



Istituto Nazionale di  
Geofisica e Vulcanologia



cmcc  
Centro Euro-Mediterraneo  
sui Cambiamenti Climatici

Environment and Climate  
Regional Accession Network **ECRAN**

# Adaptation Strategic Planning process in Italy

Sergio Castellari

*Euro-Mediterranean Center on Climate Change (CMCC)*

*National Institute of Geophysics and Volcanology (INGV)*

Bologna, Italy



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## Drivers of Italian National Adaptation Strategy (NAS)

- **Increasing concern from National Institutions**  
(2007 – *National Conference on Climate Change*)
- **Emerging scientific knowledge**  
(IPCC, EEA, EU and National projects)
- **Climate- ADAPT**
- **EU Adaptation Strategy**



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## April 2013: *EU Adaptation Strategy*

Action 1: Encourage all Member States to adopt comprehensive adaptation strategies

- **Guidelines for formulating adaptation strategies** to help EU countries to develop, implement and review their adaptation policies
- **By 2014** - an *adaptation preparedness scoreboard* for measuring Member States' level of readiness
- **In 2017** – a check out. *A legally binding instrument?*



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## EU Guidelines on developing adaptation strategies

'Strategies shall be understood in this document as an umbrella term for adaptation policies (including strategies, action plan and potentially sectoral plans)' (*page 5 footnote*)

- Step 1: Preparing the ground for adaptation
- Step 2: Assessing risks and vulnerabilities to climate change
- Step 3: Identifying adaptation options
- Step 4: Assessing adaptation options (**Prepare a strategy document and get political approval**)
- Step 5: Implementation (**Develop an action plan**)
- Step 6: Monitoring and evaluation

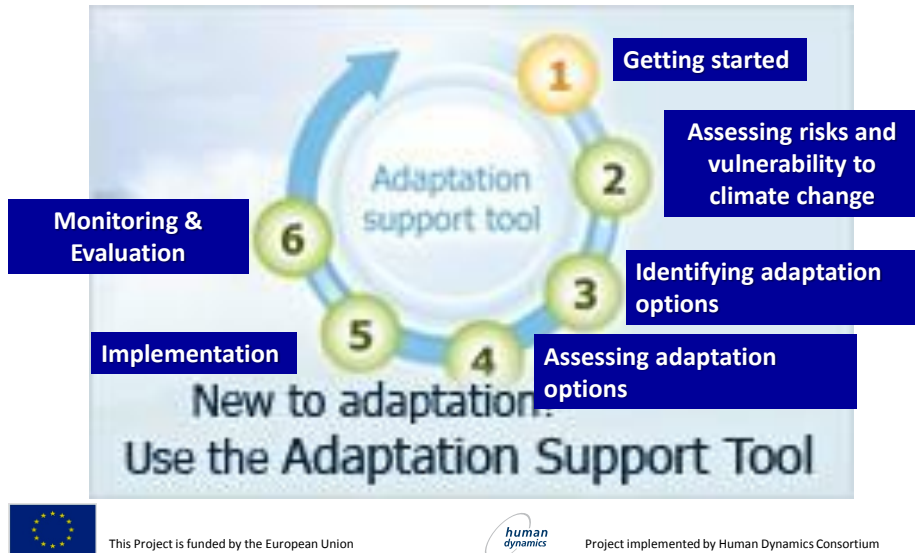


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# Climate-ADAPT: *Adaptation Support Tool*



## Some definitions used

### National Adaptation Strategy (NAS)

- Involvement of **stakeholders** and **decision-makers**
- Analysis of possible mainstreaming of adaptation in different sectoral policies
- **Recommendations** to build up adaptive capacity in different sectors and at different spatial scales (national, regional and local) and to reduce societal costs
- Review after 'n' years
- A National Adaptation Platform

### National Adaptation Plan (NAP)

- **Implementation** of NAS with **governance** and **funding** allocation
- **Evaluation** of implementation (**indicators**)



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## Italian NAS: *the kick off*



- **February 2012** – **Preliminary Meeting**  
(Ministry of Environment, Land and Sea, Rome)

*'Stato delle conoscenze riguardo ai cambiamenti climatici in Italia'*



- **July 2012** – **Agreement Ministry and CMCC (Euro-Mediterranean Center for Climate Change)**

for support to preparation of scientific  
– technical contents of NAS.



