The Negatrope: A Legal Doctrine for Verified Conservation in the Post-Combustion Economy

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ABSTRACT

In the era of ecological overshoot, legal systems must evolve beyond penalising destruction; they must learn to affirm restraint. This article introduces the *Negatrope*: a proposed legal principle that recognises verifiable conservation as a lawful act of systemic coherence.

Rooted in the concept of negative entropy, or negentropy, the doctrine affirms that deliberate non-action, such as not extracting fossil fuels or not clearing forests—can have measurable legal value when it sustains systemic order.

To operationalise this recognition, the article proposes the *Proof of Conservation (PoC)*: an evidentiary standard that uses baseline modelling and counterfactual analysis to verify that a harmful act could have occurred but did not. Together, the Negatrope and PoC framework make ecological restraint visible, verifiable, and legally cognisable.

Importantly, the Negatrope is offered as a **jurisprudential counterpart to ecocide**. Where ecocide seeks to criminalise the wilful destruction of nature, the Negatrope affirms lawful

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restraint as an affirmative act that prevents harm. This distinction reframes the legal imagination from reaction to recognition, from retribution to foresight.

The article explores how the Negatrope could be embedded in planning law, international climate governance, and emerging digital trust infrastructures. It introduces instruments, such as **Shared Negatrope Instruments (SNIs)**, and situates the doctrine within the broader landscape of environmental law, including the precautionary principle and planetary boundaries. Ultimately, the Negatrope offers a legal grammar for what does not burn—redefining conservation as an intentional and verifiable act in defence of biospheric coherence.

This article contributes to emerging legal scholarship seeking affirmative doctrines of ecological governance.

INTRODUCTION

Modern environmental law remains predominantly reactive: it penalises pollution, regulates emissions, and remediates harm. But in an era of planetary overshoot and fast-approaching ecological tipping points, such frameworks are no longer sufficient.¹ The legal system must evolve to recognise not only what is done, but what is deliberately left undone, especially when that restraint averts irreversible ecological degradation.

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¹ See Marina Romanello e al., the 2021 Report of the Lancet Countdown on Health and Climate Change: Code Red for a Healthy Future, 398 Lancet 1619 (2021); Johan Rockström et al., A Safe Operating Space for Humanity, 461 Nature 472 (2009).

This article proposes the **Negatrope** as a legal doctrine that affirms **verifiable restraint** as a lawful act, grounded in both jurisprudential logic and scientific validity. Rooted in the thermodynamic concept of **negative entropy**, or *negentropy*, a *Negatrope* refers to intentional non-action that sustains systemic order within coupled human—natural systems—such as choosing not to mine coal, not to drain wetlands, or not to clear intact forest.² In jurisprudential terms, the Negatrope operates as a doctrinal complement to **ecocide**: where ecocide criminalises the wilful destruction of ecosystems, the Negatrope affirms lawful, conservation-based restraint that prevents such harm.³

In the context of a **Post-Combustion Economy**, a legal and economic framework that transcends fossil fuel dependence, recognising such restraint becomes critical.⁴ As legacy carbon assets lose social licence and financial legitimacy, actors who forgo their exploitation should be able to affirm that decision in legal terms. Conservation, in this context, unites ecological jurisprudence and thermodynamic order—a dual imperative to preserve biospheric integrity and systemic coherence. To this end, the paper introduces the **Proof of Conservation (PoC)**: a digitally attested record that verifies avoided impact, including

² Erwin Schrödinger, What is Life? The Physical Aspect of the Living Cell (Cambridge Univ. Press 1944).

³ Rome Statute of the International Criminal Court art. 5, July 17, 1998, 2187 U.N.T.S. 90; see also Polly Higgins, *Eradicating Ecocide: Laws and Governance to Prevent the Destruction of Our Planet* 63–78 (2d ed. 2015) (advocating ecocide as a fifth ICC crime).

⁴ See Nigel Grier, *Negatrope: A Legal Principle for the Post-Combustion Economy* (June 2025) (unpublished manuscript) (on file with author).

avoided emissions. Together, the Negatrope and PoC offer a path to recognising conservation not as passive omission, but as an **affirmative**, **evidentiary act** within public and private law.

This doctrinal innovation aligns with the **precautionary principle**, which holds that lack of full scientific certainty should not be used to postpone measures that prevent environmental degradation.⁵ It also resonates with growing jurisprudence affirming the **intrinsic rights of nature** ⁶ and deep ecological perspectives that consider ecosystems as legal subjects in their own right.⁷

To illustrate the concept, the article explores the case of a coal mine lawfully **left unmined**—despite holding commercially viable reserves. Similarly, it considers the 2025 approval of Woodside's North West Shelf extension, where no legal mechanism existed to formally affirm restraint had it been exercised. Such examples highlight a missing category in law: where forbearance yields measurable benefit yet remains unrecognised. When recorded through a PoC mechanism, these decisions shift legal logic—from reaction to recognition, and from **combustion to coherence**.

The article proceeds in seven parts. Section II develops the theoretical foundations of the Negatrope. A detailed definition appears at the outset of that section. Section III examines its relationship to existing environmental, international, and indigenous legal frameworks.

⁵ Rio Declaration on Environment and Development, princ. 15, U.N. Doc. A/CONF.151/26/Rev.1 (1992).

⁶ Christopher D. Stone, Should Trees Have Standing? Toward Legal Rights for Natural Objects (3d ed. 2010).

⁷ Arne Naess, The Shallow and the Deep, Long-Range Ecology Movement: A Summary, 16 Inquiry 95 (1973).

Section IV proposes the PoC as a new evidentiary standard to document lawful ecological restraint. Section V presents a case study involving a sterilised coal deposit, illustrating how the Negatrope could operate in practice. Section VI outlines the legal mechanisms and infrastructure required to operationalise the doctrine, including planning law, treaty integration, and digital MRV systems. Section VII concludes by affirming the need for a jurisprudence of restraint that recognises what we conserve.

This article introduces the *Negatrope* as a novel legal concept for the climate and biodiversity era.

Negatrope (n.): A lawful, verifiable act of ecological restraint that sustains systemic order by avoiding extractive or destructive impact. Rooted in the concept of negative entropy (negentropy), a Negatrope formalises non-action—such as not mining, not clearing, or not emitting—as an affirmative juridical contribution to biospheric coherence.⁸

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⁸ The term *Negatrope* is introduced by the author in this article. It combines "nega-" (from *negentropy*, or negative entropy, denoting systemic order) with "-trope" (from the Greek *tropos*, meaning "turn" or "manner"), to denote a lawful systemic turn toward conservation. The thermodynamic foundation draws from Erwin Schrödinger, *What Is Life?* 68–70 (Cambridge Univ. Press 1944); see also Fritjof Capra, *The Hidden Connections: A Science for Sustainable Living* 105–112 (Anchor Books 2002).

