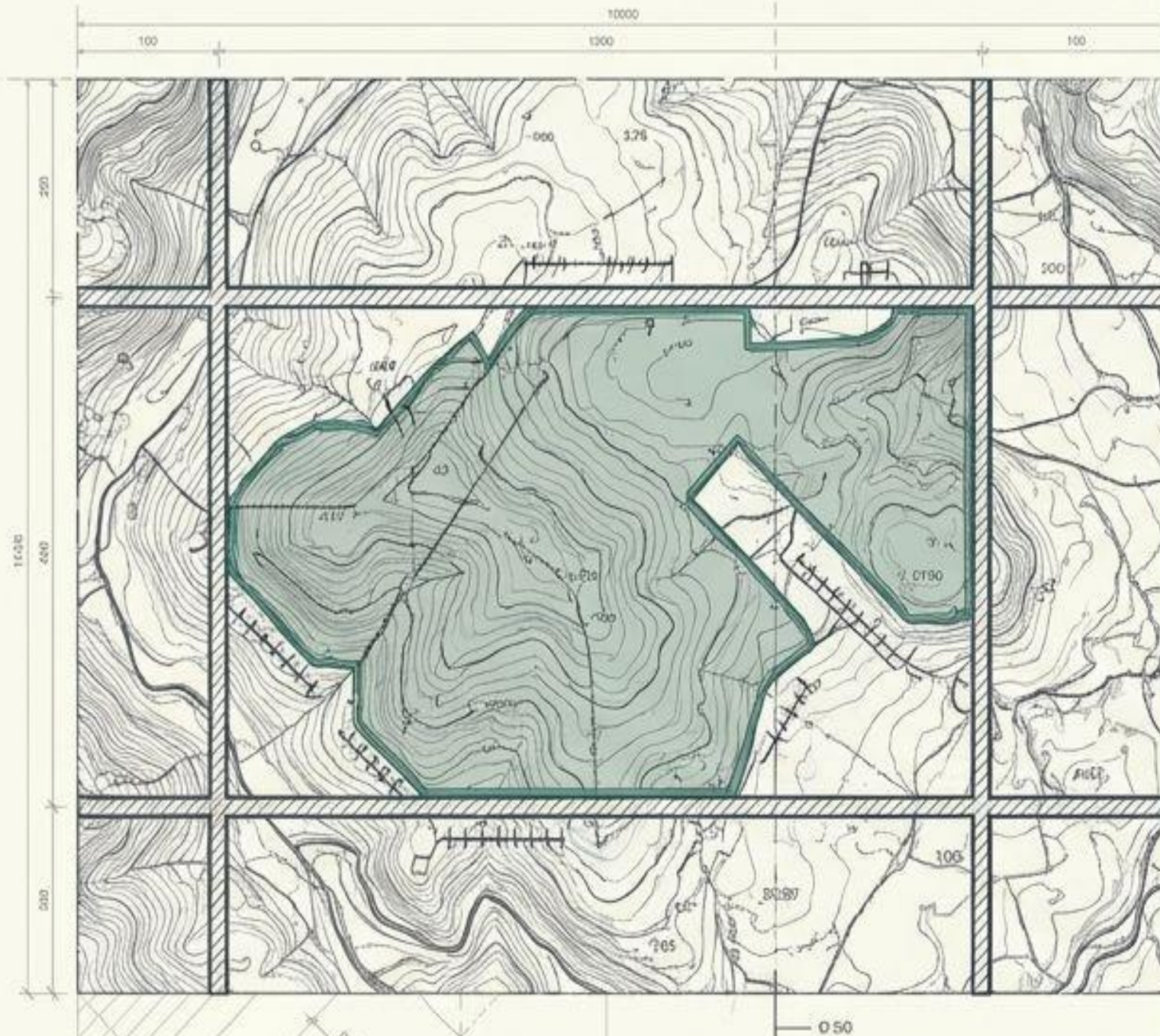


The Evolution of European Environmental Law

From Defensive Conservation to Proactive Restoration

Academic Year: 2025-2026
University of Palermo
Department of Law
Master's Degree Programme in Law
Course: "Ecological Transition and Law"
Module I: Prof. G. Torta –
Module II: Prof. N. Gullo.