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## A National Project for NAS

- National Project SNAC *'Elements for the elaboration of a National Adaptation Strategy to climate change'*
- Institutional Coordinator:  
*Italian Ministry for Environment Land and Sea*
- Technical Coordination: *Sergio Castellari (CMCC)*
- Start: *July 2012*
- End: *June 2014*

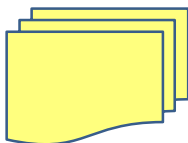


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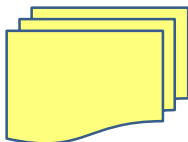


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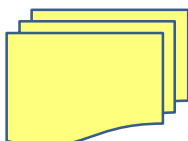
# NAS: *a package of knowledge*



## 1. **SCIENCE** - *Vulnerability Assessment*



## 2. **LAW** - *Analysis of EU Acquis communautaire relevant for CCIVA and its implementation in Italy*



## 3. **VISION** – *Strategic document*



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# NAS process: *structure*

## TOP DOWN

**Technical Panel** – approx. 100 Italian scientists/ sectoral experts. *Coordinator: Sergio Castellari (CMCC, INGV)*

**Institutional Panel** – Ministries, regional authorities, province authorities and municipalities, Civil Protections, Nat. Env. Agency. *Coordinator: Ministry of Env., Land and Sea*



## BOTTOM UP

**Participative process** - transparency, sharing with national stakeholders (civil society, scientific community, private sector...)



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## Participatory Process

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**1 October - 15 November 2012:**

**Online public self-assessment**

**9 - 10 December 2013 (Roma):**

**Consultation with stakeholder** (NGO, regions and municipalities)

**31 October 2013 - 20 January 2014:**

**Online public consultation:  
Strategic document**



60 full reviews and hundreds of comments



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## NAS: *Vulnerability assessment*

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- A desk study - review of CCIVA scientific literature for Italy (*IPCC-like*)
- Definition and identification of **sectors**
- Assessment of **present** and **expected impacts** of climate change for each sector
- Assessment of **vulnerability** of each sector to the present and future climate
- **Estimate of cost of inaction and adaptation** for some sectors
- Review of already ongoing adaptation actions



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## NAS: *sectors*

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12 sectors  
9 micro-sectors  
2 special cases

1. **WATER RESOURCES** (quantity and quality)
2. **DESERTIFICATION, SOIL DEGRADATION and DROUGHTS**
3. **HYDROGEOLOGICAL RISK**
4. **BIODIVERSITY and ECOSYSTEMS**
  - *Terrestrial ecosystems*
  - *Marine ecosystems*
  - *Inland water ecosystems and transition ecosystems*
5. **HEALTH**
6. **FORESTRY**
7. **AGRICULTURE, ACQUACULTURE, FISHERY**
  - *Agriculture and Food Production*
  - *Marine Fishery*
  - *Aquaculture*

8. **ENERGY** (production and consumption)
  9. **COASTAL ZONES**
  10. **TOURISM**
  11. **URBAN SETTLEMENTS**
  12. **CRITICAL INFRASTRUCTURES**
    - *Cultural Heritage*
    - *Infrastructures for Transport*
    - *Dangerous industries*
- SPECIAL CASES:**
- *Mountain Areas (Alps and Apennines)*
  - *Po river basin*



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## NAS: *Analysis of EU Acquis communautaire relevant for CCIVA and its implementation in Italy*