II. THEORETICAL FOUNDATIONS OF THE NEGATROPE

Doctrinal origins of the Negatrope

The Negatrope emerges not from analogy but from synthesis. Its conceptual foundation lies in thermodynamics, systems theory, and relational jurisprudence—frameworks that precede and inform legal doctrine. Schrödinger's notion of negative entropy, or *negentropy*, defines life not by what it consumes but by its ability to sustain order within disorder. Gaia theory, as articulated by Lovelock and Margulis, builds on this foundation by treating the Earth not as a passive environment, but as a self-regulating system sustained by feedback and restraint. Similarly, the Daoist concept of *Wu Wei* affirms lawful non-action—not as passivity, but as a lignment with systemic coherence.

These foundations are not philosophical ornaments; they are epistemological sources that inform a new jurisprudence. The Negatrope draws from these traditions to propose a legal principle that recognises restraint as an intentional, verifiable act of coherence. In this sense, it does not seek to abstract law into metaphor, but to ground it more deeply in the thermodynamic and ecological realities that define the biosphere.

Negatrope is defined here as a lawful, verifiable act of ecological restraint that sustains systemic order by avoiding extractive or destructive impact. The term combines *nega*- (from "negentropy") and *-trope* (from the Greek *tropos*, meaning "turn" or "manner") to denote a juridical "turn toward conservation."

The **Negatrope** is proposed as a legal principle that affirms acts of **restraint** with verifiable ecological consequence. It is derived from **negentropy**, a thermodynamic term describing the

maintenance or increase of systemic order in contrast to the entropy of disorder. In legal terms, a *Negatrope* is a **lawful decision or omission** that preserves the integrity of a coupled human–natural system—such as by conserving energy, protecting water, sustaining biodiversity, or avoiding emissions.

Contemporary environmental law tends to recognise harm rather than **affirm non-harm**. It regulates pollution, penalises emissions, and remediates destruction, but rarely acknowledges those who lawfully **choose not to act destructively**, even when such decisions produce measurable ecological benefits. The Negatrope addresses this jurisprudential blind spot by creating a legal category for **non-extractive conduct** that sustains order. In doing so, it reframes the law's epistemic lens: not only assigning liability for degradation, but also **legal recognition to preservation**.

A. Entropy and Ecological Order

In ecological and legal theory, **entropy** has become a metaphor for disorder—species collapse, ecosystem fragmentation, climate destabilisation.¹⁰ By contrast, **negentropy** signifies functional order: complexity, resilience, and life-supporting structure. Natural systems like forests, coral reefs, and aquifers exhibit negentropic behaviour—they resist chaos not by avoiding change, but by structuring flow, feedback, and regeneration.¹¹

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⁹ Erwin Schrödinger, What is Life? The Physical Aspect of the Living Cell (Cambridge Univ. Press 1944).

¹⁰ Donella Meadows, *Thinking in Systems: A Primer* (Chelsea Green 2008).

¹¹ Fritjof Capra & Ugo Mattei, *The Ecology of Law: Toward a Legal System in Tune with Nature* (2015).

Legal interventions often increase entropy: clearing forest for infrastructure, mining carbon-intensive reserves, or over-allocating groundwater. Inversely, forbearance—when it prevents disruption and preserves complex systems—acts as a **negentropic intervention**. The Negatrope thus suggests that **restraint is not passive**, but **constitutive of legal order** when its outcomes are verifiable and ecologically beneficial.

This thermodynamic framing is not merely metaphorical. As environmental governance increasingly incorporates data instrumentation, blockchain attestation, and digital twins, the capacity to measure what is conserved—energy not used, emissions not released, land not cleared—makes legal recognition of restraint technologically feasible.¹²

The Negatrope aligns with scientific and philosophical perspectives that treat the Earth not merely as a passive environment, but as an integrated living system. Under the **Gaia Hypothesis**, first articulated by James Lovelock and Lynn Margulis, the biosphere is seen as a self-regulating organism capable of sustaining life through feedback, balance, and restraint. In this view, conservation is not an external intervention but a systemic expression of coherence—precisely what the Negatrope seeks to recognise in legal form. Just as Gaia theory reframed biology and Earth systems science, the Negatrope aims to reframe environmental law: from a catalogue of prohibitions to a doctrine of lawful forbearance.

¹² Primavera De Filippi & Aaron Wright, *Blockchain and the Law: The Rule of Code* (Harv. Univ. Press 2018).

¹³ James Lovelock, *Gaia: A New Look at Life on Earth* (Oxford Univ. Press 1979); see also Stephan Harding, *Animate Earth: Science, Intuition and Gaia* (Green Books 2006).

B. Ecocide and the Case for Affirmative Law

The Negatrope is intentionally framed as the **jurisprudential counterpart to ecocide**. While ecocide seeks to criminalise wilful and wanton environmental destruction, ¹⁴ the Negatrope affirms its mirror image: deliberate, lawful restraint that averts harm. This doctrinal symmetry invites a broader legal evolution: if we are prepared to punish destruction, we must also be prepared to recognise conservation—not omission, but as an intentional act with legal force.

The modern ecocide movement builds on decades of legal development, from the early proposals of Swedish Premier Minister Olof Palme at the 1972 Stockholm Conference to the Independent Expert Panel's 2021¹⁵ definition of Ecocide as "unlawful or wanton acts committed with knowledge that there is a substantial likelihood of severe and either widespread or long-term damage to the environment". While ecocide is backward looking and punitive, the Negatrope is forward looking and affirmative. It does not displace criminal liability frameworks but complements them by creating an affirmative legal architecture through which restraint can be recognised, verified, and protected.

¹⁴ Rome Statute of the International Criminal Court art. 5, July 17, 1998, 2187 U.N.T.S. 90; see also Polly Higgins, *Eradicating Ecocide: Laws and Governance to Prevent the Destruction of Our Planet* 63–78 (2d ed. 2015) (advocating ecocide as a fifth ICC crime).

¹⁵ Independent Expert Panel for the Legal Definition of Ecocide, *Definition of Ecocide*, Stop Ecocide Found. (2021), https://www.stopecocide.earth/legal-definition/.

¹⁶ *Id.* At 6 ("'Ecocide' means unlawful or wanton acts committed with knowledge that there is a substantial likelihood of severe and either wide spread or long-term damage to the environment being caused by those acts.").

This dual structure echoes other moral and legal binaries—negligence and due care, liability and immunity, harm and benefit. The Negatrope affirms that choosing not to degrade, when that choice is verifiable and additional, should be seen as a legitimate act of legal significance. Together, ecocide and the Negatrope form a normative continuum: one criminalises destruction; the other legitimises conservation.