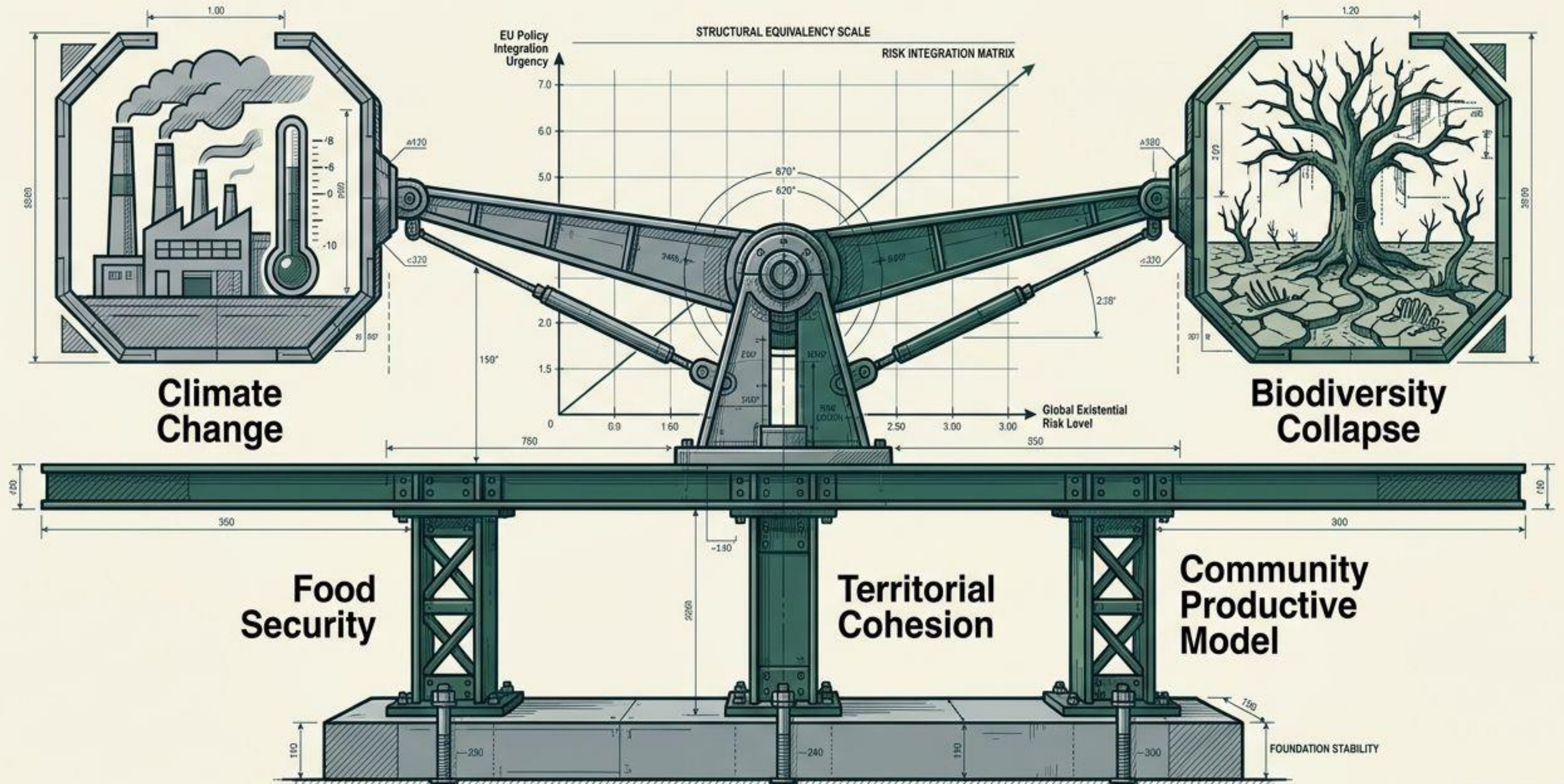
DEFENSIVE ERA: NATURA 2000



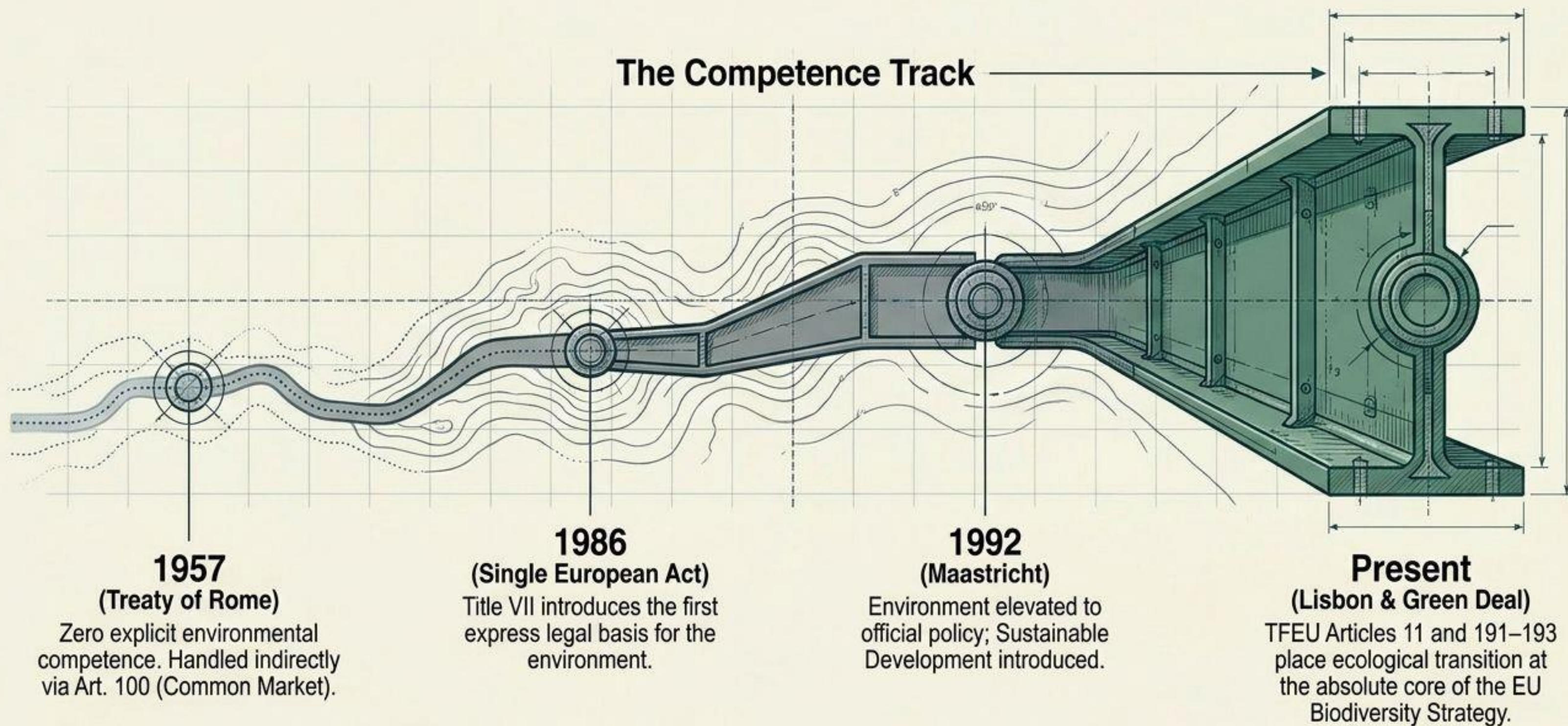
NEW PARADIGM: NATURE RESTORATION REGULATION



Environmental protection has mutated from a peripheral concern to a central pillar of European stability. The EU now legally places the biodiversity crisis on a scale of threat equivalent to climate change, abandoning lax directives for rigid, binding legal instruments.



