

**Directorate General for
Mineral and Energetic Resources**



Italian Law on CO₂ Storage

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**Div. VII - Natural Gas Storage,
Capture and Storage of Carbon
Dioxide**

CSLF (Rome) –April 2013, 17th

**Ministry of Economic Development
Department of Energy**

TODAY'S AGENDA



1. Reference regulations on CO₂ storage
 - *2009/31/CE Directive*
 - *162/2011 Decree*
2. Additional implementation decrees
 - *Areas identification*
 - *Communication decree*
3. Public awareness/perception
4. CCS and National Energy Strategy (SEN)
5. Conclusions



REFERENCE POLICY FRAMEWORK

Reference regulations

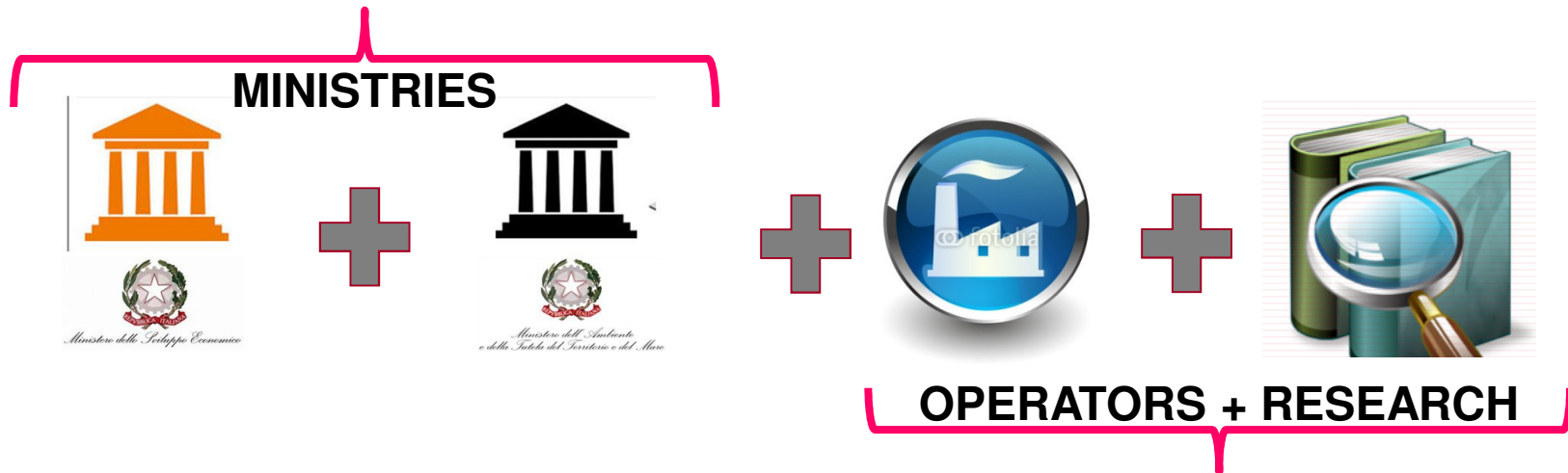
- Eu: 2009/31/CE Directive (April 2009, 23rd)
- Italy: 162/2011 Decree (September 2011, 14th)



- Crucial tool finalized at **actuating pilot projects** in order for CCS to become safe and cost-effective
- **Italian Ministry of Economic Development (MSE)** is involved in implementing decree (Community Law 96 of June 2010, 4th) to comply with EU CCS Directive

162/2011 DECREE

162/2011 Decree: result of **team-work** among **Ministry of Economic Development & Ministry of Environment** since 2009