C. Precaution, Conservation, and the Rights of Nature

The Negatrope builds on environmental law's foundational commitment to the **precautionary principle**, which permits regulatory action even in the face of scientific uncertainty. Yet while precaution focuses on the **risk of harm**, the Negatrope focuses on the **value of forbearance**. It completes the normative arc from prevention to **preservation**. That is, where precaution justifies intervention to avert uncertain danger, the Negatrope permits **legal affirmation** of restraint when **ecological benefit is verifiable**.

Such affirmation becomes increasingly important as ecological tipping points near, and regulatory incentives lag behind. Without a legal mechanism to **signal, record, and reward** restraint, actors face pressure to exhaust extractive options simply to avoid losing entitlement or perceived economic opportunity.

D. Making Restraint Visible: Real-World Scenarios

The Negatrope is not merely theoretical. It anticipates real-world decisions where restraint has high ecological value but limited legal visibility.

¹⁷ Rio Declaration on Environment and Development, princ. 15, U.N. Doc. A/CONF.151/26/Rev.1 (1992).

Consider the case of:

- an energy utility that retires high-emissions assets and avoids combustion,
- a landholder who leaves mature rainforest untouched despite development rights,
- a resource licence holder who voluntarily sterilises a coal deposit for ecological or fiduciary reasons.

A contemporary example is the Minister's 2025 decision to approve the extension of Woodside's North West Shelf gas project to 2070 under the *Environmental Protection and Biodiversity Conservation Act 1999* (Cth).¹⁸ Despite significant projected emissions and formal objections by Traditional Owners and climate advocates,¹⁹ the legal framework offered no mechanism to affirm restraint—even if the proponent had chosen to sterilise a portion of the reserves or limit the extension. Under the Negatrope doctrine, such a decision could have been formalised through a PoC, creating a verifiable, site-specific legal record of avoided combustion. A Shared Negatrope Instrument (SNI) could have enabled the Commonwealth, the proponent, and Traditional Owners to jointly affirm ecological restraint as a lawful act of biosphere coherence. This absence of lawful recognition for non-extraction illustrates the doctrinal vacuum the Negatrope is intended to fill.

¹⁸ Environmental Protection and Biodiversity Conservation Act 1999 (Cth) ss 75, 136 (Austl.).

¹⁹ Jake Evans, *Woodside's North West Shelf, Australia's Largest Gas Project, Approved for Life Extension to* 2070, ABC News (28 May 2025), https://www.abc.net.au/news/2025-05-28/woodside-gas-approved-northwest-shelf-2070-watt/105347520 (last visited June 17, 2025).

Similar logic applies to marine ecosystems, where practices such as bottom trawling have been shown to cause habitat destruction comparable to terrestrial forest clearcutting.²⁰ In such contexts, restraint—declining to licence or conduct deep sea trawling—may prevent irreversible ecological destruction and maintain benthic ecosystems integrity. Where restraint is verifiable, it must be recognised as a lawful act of conservation under the Negatrope framework.

These acts, often invisible to current markets or regulation, represent **deliberate governance decisions**. Under the Negatrope framework, such decisions could be documented through a **PoC**, a digitally attested record of avoided impact. In doing so, the law would treat restraint not as omission, but as a **positive act of ecological coherence**.

Negatrope, while rooted in thermodynamics and systems law, also resonates with deeper philosophical traditions that elevate restraint as generative action. In classical Daoist thought, the concept of *Wu Wei*—literally "non-doing" or "effortless action"—describes an intentional form of alignment with natural order, where the most powerful interventions are often those

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²⁰ Les Watling & Elliott A. Norse, *Disturbance of the Seabed by Mobile Fishing Gear: A Comparison to Forest Clearcutting*, 12 **Conservation Biology** 1180 (1998) (describing bottom trawling as the marine equivalent of clear-felling, with severe ecological consequences for benthic habitats).

that harmonise by abstention.²¹ *Wu Wei* does not signify passivity, but the deliberate choice to act through coherence rather than force. This contrasts sharply with dominant Western legal traditions, which typically valorise action as a response to breach or injury—law as intervention and correction.²² Daoist thought, by contrast, elevates *Wu Wei*: the mastery of non-action. Choosing not to act, when aligned with systemic coherence, becomes the highest form of lawful order. The Negatrope extends this principle into law: it treats deliberate ecological restraint not as omission, but as a lawful expression of systemic intelligence. It offers a doctrinal pathway to recognise inaction—when intentional, verified, and situated within ecological thresholds—as a meaningful legal act.

The Negatrope also builds on scholarship that views ecological governance as a transdisciplinary and emergent process. Valerie A. Brown's work on 'human agency in system coherence' provides a critical epistemological foundation: that complex environmental problems require governance models attuned to systemic order, not linear

²¹ See Laozi, *Dao De Jing* ch. 48 (Stephen Mitchell trans., HarperCollins 1988) ("The Master does nothing, yet nothing is left undone."); see also Roger T. Ames & David L. Hall, *Dao De Jing: A Philosophical Translation* 123–28 (Ballantine Books 2003).

²² See Duncan Kennedy, *Legal Education and the Reproduction of Hierarchy* (1983); Roberto Mangabeira Unger, *The Critical Legal Studies Movement* (Harvard Univ. Press 1986). Western legal traditions have historically emphasised adjudication, redress, and active legal intervention as markers of justice, in contrast to relational and cyclical views of order found in Daoist and Indigenous jurisprudence.

control.²³ In this view, the recognition of lawful restraint is not only ecologically sound, but also methodologically necessary—transforming conservation from a reactive burden into a participatory act of lawful design.

III. THE NEGATROPE IN CONTEMPORARY LEGAL ARCHITECTURE

The **Negatrope**, as a legal principle, is designed not to replace existing environmental law but to **fill a doctrinal gap** in the legal treatment of conservation. Where most regimes centre on harm mitigation, remediation, and liability attribution, *Negatrope* introduces a framework for recognising **pre-emptive restraint** as a legally meaningful act. This section explores how such a principle complements and extends existing legal norms—internationally and domestically.

A. Environmental Law's Harm-Based Legacy

The architecture of environmental law is historically built around **damage and risk**.

Regulatory systems identify pollutants, define thresholds, impose penalties, and create remediation duties. Instruments such as **environmental impact assessments**, **pollution**

Valerie A. Brown, John A. Harris & Jacqueline Y. Russell, Tackling Wicked Problems Through the Transdisciplinary Imagination (Earthscan 2010); Valerie A. Brown & John A. Harris, The Human Capacity for Transformational Change: Harnessing the Collective Mind (Routledge 2014).

licensing, and **protected area designations** all work to manage or limit harm—but do so reactively.²⁴

This emphasis on harm has yielded critical protections. Yet it also creates a blind spot: actors who choose not to act destructively—who **forgo permitted but ecologically costly activities** often receive no legal recognition. Indeed, some may face **regulatory or commercial penalties** for failing to exploit a resource, such as losing tenure or triggering underuse clauses. The law has not yet evolved to protect restraint as **an intentional and beneficial act of governance**.