The Expanding Mandate of EU Environmental Competence (1957–Present)



The Five Substantive Pillars of European Environmental Law

Preventive Action:

Prioritizes ex-ante assessment (EIA/SEA) over ex-post remediation.

Precautionary Principle:

The cornerstone. Flips the burden of proof against developers; mandates restrictive measures even lacking absolute scientific certainty.

Rectification at Source:

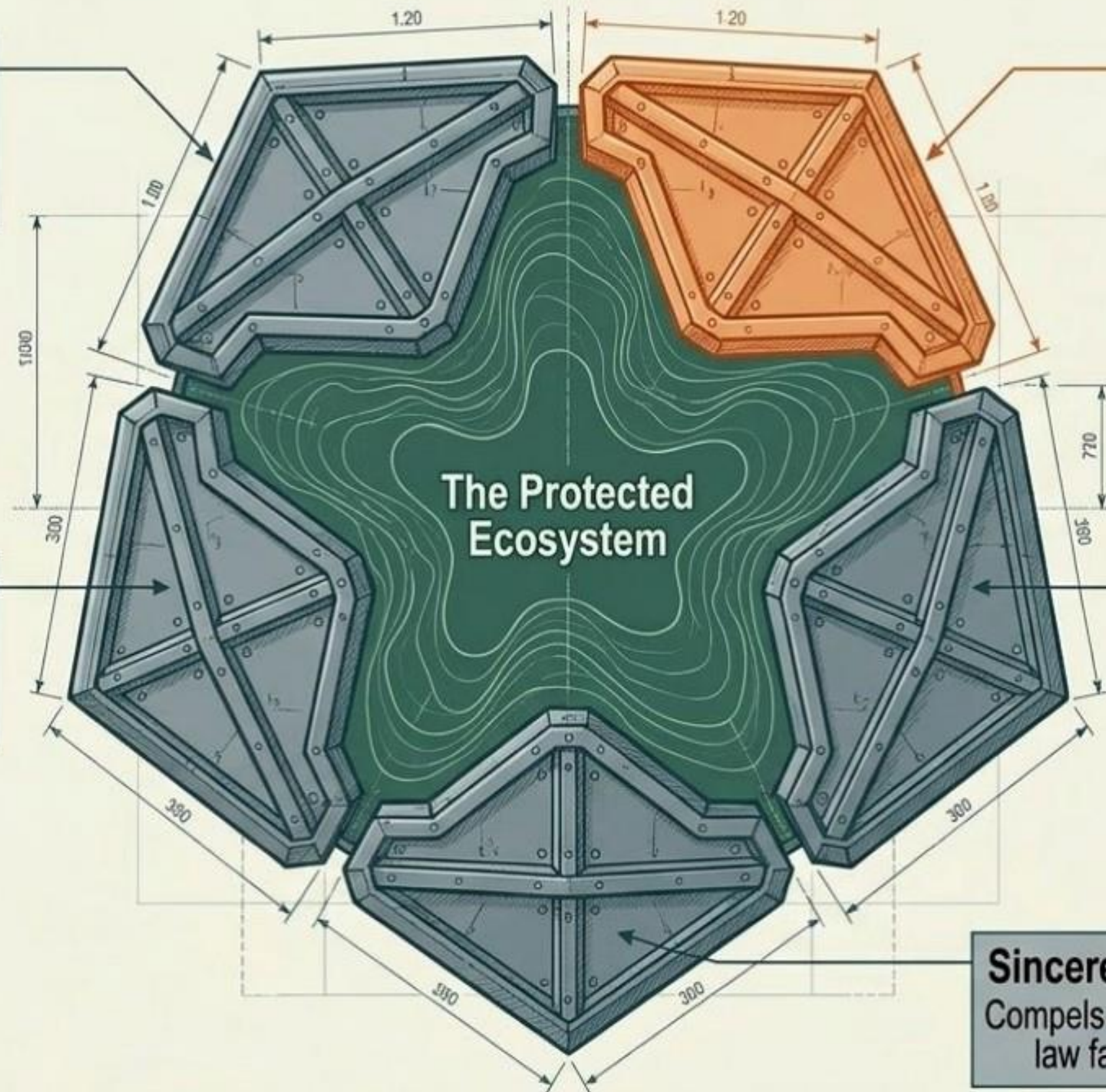
Mandates tackling impacts at their geographic/technical origin to prevent territorial dispersal.

Polluter Pays:

The economic foundation internalizing prevention/remediation costs into the operator's production model.

Sincere Cooperation (Art. 4.3 TEU):

Compels national courts to interpret domestic law favoring the effet utile of EU rules.



Pillar I: The Natura 2000 Network (The Defensive Era)

Born from the Birds (2009) and Habitats (1992) Directives, Natura 2000 is an integrative, coordinated network designed to maintain favorable conservation status while coexisting with sustainable human activity.

Massive Scale: Covers >18% of EU land area, forming the largest coordinated protected network globally.

Dual Foundation: Built on the structural convergence of the Birds and Habitats Directives.

Core Doctrine (Marismas de Santoña C-355/90): Site selection must blindly follow rigorous scientific criteria, ignoring all economic or political convenience.



The Tightening Grip of Designation: Typology of Protected Sites

Living Blueprint



Stage 1: SPA (Special Protection Areas)

Declared automatically by States under the Birds Directive.

The Designation Funnel

Stage 2: SCI (Sites of Community Importance)

Proposed by States (National Lists), evaluated by the Commission based on biogeographical data.

Stage 3: SICI (Transition Sites)

Intermediary phase where preventive protection is immediately activated by the precautionary principle.