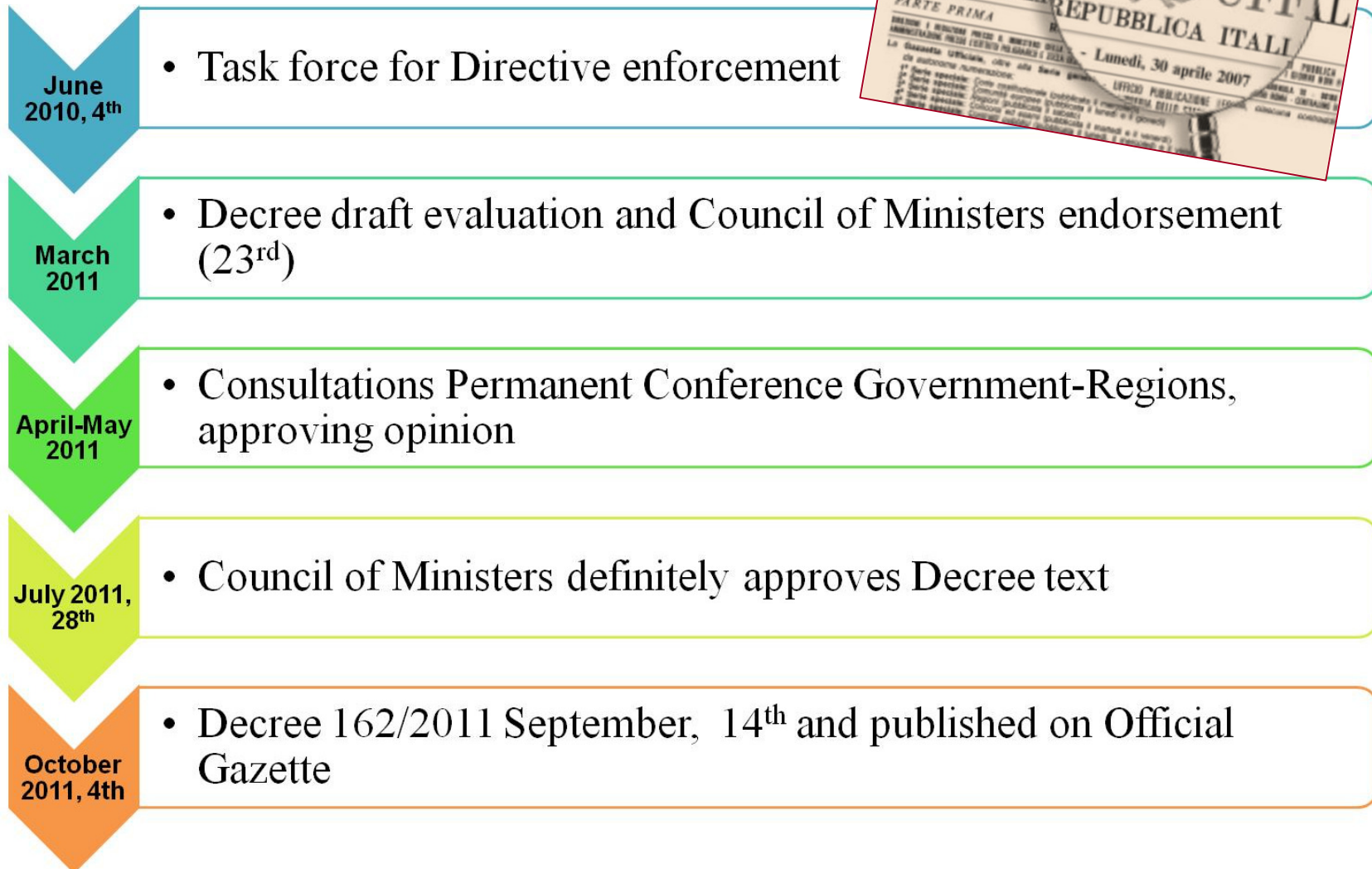
Support of **industrial operators** and **research corporations**

Meeting place:

“Observatory on the Carbon Capture and Storage”
(promoted in Italy under the initiative of the Sustainable Development Foundation)

DECREE PUBLICATION ITER

Timetable to publication of 162/2011 Decree:



162/2011 DECREE CONTENTS

- All the parts of CCS Directive adopted
- Crucial points in the scheme below
- Further implementing decrees foreseen (see next→)