B. Toward Affirmative Environmental Jurisprudence

The Negatrope is part of a broader legal shift from reactive regulation toward proactive recognition. Where traditional environmental law is structured around thresholds of harm—pollution limits, discharge permits, offset balances—new doctrines are emerging that seek to affirm ecological integrity as a matter of first principle. These include, the rights of nature, the doctrine of ecological integrity, and evolving duties of care that extend beyond anthropocentric baselines.

²⁴ See, e.g., National Environmental Policy Act of 1969, 42 U.S.C. §§ 4321–4370h (U.S.); Environmental Protection and Biodiversity Conservation Act 1999 (Cth) (Austl.).

The precautionary principle, widely adopted in international instruments and domestic law, enables regulatory intervention in the face of uncertain risk.²⁵ It reflects a legal sensibility that **absence of proof is not proof of absence**, and that forbearance may be warranted where harm is plausible but not yet realised. The Negatrope complements this approach by extending it into the evidentiary domain: not only may restraint be justified by uncertainty, it may also be verified and affirmed when it demonstrably sustains systemic order.

Similarly, the **rights of nature** movement posits that ecosystems possess legal standing independent of human use.²⁶ In jurisdictions where such rights have been codified, courts have begun to recognise rivers, forests, and mountain systems as subjects of law.²⁷ These frameworks reflect a **jurisprudence of affirmation**—one that does not merely restrict harm but dignifies ecological preservation. The Negatrope builds on this trend by grounding restraint in both **thermodynamic coherence**,²⁸ and **legal evidentiary mechanisms**, thereby making it operable within existing legal systems.

²⁵ See Rio Declaration on Environment and Development princ. 15, U.N. Doc. A/CONF.151/26/Rev.1 (Aug. 12, 1992).

²⁶ See Constitución de la República del (Ecuador), Oct. 20, 2008, art. 71.

²⁷ See Corte Constitucional del Columbia [Constitutional Court of Columbia], Judgment 218-17-EP/20 (Apr. 30, 2021); see also Te Awa Tupua (Whanganui River Claims Settlement) Act 2017 (N.Z.).

²⁸ See Fritjof Capra, *The Web of Life: A New Scientific Understanding of Living Systems* 81–95 (Anchor Books 1996); Fritjof Capra, *The Hidden Connections: A Science for Sustainable Living* 105–112 (Anchor Books 2002); Fritjof Capra & Pier Luigi Luisi, *The Systems View of Life: A Unifying Vision* 321–25 (Cambridge Univ. Press 2014).

Together, these developments suggest that environmental law is undergoing a doctrinal expansion. It is no longer confined to managing degradation after the fact, but increasingly oriented toward recognising lawful acts of conservation as juridical contributions. The Negatrope formalises this shift, providing a structure through which affirmative ecological governance can be seen, validated, and upheld.

This emerging doctrinal spectrum, spanning prohibition, precaution, and affirmation, is illustrated in Figure 1 (Section VI.F), which maps the legal landscape along the axes of biospheric coherence²⁹ and legal posture.

C. International and Treaty Frameworks

Although no treaty currently codifies *restraint* as a freestanding right or duty, several instruments implicitly support the Negatrope's logic. The **Rio Declaration on Environment and Development** affirms in Principle 15 that "where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation." While this is typically cited in support of precautionary regulation, it also legitimises **proactive environmental conduct** in the absence of mandated restraint.

²⁹ See Fritjof Capra, *The Web of Life: A New Scientific Understanding of Living Systems* 81–95 (Anchor Books 1996); Fritjof Capra, *The Hidden Connections: A Science for Sustainable Living* 105–112 (Anchor Books 2002); Fritjof Capra & Pier Luigi Luisi, *The Systems View of Life: A Unifying Vision* 321–25 (Cambridge Univ. Press 2014).

³⁰ Rio Declaration on Environment and Development, princ. 15, U.N. Doc. A/CONF.151/26/Rev.1 (1992).

The **Paris Agreement** similarly supports non-mandatory contributions to environmental preservation. Parties to the Agreement submit **Nationally Determined Contributions**(NDCs) that reflect voluntary commitments to avoid emissions—some of which include carbon reserves left unexploited.³¹ The Negatrope would enable such conduct to gain formal recognition **beyond sovereign declarations**, allowing registrable and verifiable acts of restraint to be made legally meaningful across jurisdictions and governance scales.

D. Domestic Precedents and Analogous

Within national legal systems, analogues to the Negatrope already exist, albeit in fragmented form. For example:

- In water law, some jurisdictions recognise non-use rights or instream flow protections as lawful mechanisms to preserve ecological function and system integrity.³²
- In **land law**, conservation easements allow property owners to restrict use in perpetuity for ecological benefit.
- In **carbon markets**, avoided deforestation projects (REDD+) enable credits to be issued for trees left standing.

These precedents illustrate that **the law can and does affirm restraint**, but only within narrow administrative boundaries or proprietary logic. The Negatrope seeks to generalise this

³¹ Paris Agreement, Dec. 12, 2015, T.I.A.S. No. 16-1104.

³² See, e.g., Colorado Water Trust, *Instream Flow Water Acquisitions*, https://coloradowatertrust.org/instream-flow (last visited June 15, 2025).

concept: to allow restraint to be **recognised**, **verified**, **and protected as a lawful act** whether or not it is tied to a specific benefit instrument (like a credit or easement).

Both the Ecocide movement and the Negatrope doctrine draw from a shared philosophical lineage that treats the Earth as a coherent, self-regulating system. This perspective, rooted in Gaia theory, deep ecology, and systems science, reframes environmental harm not as external damage, but as a destabilisation of biospheric order.³³ Where Ecocide criminalises this harm, the Negatrope affirms restraint as its systemic inverse: the lawful maintenance of planetary equilibrium.

In common law systems, legal redress for environmental harm has traditionally required demonstrable injury—typically pursued through torts such as nuisance, negligence, or strict liability.³⁴ These doctrines are reactive by design: they compensate loss after the fact, rather than affirming precaution or restraint beforehand. There is no cause of action for a harm avoided, nor any doctrine to record the legal significance of a non-event.³⁵ As such, the

³³ James Lovelock, *Gaia: A New Look at Life on Earth* (Oxford Univ. Press 1979); Thomas Berry, *The Great Work: Our Way into the Future* (Bell Tower 1999); Arne Naess, The Shallow and the Deep, Long-Range Ecology Movement: A Summary, 16 Inquiry 95 (1973).

³⁴ See John Murphy, *The Law of Nuisance* 2d ed. (Oxford University Press 2010); Benjamin Pontin, *Nuisance Law and Environmental Protection* (2013) 25 J. Envtl. L. 437.