Stage 4: SAC (Special Areas of Conservation)

The absolute legal anchor. States face a strict, unextendable 6-year deadline to enact statutory management plans.

Purely Scientific Criteria
(No economic/political motives allowed)

1000

300

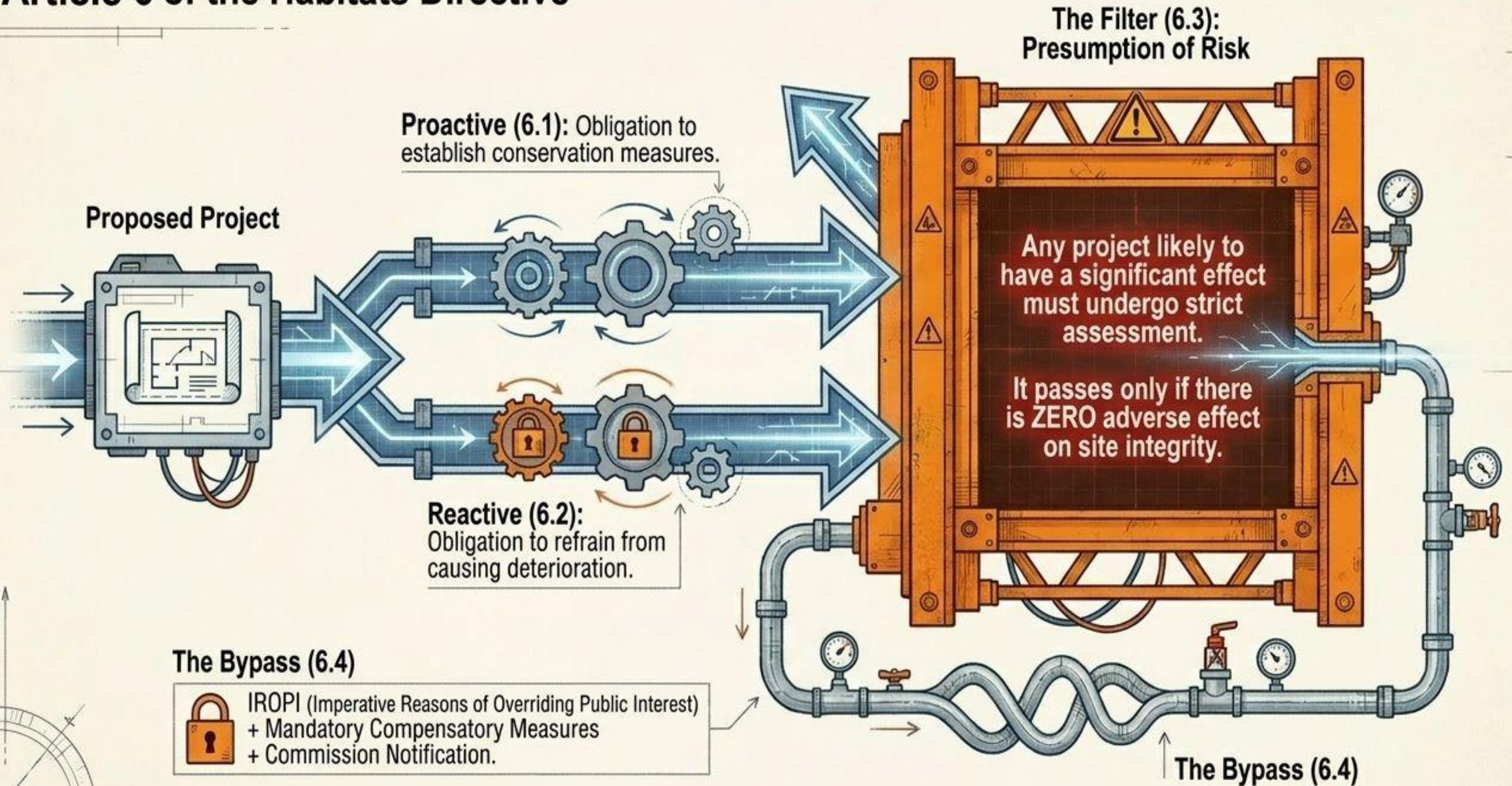
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The Iron Sieve: Article 6 of the Habitats Directive

Living Blueprint



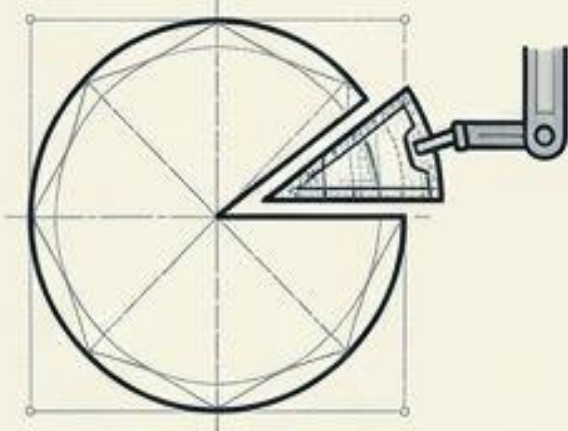
Waddenzee (2004)



Standard of Proof

Authorization requires scientific certainty **"beyond all reasonable doubt"** that integrity will not be harmed.

