCIAL SITUATION

- OVERCAPACITY PRODUCTION GAS PLANTS – REDUCTION OF ENERGY DEMAND, OVER-PERMITTING, COMPETITION FROM RES
- TYPES OF GAS ACQUISITION CONTRACTS (LONG TERM TAKE OR PAY)
- COMPETITION FROM FAR EAST (REFINING)

The situation in Italy: the strengths

HIGH ENVIRONMENTAL STANDARDS

- ENERGY INTENSITY 15% LOWER THAN AVERAGE EUROPEAN

GEOGRAPHICAL POSITION

- ITALY IS IDEALLY LOCATED IN THE MEDITERRANEAN REGION

VERY HIGH QUALITY OF SERVICE

- THE POWER QUALITY SCORES ARE AMONG THE BEST IN EUROPE

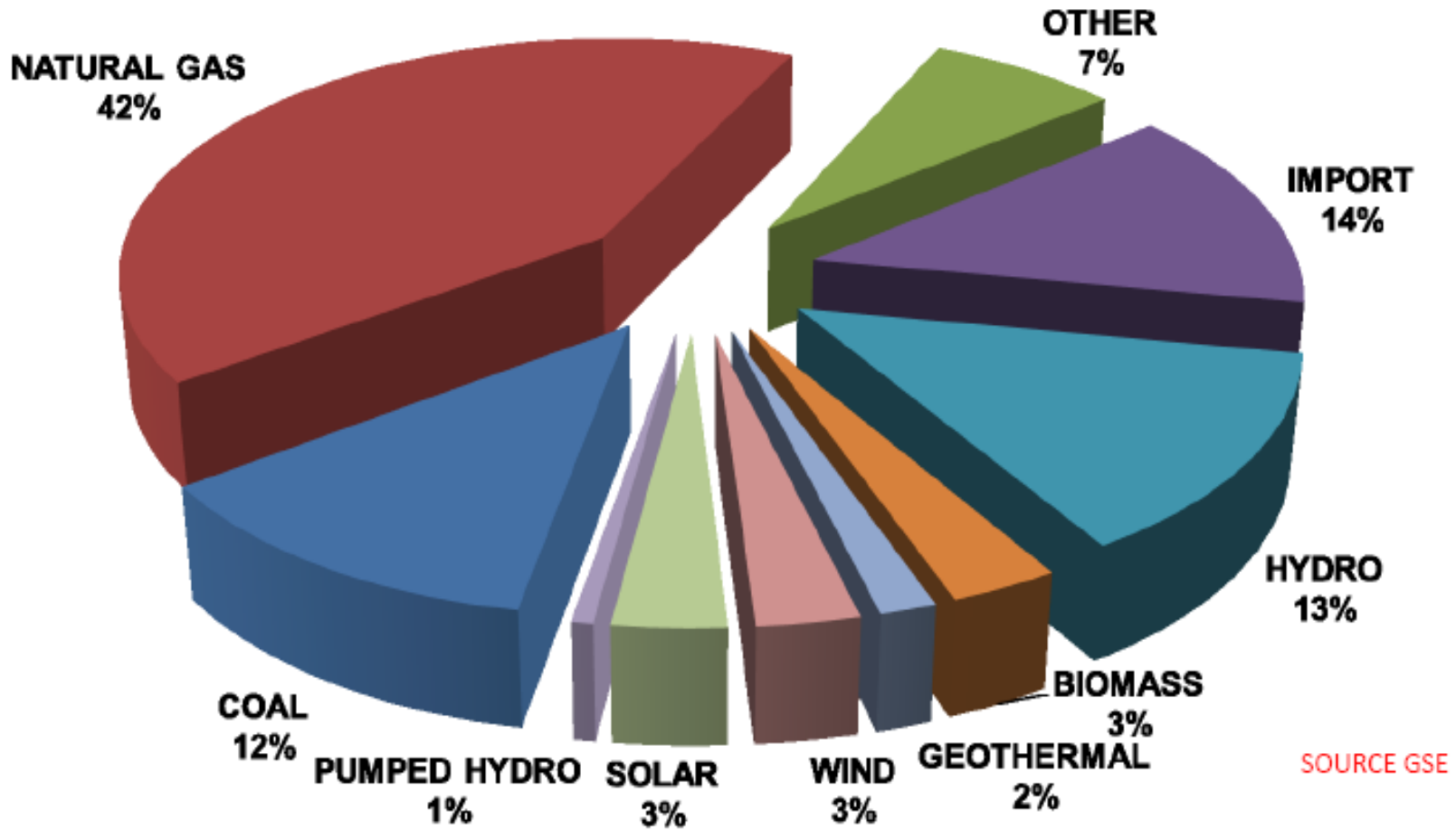
ADVANCED REGULATORY FRAMEWORK

- NATIONAL REGULATOR IS PROACTIVE IN MOTIVATING NETWORK OPERATORS TO INTRODUCE INNOVATION

EXCELLENT TECHNOLOGICAL LEVEL

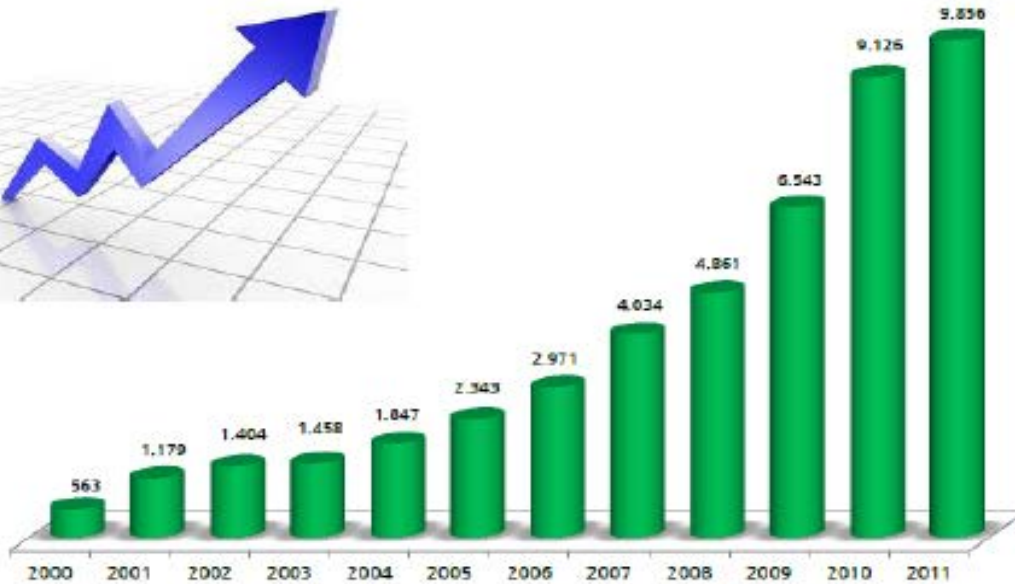
- COMPETITIVE AND ADVANCED INDUSTRIAL SECTOR

Electricity generation (2011)



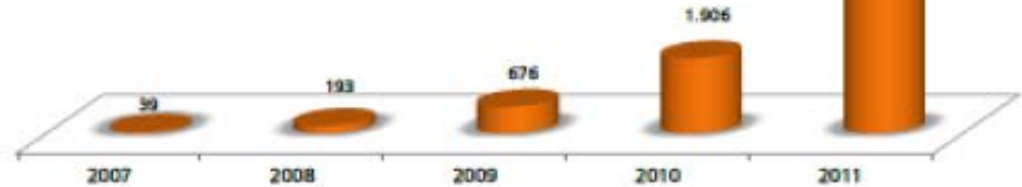
SOURCE GSE

A rapid growth in RES integration



WIND [GWh]

PHOTOVOLTAIC [GWh]



A new National Energy Strategy

The new National Energy Strategy is focused on clear objectives and consistent with the need for growth of the Country, taking into account our natural strengths and weaknesses:

- Energy more competitive in terms of cost, to the benefit of households and firms
- Greater security and independence of supply
- Sustainable economic growth through the development of the energy sector
- Maintenance of high environmental standards and quality of service

Seven Priorities up to 2020

1. Foster Energy Efficiency
2. Promote a competitive gas market