³⁵ Douglas A. Kysar, *Regulating from Nowhere: Environmental Law and the Search for Objectivity* 161–66 (Yale University Press 2010); Benjamin J. Richardson, *Time and Environmental Law: Telling Nature's Time* 58–61 (Cambridge University Press 2017).

common law remains epistemically blind to intentional non-use. The Negatrope responds to this doctrinal gap by offering a forward-looking evidentiary structure—akin not to tort, but to environmental registries, land-use planning, and ecological fiduciary law—that can recognise restraint as lawful action.

E. Comparative and Customary Law Foundations

While the Negatrope emerges as a novel legal principle, its underlying structure resonates across diverse legal traditions. In Indigenous legal systems, particularly those grounded in custodial relationships to land, restraint is not absence—it is law.

This jurisprudential orientation is not unique: across Indigenous legal traditions globally, restraint is embedded in systems of obligation, cosmology, and land-based sovereignty.³⁶

Sacred no-go zones, seasonal taboos, and obligations to leave areas undisturbed are examples of lawful non-action embedded in relational jurisprudence. These systems do not separate people from place, but treat forbearance as a co-creative act of ecological stewardship. Such principles are evident in the co-governance of Te Urewera in Aotearoa New Zealand, where a

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³⁶ See also Irene Watson, *Aboriginal Peoples, Colonialism and International Law: Raw Law* (Routledge 2015), arguing that Aboriginal law constitutes a sovereign, place-based legal order irreducible to colonial legal norms; Makau Mutua, *The Banjul Charter and the African Cultural Fingerprint: An Evaluation of the Language of Duties*, 35 Va. J. Int'l L. 339, 342–49 (1995), framing African customary law as grounded in duties to land, community, and ecological balance.

former national park is now recognised as a legal entity with guardianship shared between the Crown and Tūhoe iwi.³⁷

Other civil law jurisdictions have similarly begun to embed ecological restraint into constitutional or administrative doctrine. In Colombia, the Constitutional Court recognised the Atrato River as a legal subject entitled to protection and regeneration, affirming that ecological integrity could form the basis of legal rights regardless of injury.³⁸ This jurisprudence anticipates a doctrinal logic in which conservation is no longer contingent on harm but is instead a lawful act in its own right.

The **Salween Peace Park** in eastern Myanmar (Burma) offers a compelling example of lawful ecological restraint rooted in **Indigenous jurisprudence**. Declared in 2018 by Karen communities, the Park covers more than 5,400 square kilometres of forest and river systems along the Salween River, protected not through state law but through **customary governance**, community protocols, and Indigenous self-determination.³⁹ It represents a realworld instance of restraint as law: the refusal of extractive development is not framed as

³⁷ Te Urewera Act 2014 (N.Z.); see also Jacinta Ruru, "Tūhoe-Crown Settlement – Te Urewera Act 2014", Māori L. Review (2014).

³⁸ Colombian Constitutional Court, Judgment T-622/16 (Nov. 10, 2016), unofficial English trans. available at http://files.harmonywithnatureun.org/uploads/upload838.pdf; see also Maria Antonia Tigre, *Rights of Nature in the Inter-American System of Human Rights*, 7 *Transnat'l Envtl. L.* 151 (2018).

³⁹ KESAN, Salween Peace Park Charter (2018); For more context, see Kevin Woods, "Community Forestry and Peacebuilding in Myanmar," in Conservation and Peacebuilding (2022).

inaction, but as an affirmative act of conservation grounded in ancestral legal systems. While not formally recognised by the state, the Park's legitimacy is affirmed through participatory mapping, ecological monitoring, and collective memory—an analogue to the Negatrope's vision of Proof of Conservation and Shared Negatrope Instruments.⁴⁰

This cross-cultural grounding affirms that the Negatrope is not a Western innovation imposed on nature, but a legal expression of restraint already familiar to plural legal orders. Legal pluralism accepts the coexistence of multiple normative systems—state-based, customary, and Indigenous—each capable of producing lawful conduct. ⁴¹ By recognising verified restraint as a valid juridical act, the Negatrope aligns with this pluralist frame and offers a unifying evidentiary architecture through which diverse traditions of conservation can be made visible, shareable, and enforceable within modern governance.

IV. PROOF OF CONSERVATION: THE EVIDENTIARY STANDARD

A. From Absence to Evidence

To function within a rules-based legal system, ecological restraint must be more than implied—it must be demonstrable. The Negatrope therefore relies on a companion evidentiary mechanism: the PoC. A PoC enables the legal recognition of forbearance by

⁴⁰ See KESAN, Salween Peace Park: A Model for Indigenous Conservation (2020), https://kesan.asia/salween-peace-park/.

⁴¹ Brian Z. Tamanaha, *Understanding Legal Pluralism: Past to Present, Local to Global*, 30 Sydney L. Rev. 375 (2008).

verifying that a harmful or extractive act *could* have occurred, but demonstrably *did not*, and that its non-occurrence delivered a **quantifiable ecological benefit**.⁴²

The primary challenge lies in making **restraint legible to legal and institutional processes**. Conventional evidentiary models in law focus on documenting events after they occur; by contrast, a PoC must affirm an intended absence—such as emissions not released because a fossil fuel was not combusted, or pollution not discharged because an industrial process was deferred.

B. Methodological Foundations of PoC

Drawing from digital verification protocols and lifecycle accounting frameworks, a PoC establishes what *would have* occurred in the absence of restraint using **counterfactual modelling**, and attests to its prevention through **transparent**, **independently verifiable** data.⁴³

C. Legal Character: PoC vs. Offsets

In this sense, the PoC functions analogously to the concept of **negative emissions** in carbon accounting but with a legal and moral dimension. It is not merely a metric of avoided harm; it is a **juridical recognition of lawful restraint**. Unlike offsets, which permit equivalent harm

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⁴² See Amy J. Wildermuth, *Why State Standing in Climate Cases Matters*, 27 J. LAND USE & ENV'T L. 1, 14–16 (2011) (noting difficulties in proving absence and causality in environmental claims).

⁴³ See Int'l Org. for Standardization, *ISO 14064-2:2019*, *Greenhouse Gases—Part 2:Specification with Gidance* at the Project Level for Quantification, Monitoring and Reporting of Greenhouse Gas Emission Reductions or Removal Enhancements (2019) (specifying principles and requirements for greenhouse gas projects and counterfactual baselining).

elsewhere, the PoC embeds value in the **site-specific act of restraint itself**, provided that restraint can be independently substantiated.⁴⁴

For example, if a landholder elects not to clear a regenerating forest for agriculture, a PoC would recognise and document that forbearance as a lawful act of conservation in situ. By contrast, a carbon offset would permit clearing elsewhere by transferring credit value from restraint—turning preservation into a tradeable justification for equivalent harm. The PoC breaks from this equivalence logic: it affirms that the act of not clearing carries inherent legal value, independent of any compensatory exchange.