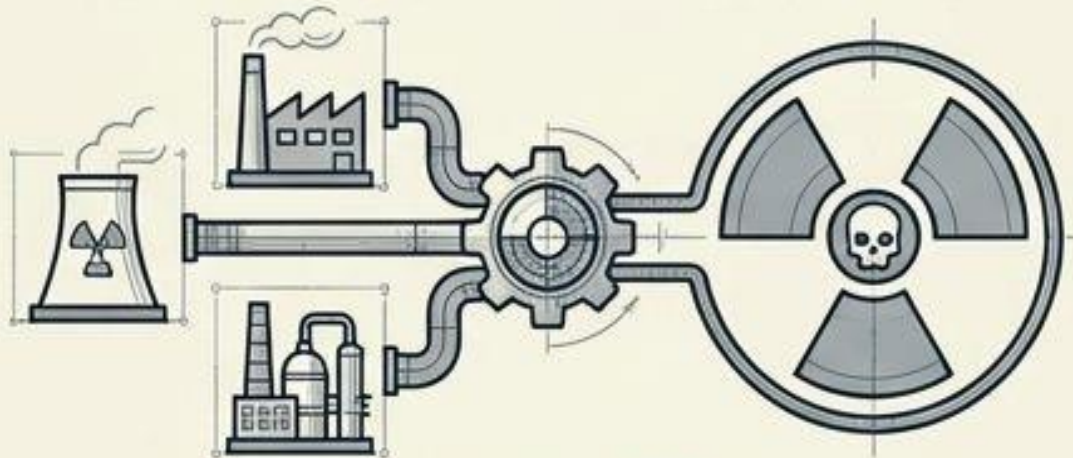
Ireland (2007) & Sweetman (2013)



Scale & Integrity

Small project size is irrelevant; irreversible loss of even a statistically marginal percentage equals loss of global site integrity.

Germany [Moorburg] (2017)



Synergistic Effects

Mandates strict calculation of aggregated, cumulative impacts along entire ecological corridors.

Poland [Białowieża] (2018)

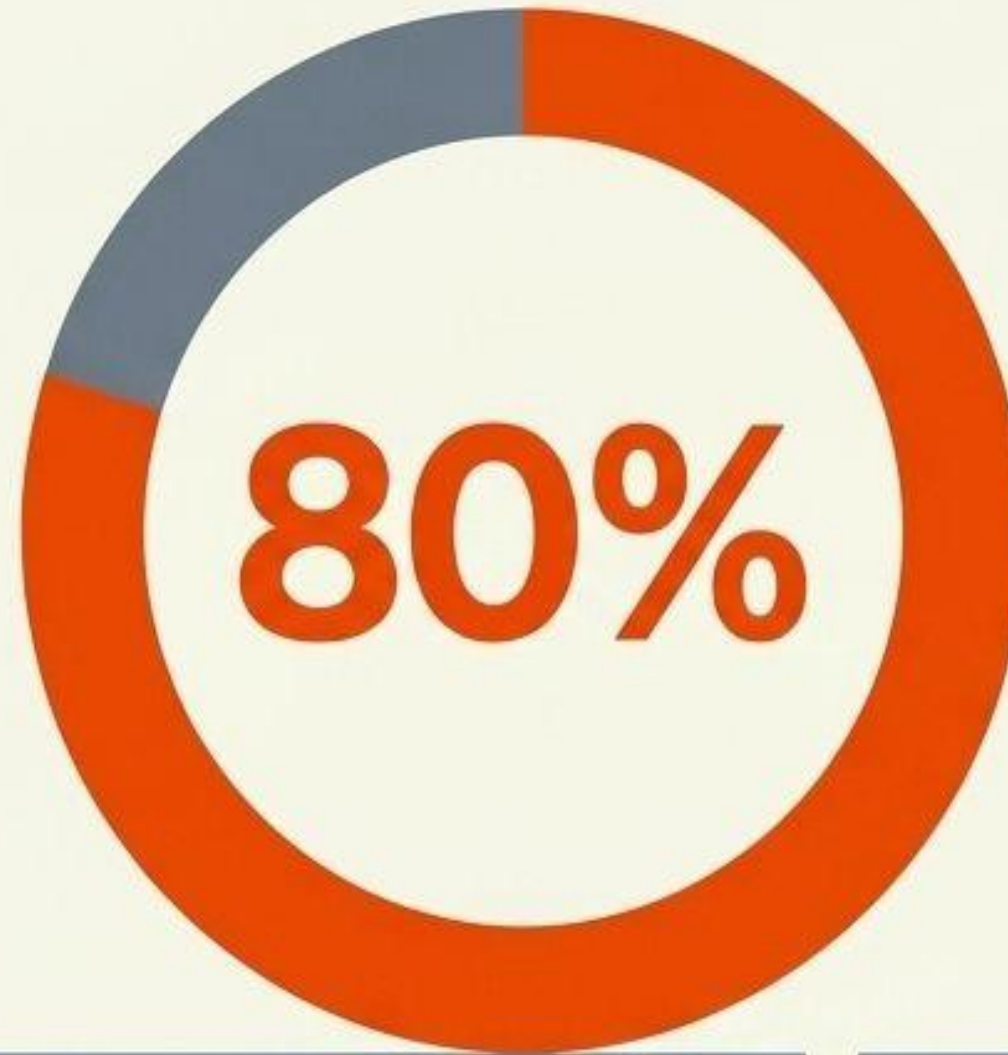


Primacy of Science

Immediate cessation of commercial logging; productive forest management cannot trump scientific conservation criteria.

The Breaking Point: Why Defensive Preservation Was Not Enough

Natura 2000 slowed absolute destruction but failed to reverse degradation. Official European Environment Agency data confirms an ecological collapse that threatens agricultural viability and the hydrological cycle.



80% of evaluated EU habitats are in unfavourable or critical status.

Structural Underfunding:
Over-reliance on insufficient LIFE/structural funds vs. private opportunity costs.