Competent Authority
definition

Storage areas detection
(→ no water column, no
seismic Zone 1 of high
seismicity)

Assignment procedures
for storage licenses and
preliminary survey
activities

Check of Operators
technical-economical
requirements
(→ financial guarantees)

Monitoring activities
and survey

Plants
closure and post-closure
actions

Information
to the
Public

3 Attachments:
- Storage system
characterization
- Monitoring
- Operator requirements

IMPLEMENTING DECREES

Working groups' Purpose:
to prepare additional implementing decrees

Group 1 - storage potential

- Art. 7, co. 1 - sites detection
- Art. 7 co. 5 - storage capacity evaluation

Group 2 - guarantees and tariffs

- Art. 25 - financial guarantees
- Art. 26 - financial mechanism
- Art. 27 - financial regulations

Group 3 - communication

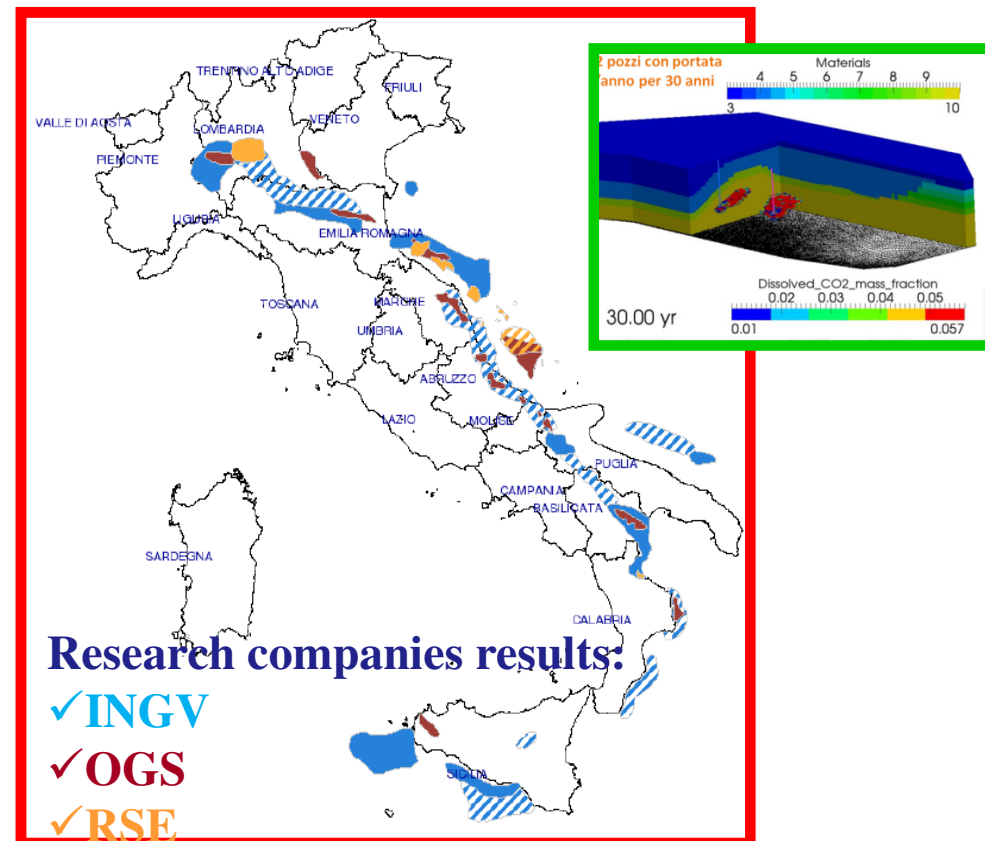
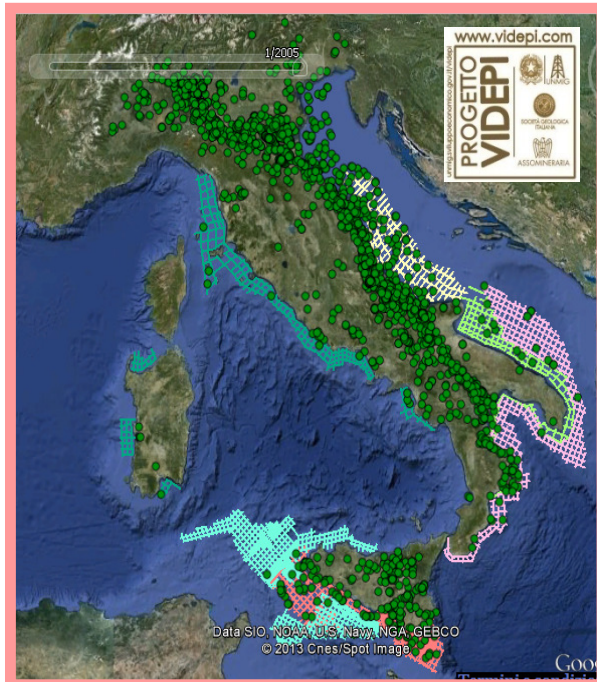
- Art. 31 - information to the public