D. Pathways for Legal Integration

In practice, PoCs could be embedded within planning regimes, permitting frameworks, and environmental assessment protocols. In jurisdictions using Environmental Impact Assessment (EIA) or Strategic Environmental Assessment (SEA), a PoC could document voluntary non-development zones or modified project scopes, allowing regulators to formally acknowledge conservation without requiring economic displacement. In digital infrastructure contexts—such as blockchain-based environmental registries or geospatial MRV platforms—PoCs could support the issuance of non-fungible attestations of avoided impact, distinguishable from offsets in both origin and legal character. 45

⁴⁴ See Simon Nicholson, Negative Emissions and the Long Road Ahead, 358 SCI. 1392, 1392–94 (2017).

⁴⁵ See Primavera De Filippi & Aaron Wright, *Blockchain and the Law: The Rule of Code* 177–89 (2018) (exploring the legal affordances of on-chain evidentiary infrastructure).

E. Standardisation and Governance Criteria

To ensure reliability, the standardisation of PoCs will require methodological rigor, including:

- Establishing credible **baselines** for what would otherwise occur.
- Ensuring **additionality**, so that restraint is not over-credited.
- Providing **auditability**, through spatial, temporal, and ecological data streams.

These criteria parallel those already familiar in environmental finance, particularly in REDD+ and project-based carbon credit schemes but shift the frame from **remediation to restraint**. By defining a **lawful grammar of restraint**, the PoC transforms ecological non-action from an ethical gesture into a **legal fact**, enabling governance systems to articulate, validate, and protect what would otherwise remain invisible.

V. CASE STUDY: THE UNMINED COAL DEPOSIT

A. Quantifying the Harm Not Done

To illustrate the practical application of the Negatrope and its evidentiary mechanism—the PoC—consider the case of a proposed coal mine with a production capacity of 60 million tonnes per annum (Mtpa) over a projected 30-year operational lifespan. Such a resource, in economic terms, would qualify as nationally significant, capable of generating tens of billions in export revenue under prevailing market conditions. In environmental terms, however, its combustion would result in downstream emissions exceeding 4.86 gigatonnes of CO₂ equivalent—a cumulative impact comparable to the annual emissions of some industrialised nations. ⁴⁶

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⁴⁶ See Australian Dep't of Indus., Sci. & Res., Resources and Energy Quarterly (Dec. 2024).

Now consider that the mine proponent, whether by voluntary decision, regulatory settlement, or sovereign policy, elects not to proceed with extraction. The coal remains unmined. The land remains uncleared. The emissions are never released.

B. Legal and Institutional Invisibility

Yet under prevailing legal and institutional arrangements, this act of forbearance is treated as a non-event. It yields no formal recognition, receives no evidentiary value, and does not give rise to any legally registrable asset. This silence persists despite the fact that the *non-event*—the absence of combustion—yields a calculable benefit to the global climate system.

C. Fiduciary Duty and Capital Allocation

The Negatrope introduces a calculus of ecological restraint that directors may increasingly be required to consider. Directors owe fiduciary duties to act in the best interests of the corporation, including the management of financial risk, reputational exposure, and long-term value preservation.⁴⁷ In resource-intensive sectors, the decision not to proceed with extraction—when underpinned by credible ecological, legal, and financial reasoning—may align with those duties.⁴⁸ If a legally recognised instrument, such as an SNI can verify that

⁴⁷ See *Corporations Act 2001* (Cth) s 181(1)(a); *ASIC v Cassimatis (No 8)* [2016] FCA 1023, [476]–[478] (Edelman J) (duty to act with care, diligence, and in good faith).

⁴⁸ Sarah Barker & Ellie Mulholland, *Directors' Liability and Climate Risk: Australia – Country Paper*, Commonwealth Climate and Law Initiative (2017), https://ccli.ouce.ox.ac.uk/wp-content/uploads/2017/07/CCLI-Australia-Paper-Final.pdf.

forbearance creates value or mitigates risk, directors may be obligated to evaluate it alongside other capital allocation options.⁴⁹

The Negatrope thus complements fiduciary frameworks by enabling directors to compare the hurdle rate of proceeding with a project against the opportunity value of registering verifiable conservation. Rather than indefinitely mothballing stranded or marginal assets, a director may lawfully elect to register a Negatrope—preserving ecological and reputational capital in a manner consistent with shareholder interests and prudent governance.

D. Applying the Negatrope Framework

This is the precise terrain in which the Negatrope operates. By framing the non-exploitation of extractive potential as a form of lawful conservation, the Negatrope renders such restraint legally visible. The associated PoC models the counterfactual scenario—establishing the emissions profile that *would have* occurred had extraction proceeded, based on standard combustion factors, market demand projections, and baseline energy use assumptions. The PoC then attests to the fact that this impact was avoided, documents the intention behind the non-action, and verifies its ecological consequence using transparent, independently verifiable data.

⁴⁹ Sarah Barker, Fiduciary Duties and Climate Change in the Anthropocene: Legal Risk, Governance and the Role of the Board, 94 Austl. L. J. 370 (2021).

⁵⁰ See Intergovernmental Panel on Climate Change, 2006 IPCC Guidelines for National Greenhouse Gas Inventories, vol. 2, ch. 2 (2006).

E. Equity in Restraint: Distributional Fairness and State Participation

This model also addresses a recurring equity challenge in climate law: actors who refrain from development often suffer regulatory or commercial disadvantage. The Negatrope reverses this disincentive. It allows the resource holder—whether private, corporate, or sovereign—to generate lawful value from not extracting, without relying on conventional offset schemes or carbon credit trading. The government, in turn, could be recognised as a coparticipant in restraint—receiving fiscal recognition in lieu of forgone royalties, should it elect to protect the deposit as a national asset of non-combustion.

In many jurisdictions, however, **Indigenous peoples and traditional custodians** are also legal or moral stakeholders in extractive decisions.⁵¹ They may be entitled to negotiated royalties, employment pathways, or participation agreements under Native Title, treaty frameworks, or land use legislation. The lawful recognition of restraint must therefore account not only for the sovereign's fiscal position, but also for the potential foregone benefits that Indigenous communities may have otherwise received had extraction proceeded.⁵²

SNIs offer one pathway to reconcile these interests. Through co-declarations between the state, resource holder, and traditional owners, restraint can be formalised as a joint legal act—enabling new benefit-sharing models that reflect both avoided harm and ecological guardianship.⁵³ These instruments could be structured to allocate a portion of recognised

⁵¹ See generally United Nations Declaration on the Rights of Indigenous Peoples, G.A. Res. 61/295, art. 32 (Sept. 13, 2007) (affirming Indigenous rights to free, prior, and informed consent regarding resource development).