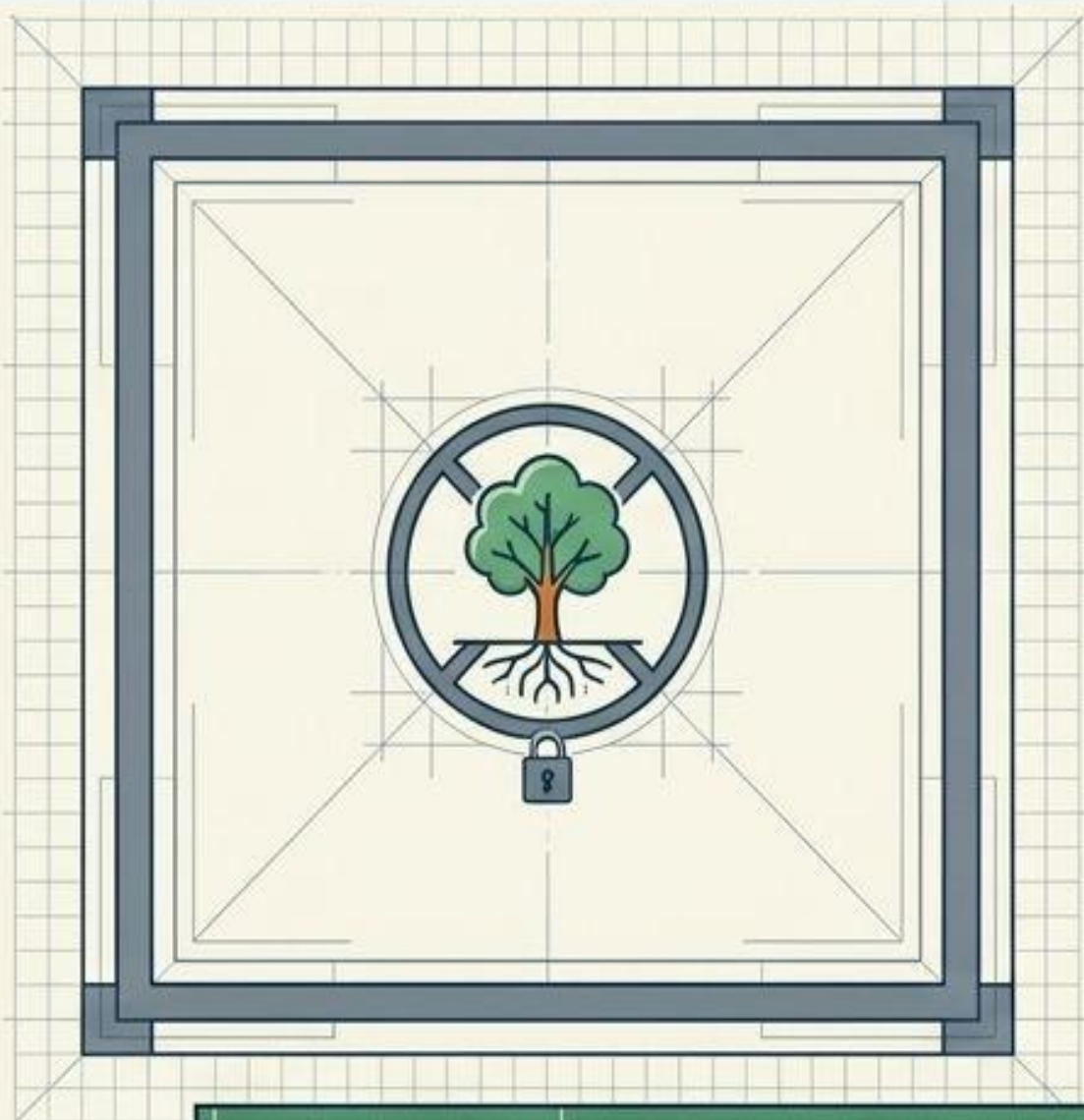
Devalued Assessments:
Art 6.3 filters reduced to formalistic bureaucratic procedures funded by developers.

Social Friction:
Rural perception of conservation as 'concealed expropriation'.

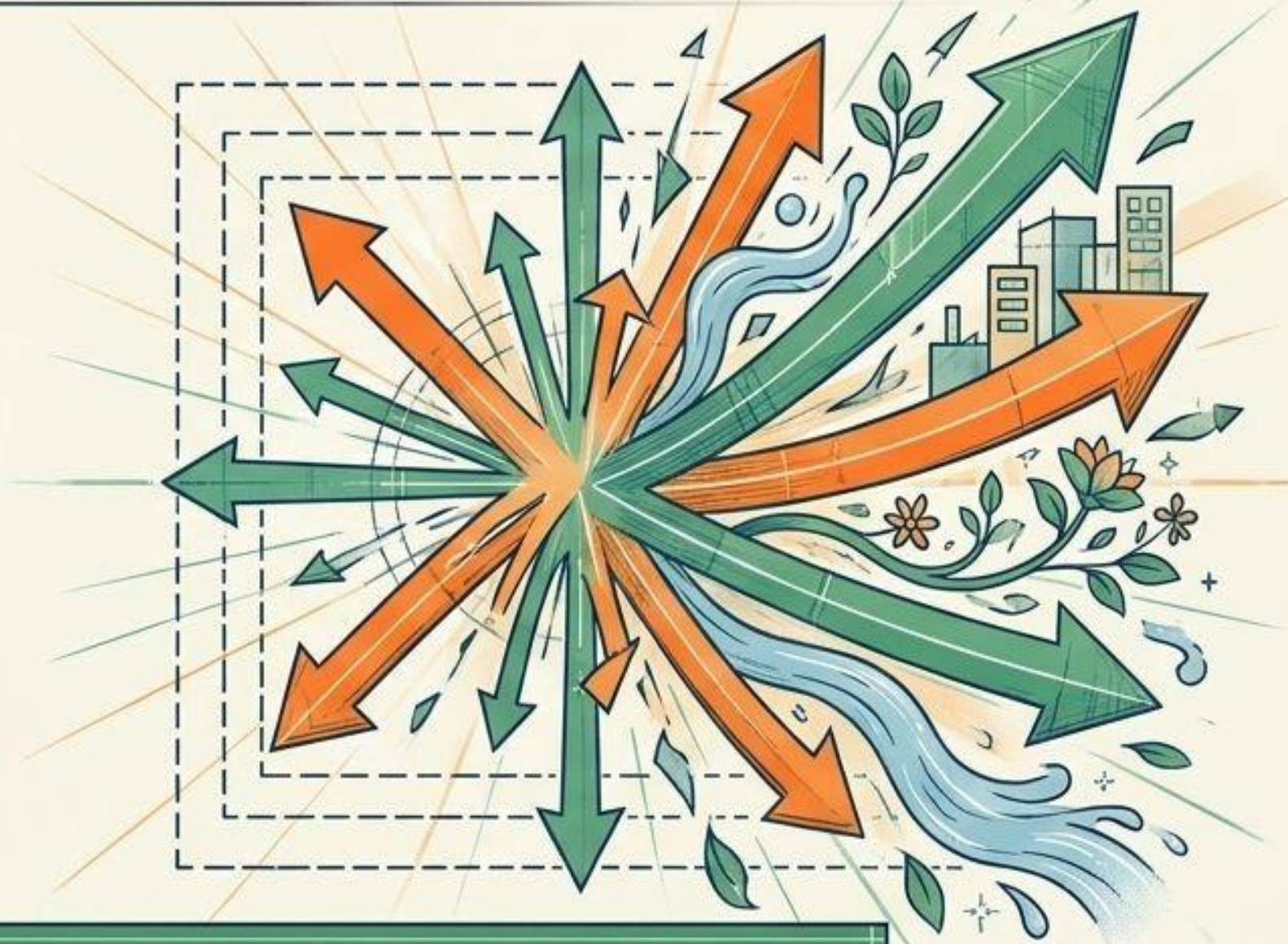
Pillar II: The Nature Restoration Regulation (The New Paradigm)