Focus on:

- Areas (Group 1)
- Communication (Group 3)

AREAS IDENTIFICATION

- Synthesis of **studies** by research companies for recognition of eligible national options for CCS deployment
- Sites detection and storage volume evaluation (**modeling**)
- Public available data: from **ViDEPI project** + “allowed/not allowed” criterion
- Synergy

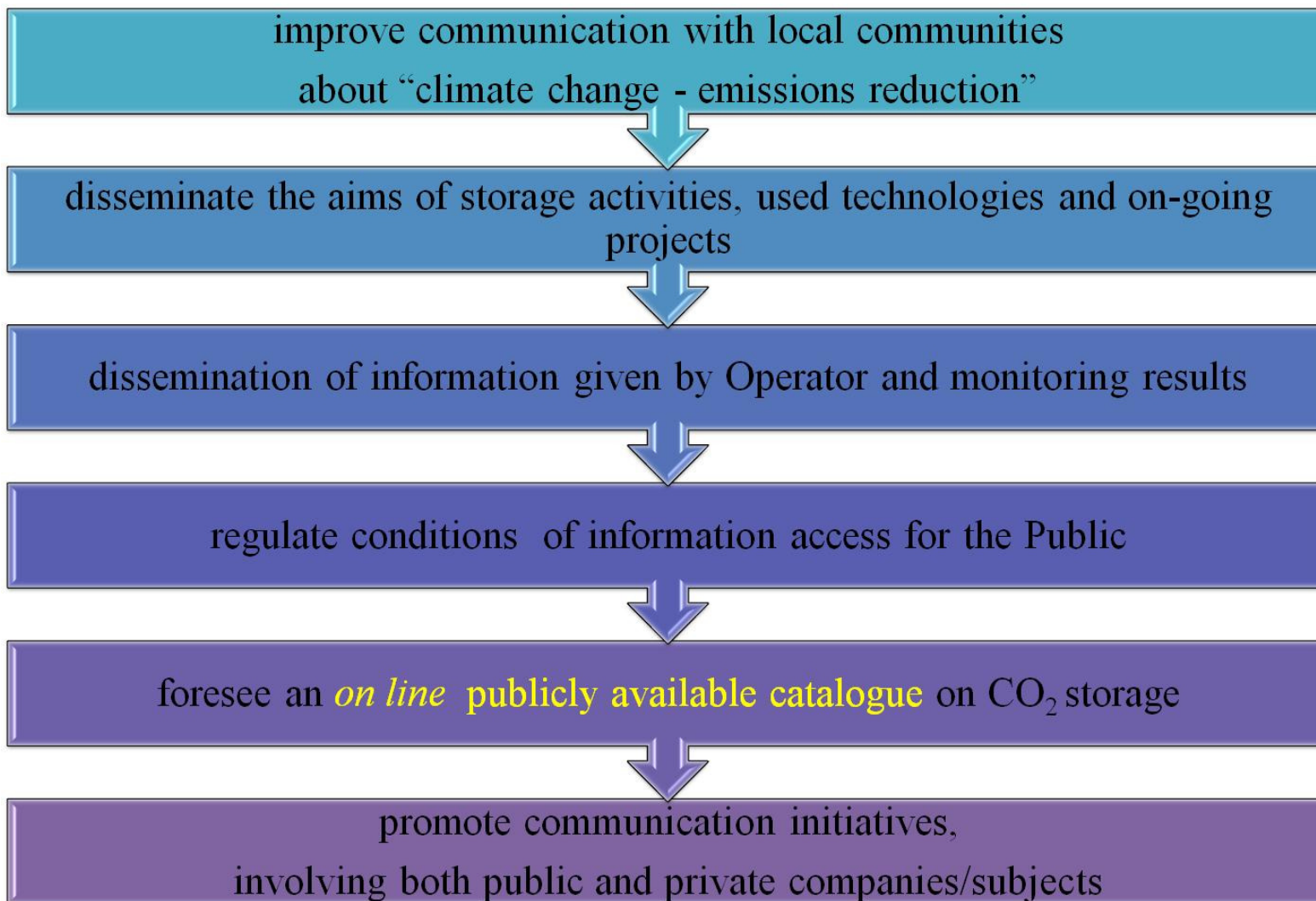




COMMUNICATION DECREE

“Communication Decree” scheme (main goals).

The decree aims to:



PUBLIC PERCEPTION

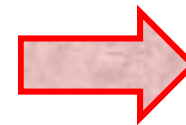
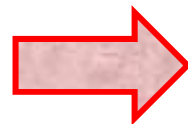
DEBAT PUBLIC

(on energy decisions & strategy)

1 - Essential
informative tool
(understand the
issue!)

2 - Involvement
of communities
(discuss the
possibilities before
choosing!)

3 - SEN
admits the need
of involving
communities
(involvement from the
project planning!)



...People approval!

PUBLIC PERCEPTION

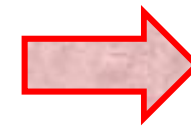
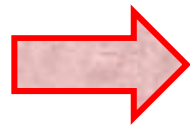
OPINION POLL

(on energy issues: production, NGS, CCS...)

1 - E.g.: ISPO Study (Institute for Studies on Public Opinion for Assomineraria): investigate public feeling on E&P activities in Italy.

2 - Public opinion & opinion leaders on: Energy issue, E&P activities background knowledge

3 - Similarly, Italian Economic Development Ministry is interested in being familiar with **people opinion** about energy strategies where territory is involved in.



...People approval!

PUBLIC PERCEPTION

ISPO Study Results

Statement: E&P activities satisfy energy demand for 10%!

Question: About E&P in Italy do you think it's better....:

Opinion Leaders

- ... develop production activities (to be self-sufficient in respect of energy import)? → 55%
- ... completely stop activities? → 9%
- ... go on like this? → 22%

Public opinion

- ... develop production activities (to be self-sufficient in respect of energy import)? → 57%
- ... completely stop activities? → 11%
- ... go on like this? → 32%

Opinion Leaders think that:

- ✓ 63%: Italy has the technical know-how to develop Production in a sustainable way;
- ✓ 73%: bureaucracy slowed down E&P activities;
- ✓ Governments (64%) + UE (28%) should plan the future energy strategy.



CCS & NATIONAL ENERGY STRATEGY (SEN)

Oct/Dec 2012 → March 2013 (Inter-Ministerial decree).
Italian energy field modernization → Country development.
CCS Technology → key position up to 2030-2035,
(de-carbonizing path).