⁵² *Id*.

⁵³ See e.g., Native Title Act 1993 (Cth) ss 24BA-24EBA (Austl.).

value (e.g., climate finance, conservation trust income, or biodiversity credits) to Indigenous partners. In this way, restraint is neither extractive nor exclusive: it becomes a co-authored act of lawful conservation.

In International waters or marine zones under multilateral governance, restraint may take the form of declining to issue bottom trawling licenses in fragile benthic ecosystems. When recognised through marine science and treaty registries, such non-exploitation can be formalised as a Negatrope Event and potentially incorporated into global climate and biodiversity frameworks.⁵⁴

Analogues exist in international efforts such as Ecuador's Yasuní-ITT initiative, which proposed leaving oil underground in exchange for global contributions to biodiversity and climate protection.⁵⁵ The Negatrope generalises this logic into a justiciable principle: not based on compensation for loss, but on affirmation of restraint as a **lawful ecological act**.

F. Making Restraint Legible: Institutional Applications of PoC

By translating the non-mine into a legal artefact, the Negatrope introduces a new form of ecological governance: one that does not depend on damage to prove value but can instead articulate the lawfulness of withheld harm. In this model, a regulator or court could rely on a

⁵⁴ See Trisha B. Atwood et al., *Predicted Carbon Losses from Trawling the Global Seafloor*, 595 Nature 482, 482–87 (2021) (estimating that trawling resuspends approximately 1.47 gigatonnes of CO₂ annually by disturbing seabed carbon stores); Les Watling & Elliott A. Norse, *Disturbance of the Seabed by Mobile Fishing Gear: A Comparison to Forest Clearcutting*, 12 **Conservation Biology** 1180 (1998).

⁵⁵ See Ivonne A-Baki, *The Yasuní-ITT Initiative: A New Concept for Protecting the Amazon*, 49 U.N. CHRON. 2 (2012).

PoC to validate the environmental benefit of restraint—for instance, by recognising it in the context of a development approval, an Environmental Impact Assessment (EIA),⁵⁶ or as a nationally reported mitigation measure under a country's NDC to the Paris Agreement.⁵⁷ Within a post-combustion economy, such mechanisms enable lawful restraint to become legible, evidentiary, and enforceable—positioning PoC as a functional tool in both domestic and international climate governance—a development that may prove to be among the most consequential in the evolution of ecological law.

Where recognised under national legislation or treaty frameworks, such instruments may serve as binding records admissible in resource allocation or benefit sharing arrangements. In Australian water law, environmental water buyback schemes under the Murray–Darling Basin Plan exemplify how restraint can be formalised as a lawful, compensated act.⁵⁸

Through voluntary acquisition, the Commonwealth purchases entitlements and assigns them to environmental purposes—legally protecting non-extraction to preserve instream flows, wetland health, and ecological resilience. This institutional recognition of non-use establishes a strong precedent for applying the Negatrope doctrine to other forms of ecological restraint.

⁵⁶ See, e.g., Environmental Protection Act 1994 (Qld) pt 4 (Austl.) (establishing EIA processes for mining and industrial projects); Cal. Pub. Res. Code § 21000 et seq. (West 2022) (California Environmental Quality Act requiring environmental review and alternatives assessment for projects with significant impact).

⁵⁷ Paris Agreement to the United Nations Framework Convention on Climate Change, art. 4, Dec. 12, 2015, T.I.A.S. No. 16-1104, https://unfccc.int/sites/default/files/english_paris_agreement.pdf (requiring parties to prepare, communicate, and maintain nationally determined contributions reflecting mitigation actions).

⁵⁸ See Australian Dep't of Climate Change, Energy, the Env't and Water, *Water for the Environment*, https://www.dcceew.gov.au/cewh/manage-water/water-for-environment/ (last visited June 15, 2025).

Beyond its regulatory and governance implications, the Negatrope also offers potential legal certainty for financial actors engaged in land-use decisions, infrastructure planning, or long-term conservation finance.

In time, SNIs and site-specific PoCs could offer a basis for legal certainty in financial and fiduciary settings—supporting the development of bankable conservation agreements or performance-linked funding structures that rely on verified restraint rather than speculative offsets. ⁵⁹ Instruments such as conservation easements, environmental performance bonds, and biodiversity stewardship agreements already provide limited legal models for this type of structured forbearance. ⁶⁰ The Negatrope extends this logic to dynamic, systems-based metrics capable of integrating ecological restraint into enforceable public and private legal commitments.

VI. INFRASTRUCTURE FOR LEGAL OPERATIONALISATION

A. Embedding Restraint into Law

For the Negatrope to function as a legal principle, it must be **institutionally actionable**. This means embedding the doctrine within existing legal architectures—such as **planning law**,

⁵⁹ See Elizabeth M. Roderick, *Financing Nature: Exploring Mechanisms for Bankable Biodiversity Conservation*, 45 Envtl. L. Rep. 10067 (2015); Forest Trends, *State of Biodiversity Markets 2023* (2023), https://www.forest-trends.org.

⁶⁰ See Margaret Walls, *Private Land Conservation and the Role of Conservation Easements* (Res. for the Future 2020); Jane Flegal & Megan Herzog, *Environmental Performance Bonds: A Tool for Accountability in Climate Risk*, CarbonPlan (2021), https://carbonplan.org/research/environmental-performance-bonds.

environmental governance, and public registries—while remaining adaptable to emerging frameworks, including digital trust infrastructure, climate registries, and transnational environmental law. The goal is to make ecological restraint not only visible and verifiable, but legally cognisable and enforceable.

Environmental and planning regimes traditionally manage harm through approvals, offsets, and regulatory conditions. Yet few frameworks provide standing for **deliberate non-action**. The Negatrope offers a remedy. Through formal recognition of **PoCs**, regulators could incorporate non-extractive decisions into land use planning, resource governance, and environmental assessment. A surrendered mine lease could each be recorded as a **Negatrope Event**, generating a legal record of forbearance.⁶¹

B. Shared Negatrope Instruments (SNIs)

Beyond procedural recognition, new legal instruments could formalise restraint as a shared governance function. For example, **SNIs** may serve as joint declarations between landholders and state authorities, and other affected stakeholders—such as indigenous custodians—documenting mutual commitments to non-extraction or long-term ecological preservation. Rather than replicating case-specific examples already discussed, SNIs offer a generalisable legal structure to encode such decisions in a justiciable form.

These instruments could also facilitate **co-benefit attribution**—capturing values such as biodiversity, cultural heritage, or water retention and climate stability—while enabling fiscal innovation. For instance, States might elect to forego resource royalties in exchange for

⁶¹ See Lesley Head, *Hope and Grief in the Anthropocene: Re-conceptualising Human–Nature Relations* 97–102 (2016) (on the legal invisibility of forbearance in land-use decisions).