The 2024 Regulation executes a conceptual revolution: from passive protection to proactive human intervention. It imposes an obligation of result, not merely an obligation of means.

Defensive Paradigm (Natura 2000)



Restorative Paradigm (2024 Regulation)



Binding Metrics: Mandatory restoration of at least 20% of the Union's land and sea by 2030, and all degraded ecosystems by 2050.

Transversal Mandates: Restoring Beyond the Perimeter

Agricultural Ecosystems



Mandates reversing farmland bird decline and increasing organic carbon stocks in mineral soils.

Pollinator Populations



Mandates adopting urgent measures to halt insect decline and ensure an upward trend via biennial scientific evaluations.

River Connectivity



Obligation to remove artificial barriers to achieve 25,000 km of free-flowing rivers

Urban Ecosystems



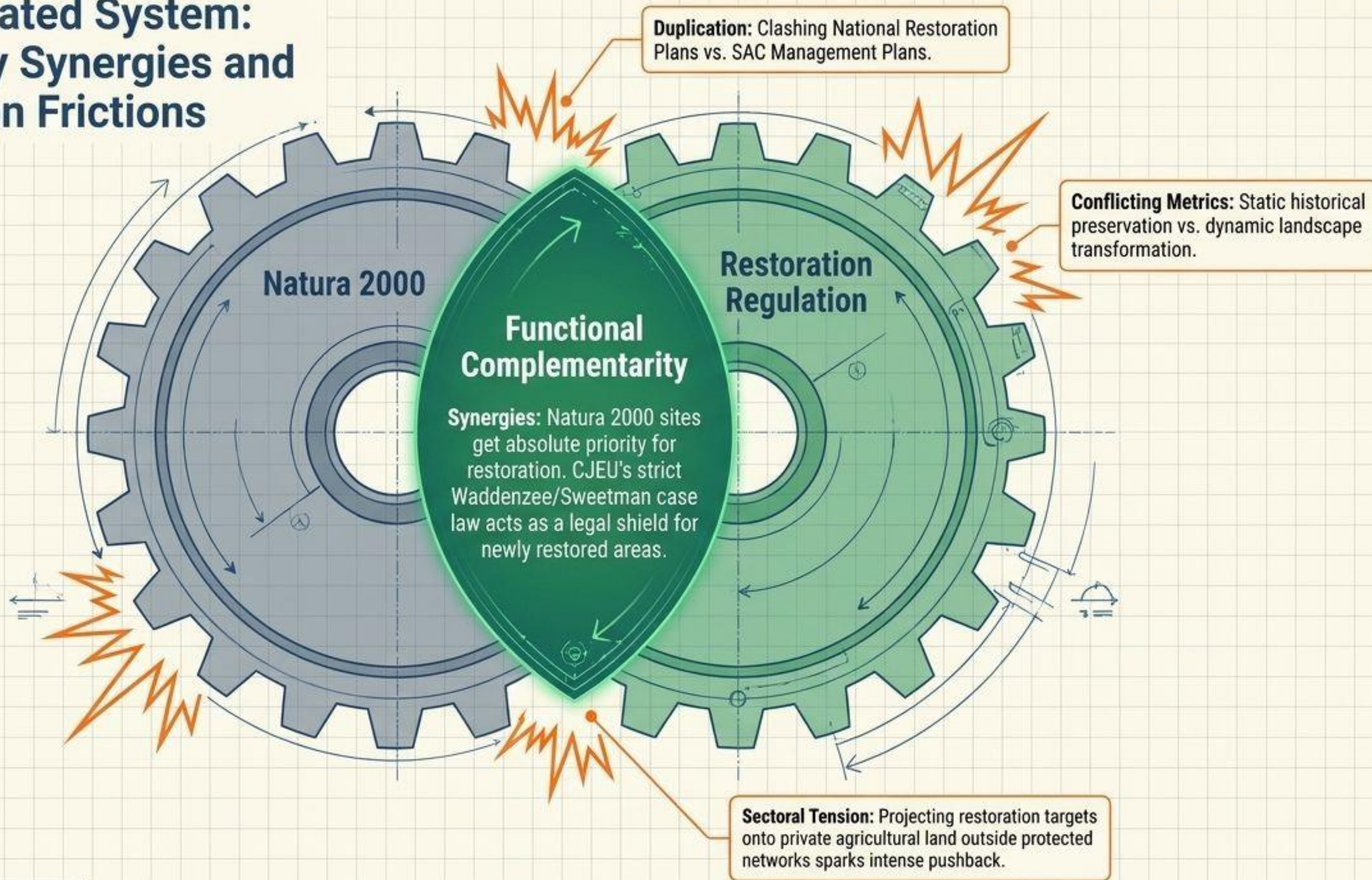
Absolute prohibition on registering a net loss of urban green space and tree canopy cover