✓ CCS: KEY ROLE

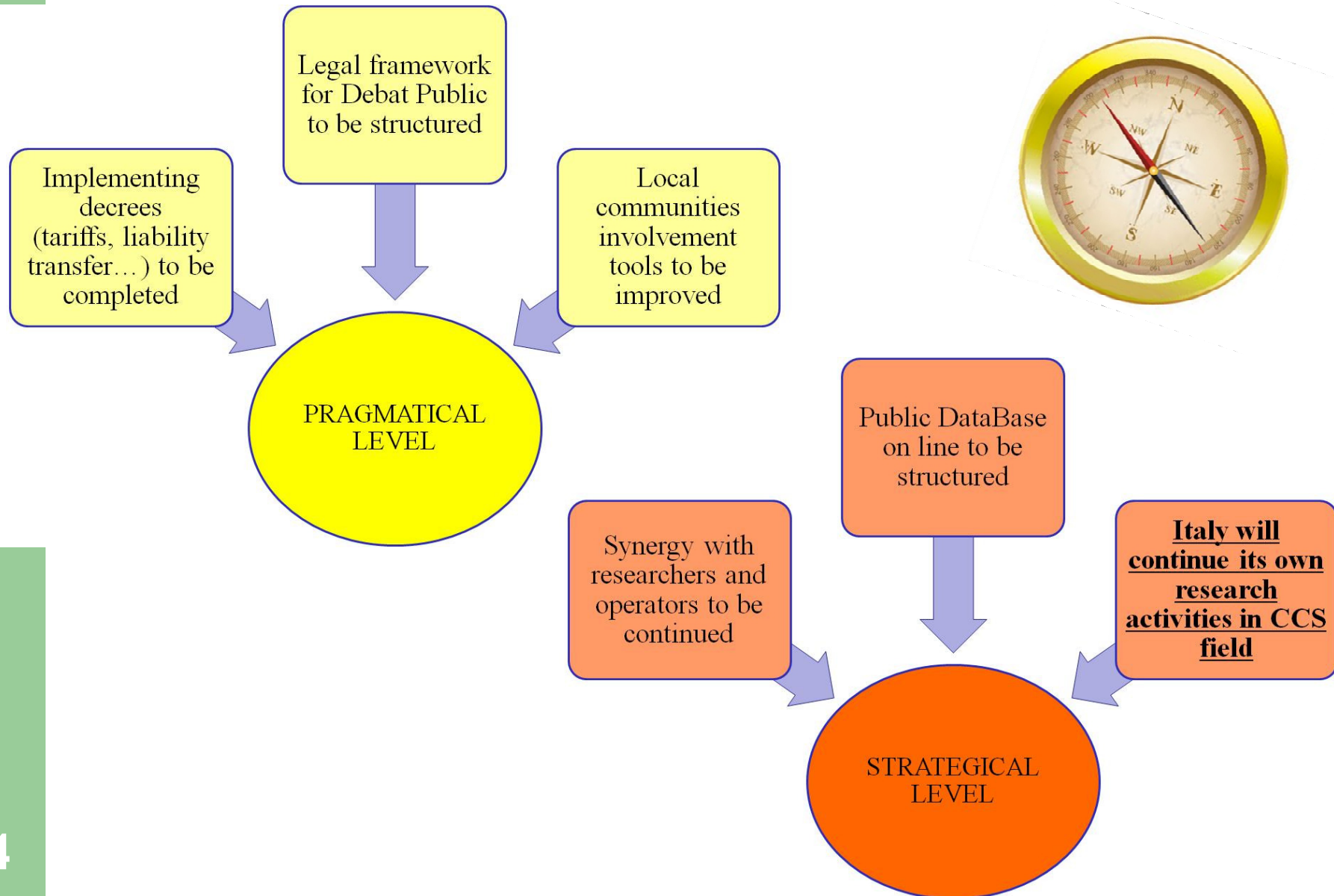
CCS is not cost-effective (nowadays) **BUT** it plays an essential role in the long-term period (in clean coal generation and in application to other high emission industries) and **Italy will continue its RESEARCH ACTIVITIES in CCS.**

✓ 3 EVOLUTIONARY SCENARIOS

- High energy efficiency
- High renewables
- High CCS (→ fossil fuel use supported by capture and storage advanced technologies both in power generation and in industries).

CONCLUSIONS

Ministry's purposes:



Thank you for your attention!

Visit our web-site

<http://unmig.sviluppoeconomico.gov.it/home.asp>



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