3. Sustainably develop renewables
4. Develop an electricity market fully integrated with the European market
5. Restructure the refining industry and the fuel distribution network
6. Sustainably raise national hydrocarbons production
7. Modernise the system of governance of the energy sector

R&D in the energy sector

The following are considered to be of priority interest to Italy:

- Research into innovative renewable technologies, particularly those in which we already start off in a strong position
- Research into smart grids, also to facilitate distributed generation, and into storage systems
- Research into energy efficiency materials and solutions
- The development of projects on CCS methods, mainly from the perspective of Italy's participation in the European action program on this technology, and possible technological transfer initiatives in non-EU areas.

Fund of Electricity System R&D

- ❑ Programme Agreements (ENEA, CNR and RSE)
- ❑ Main activities carried out in 2006-2012:
 - Combustion technologies
 - Capture technologies (oxycombustion and post-combustion)
 - Evaluation of storage capacity
 - Separation techniques
 - Geological storage
- ❑ About 90 M€ allocated since 2006 on the electricity bill

The CCS agenda in Italy

- Implementation of European Directive on CO₂ storage
- Evaluation of storage capacity
- Support of R&D activities
- Demo projects at EU level (EEPR and NER 300)
- Development of the Sardinian coal pole
- International partnerships (CSLF, ZEP, IEA, Bilateral Agreements)