

# ***From evidence to action: legal pathways for science-based climate adaptation?***

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# Science and Law dangerous liasons?

- A context of polycrisis

**PARADOX:** scientific knowledge is advancing rapidly, yet public trust is declining

- The science-law interface as a node to the **legitimacy** and **effectiveness** of regulation

# Science and Law – dangerous liaisons?

CLIMATE CHANGE as PARTICULARLY complex

Complex systems

Interdisciplinarity

Knowledge is often probabilistic

Indicators and baselines that are scientific but become normative

Deeply politicised

# Theoretical framework

## Law as an epistemic device

- Law and science as co-produced (Jasanoff, 2004; Tallacchini, 2012)
- Discourses as analytical entry points
- Institutions as discursive arenas (Schmidt, 2008)

# Research questions

**RQ:** *How is scientific knowledge mobilized and legitimized within EU climate adaptation policies? Are there any differences at the EU and Italian levels?*


## **Sub-questions:**

- In which ways is science mobilized (as binding constraint, collaborative standard, or political instrument)?
- How is uncertainty managed (through precaution, flexibility, or political discretion)?
- What role do participation and communication play: genuine co-construction or symbolic legitimation?



# Methodology

## *Qualitative textual analysis*

- **Corpus:**
    - EU Climate Law (Reg. 2021/1119).
    - EU Climate Adaptation Strategy (2021).
    - Italian NECP (DM 434/2023) + ISPRA/CMCC technical studies.
  - **Approach:**
    - Qualitative coding of key legal and policy texts.
    - Analytical categories **derived deductively** from theory (co-production, DI, discourse analysis).
    - **Refined inductively** through close reading of texts.
    - Linked to EU Better Regulation Guidelines (evidence, participation, transparency)
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# Current and (partial) findings 1/2



**Climate change adaptation** - presented as a ***technical emergency*** requiring action and as an ***economic opportunity*** (growth, competitiveness, innovation).



**Science as authority** : IPCC, IPBES, and EU agencies are explicitly cited as the scientific baseline, turning them into ***legal references***. Other knowledges (local, dissenting) are excluded. Question of independence and transparency.

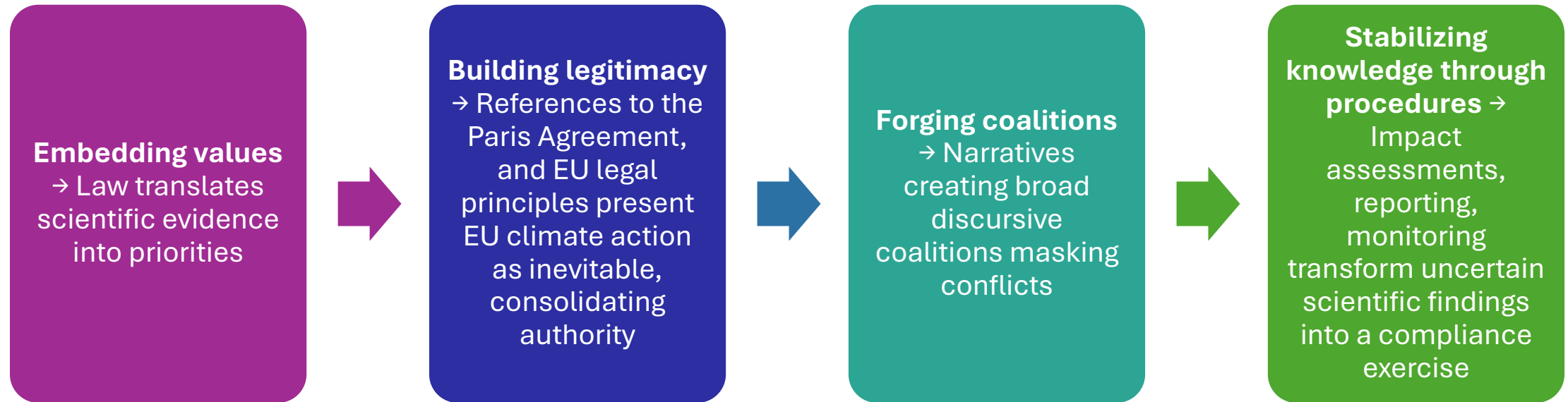


**Needed solutions framed as technical imperatives** (“all sectors must contribute”), presenting choices as inevitable rather than contested – depoliticized.



**Floating signifiers**: vague but powerful terms (*resilience, vulnerability, adaptive capacity*) work as “floating signifiers”: they create agreement while masking underlying value conflicts.

# Current and (partial) findings 2/2





# Conclusions

## Epistemic effects

- Law stabilizes contested scientific categories (*resilience*, *vulnerability*) and canonizes certain sources (IPCC, IPBES, ISPRA).

## Political effects

- Proceduralization (Better Regulation, impact assessments, consultations), depoliticizes value conflicts, turning them into technical routines.

## Democratic tensions

- Science as binding constraint risks reducing participation to a formal ritual, especially in the Italian PNACC, where stakeholders engagement mechanisms fall short of EU standards pluralism and contestation are often marginalized.

## Contribution to the literature

- Beyond “evidence-based policymaking” as a neutral ideal.
- Law functions as an *epistemic device*: it produces what counts as legitimate science and embeds it into governance.



# Thank you!

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