The Synthesis Matrix:

Defensive Conservation vs. Restorative Law

Legal Dimension	Natura 2000	Restoration Regulation
Legal Instrument	Directives (requires national transposition, temporal flexibility)	Regulation (binding in entirety, immediate direct application)
Core Paradigm	Passive / Preventive (halting damage)	Active / Proactive (human intervention to repair tissues)
Success Criteria	Historical / Static (maintaining original parameters)	Dynamic / Functional (building future climate resilience)
Territorial Scope	Defined Enclaves (fenced perimeters)	Universal Land Projection (reaching into private farms and cities)

The Integrated System: Regulatory Synergies and Articulation Frictions



The Mediterranean Stress-Test: Italy vs. Spain



Italy

Governance: Marked by Regional Decentralization (Regioni).

Asymmetry: Extreme gap between advanced North and delayed Mezzogiorno.

Litigation Vector: Industrial fragmentation (Valloni e Steppe case).



Spain

Governance: State of Autonomies model with chronic competence conflicts.

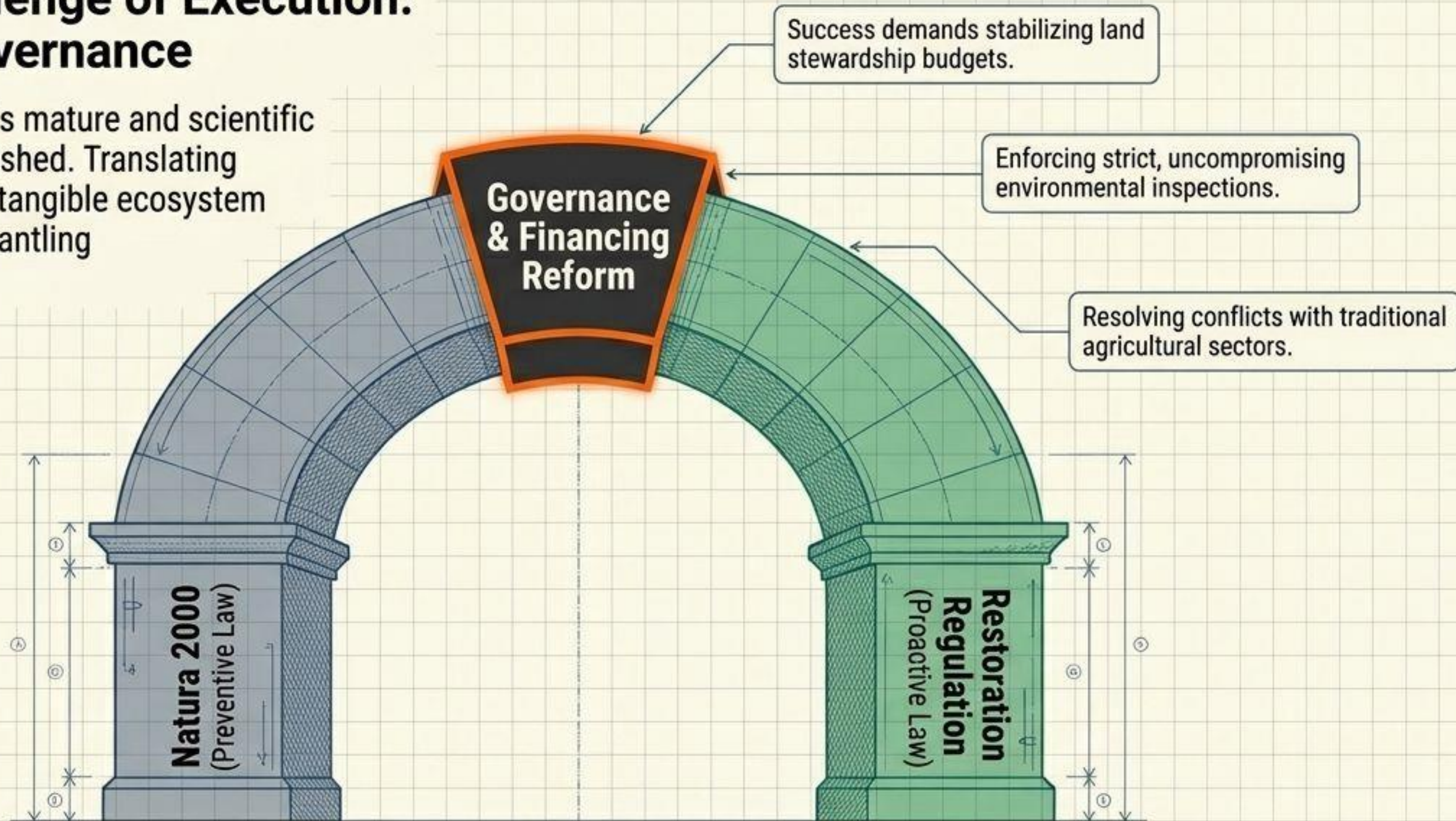
Pressure: Intensive urban-tourist development on coasts.

Litigation Vector: Illegal water extraction for intensive agriculture (Marismas de Santoña & Doñana condemnations).

Shared Pathologies: Chronic underfunding, extreme bureaucratic slowness, and inadequate impact assessments.

The True Challenge of Execution: Reforming Governance

The legal architecture is mature and scientific frameworks are established. Translating regulatory targets into tangible ecosystem recovery requires dismantling bureaucratic inertia.



Ecological restoration is no longer an accessory policy—it is the core structure of European territorial security.