- Analysis of the **EU Adaptation Strategy**
- Analysis of **NAS adopted in Europe** with focus on governance settings and sectoral approaches
- Analysis of the **national implementation of Acquis communautaire** for the different sectors of Italian NAS



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## NAS: *Strategic document*

addresses the following main elements, coherent with the EU Adaptation Strategy and builds on lessons learnt from other European NAS

- **Objective** and **general principles**
- **Recommended actions** to build adaptive capacity in the NAS sectors at 2 time scale:
  - Short term: by 2020
  - Long term: beyond 2020
- Focus on **cross-sectoral issues** for adaptation



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## NAS: *cross-sectoral Issues*

1. Observation/monitoring systems needed for adaptation
2. Research needs for adaptation
3. Synergy between adaptation, mitigation and sustainable development
4. Disaster risk reduction and adaptation
5. Uncertainties and decisional processes of adaptation
6. Transnational adaptation
7. Communication, information to stakeholders



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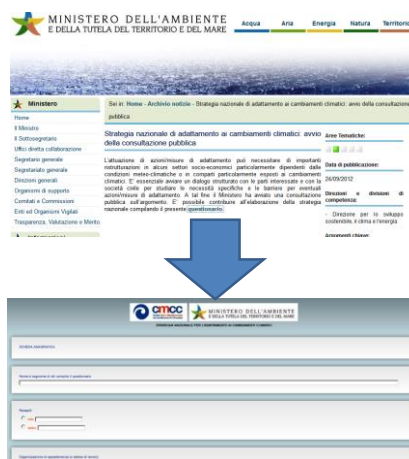


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## Stakeholders involvement (1): Self-assessment

- On line: **Oct. 1 – Nov. 15, 2012**  
6 sections, 23 questions (multiple, open, value), Glossary; **155 full answers**
- Stakeholders:**
  - private sector (22%)
  - research (22%)
  - public sector/institutions (16%)
  - professional bodies and associations (11%)
  - NGO (8%)
  - environment and nature protection associations (6%)
- Stakeholder sectors:**  
Energy (10%), Forestry (9%), Biodiversity (9%), Agriculture (8%)



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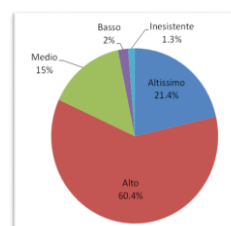
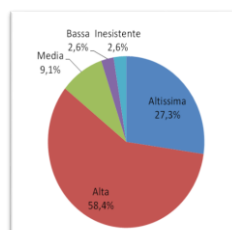
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## Stakeholders involvement (2): Self-assessment

Perception of CC impacts:

Very High risk (21.4%)

High risk (60.4%)

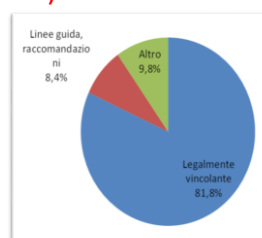


Perception of vulnerability:

Very High (27.3%) High (58.4%)

Suggested legal form for NAS:

Legally binding (80%);  
Guidelines, recommendations (8.4%)



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## Stakeholders involvement (3): *Self-assessment*

Need to change **life style**  
(i.e. modify the behaviour by reducing  
the consumption of resources)



NAS Objectives/contents:  
taking care of **territory**



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## Italian NAS follows EU Guidelines

- ✗ **Step 1:** Preparing the ground for adaptation
- ✗ **Step 2:** Assessing risks and vulnerabilities to climate change
- ✗ **Step 3:** Identifying adaptation options
- + **Step 4:** Assessing adaptation options

**Prepare a strategy document and get political approval**



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## NAS: *potential future steps*

- Adoption of the NAS in the next months
- A **National Adaptation Platform**
- Define the **optimal full governance of a NAS in Italy**
- After 4 years - **Review of the scientific/technical contents** of the NAS, based on new scientific outcomes
- **Review of the costs of adaptation** considering **co-benefits** in terms of employment, technical development, impact on public debt
- Starting a **NAP**



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