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verified ecological restraint, particularly where mechanisms like international climate finance, conservation trust income or biodiversity-linked instruments can offset the fiscal gap.⁶² By embedding restraint into a negotiated instrument, SNIs position lawful forbearance not as loss, but as a shared ecological investment.

C. Alignment with NDCs and International Law

At the international level, the Negatrope doctrine could complement mechanisms under the **Paris Agreement**.⁶³ Although **NDCs** recognise mitigation outcomes, most frameworks under Article 4 remain structured around *emissions reductions*, not *non-emissions*. The Negatrope offers a means to **document and verify restraint** as a mitigation contribution, provided that the accompanying PoC meets accepted standards of **auditability**, **transparency**, **and additionality**.⁶⁴ Over time, this could inform treaty innovations that recognise **unexploited reserves**, **in situ conservation**, and **legal non-extraction zones** as acts of **planetary governance**.

D. Digital Trust and the Negawatt Protocol

https://www.niaa.gov.au (discussing shared land governance tools and biodiversity co-benefits).

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⁶² See Nat'l Indigenous Australians Agency, Indigenous Protected Areas Program (2023),

⁶³ Paris Agreement to the United Nations Framework Convention on Climate Change, art. 4, Dec. 12, 2015, T.I.A.S. No. 16-1104.

⁶⁴ *Id*.

Digital infrastructure will be central to making these mechanisms operational.* The **Negawatt Protocol**, ⁶⁵ for example, is a rules-based system designed to verify and record conservation outcomes on a decentralised ledger. ⁶⁶ Platforms such as the Negawatt Protocol address verification risks through post-impact validation and immutable on-chain POC registration, reducing the likelihood of double counting or speculative attribution. Within such systems, the **Negatrope** provides the legal rationale, while the **PoC** serves as the evidentiary unit. Where conserved value is quantifiable in energy terms—such as kilowatt-hours avoided through efficiency measures—a valid PoC may give rise to a **Negawatt Token (NWT)**, issued and recorded on-chain.

To strengthen operational governance, future developments of the Negawatt Protocol may incorporate validator certification standards—ensuring POC are subject to uniform, auditable methodologies and capable of meeting evidentiary thresholds under administrative or judicial review.

^{*} The Negatrope framework is intended to be technology-neutral and sovereignty-respecting. Nonetheless, digital MRV raises valid concerns around surveillance, dependency, and data governance that merit further attention as implementation evolves.

⁶⁵ See Nigel Grier, *Negawatt Protocol: Measurement and Verification Framework for Energy Conservation* (forthcoming 2025) (unpublished manuscript) (on file with author).

⁶⁶ See Regen Network Dev. Inc., *Regen Registry Methodology Library* (2024), https://www.regen.network; *Negawatts.io* (Beta), https://www.negawatteconomy.com/ (last visited June 18, 2025)

E. Toward Transactable Conservation

Registries within the Negawatt Economy, such as *Negawatts.io*, could serve as **public infrastructure for digital conservation law**, enabling state actors, communities, and validators to record, verify, and claim acts of restraint. Validators could be authorised to certify PoC under defined protocols, while token issuance remains subject to clear rules of provenance, scope, and attribution.

While sector-specific, the Negawatt Protocol illustrates a broader legal transformation: how acts of conservation can be rendered provable, recordable, and, where appropriate, transactable. Critically, this occurs without reducing restraint to an offset or market commodity. Instead, the Negatrope affirms that in the post-combustion economy, the most lawful contribution may be the one that does not burn.

F. Visualising the Legal Landscape

This framework reflects the broader shift from harm-based to coherence-based legal doctrines, positioning the Negatrope as a proactive axis of legal innovation.

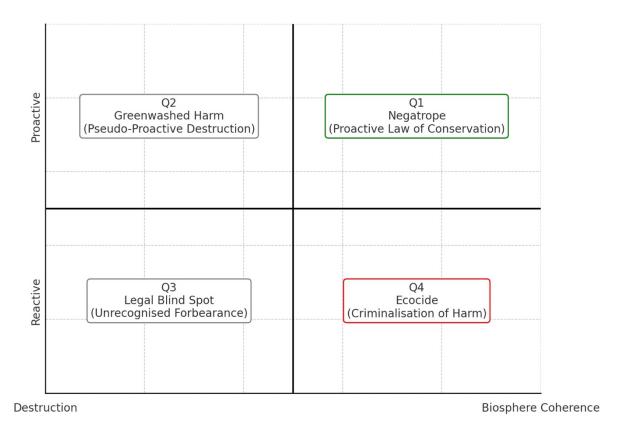


Figure 1: Mapping Legal Doctrines by Posture and Biospheric Coherence

This figure maps four legal quadrants based on their posture (reactive vs proactive) and biospheric impact (destruction vs coherence). The Negatrope occupies the top-right quadrant, representing a proactive legal doctrine of conservation. Ecocide is positioned as a reactive legal response to harm, while "Greenwashed Harm" and "Legal Blind Spots" highlight misleading or under-recognised responses to ecological decision-making.

G. Legal Mechanisms for Operationalising Restraint

The Negatrope framework is designed to integrate with established legal processes rather than replace them. Under Australia's *Environmental Protection and Biodiversity*Conservation Act 1999 (Cth), for example, PoCs could be formally recognised during controlled action referrals under Section 75, or considered by the Minister under Section 136

when assessing public interest and ecological sustainability.⁶⁷ At the state level, planning regimes such as the *Planning Act 2016* (Qld) or the *Environmental Planning and Assessment Act 1979* (NSW) already accommodate negotiated conditions, voluntary conservation areas, and modified development footprints.⁶⁸ In each case, a PoC could be introduced as part of an Environmental Impact Statement (EIS) or appended to development consents to formally record areas or activities deliberately excluded on ecological grounds.

Internationally, the Paris Agreement under Article 4 permits nations to record voluntary climate actions through NDCs.⁶⁹ PoCs could be incorporated into national emissions inventories to reflect avoided combustion from projects never executed or permanently reduced in scope. Likewise, in Indigenous Protected Areas (IPAs) or co-management zones under native title or treaty frameworks, SNIs could be used to document restraint decisions made through culturally informed governance. These legal mechanisms already exist—the doctrinal gap lies in recognising and evidencing what we conserve. The PoC renders restraint operational by providing verifiable documentation that can be embedded in law, policy, and institutional reporting systems.

⁶⁷ Environmental Protection and Biodiversity Conservation Act 1999 (Cth) ss 75, 136 (Austl.).

⁶⁸ Planning Act 2016 (Qld) s 45; Environmental Planning and Assessment Act 1979 (NSW) pt 4.

⁶⁹ Paris Agreement to the United Nations Framework Convention on Climate Change, art. 4, Dec. 12, 2015, T.I.A.S. No. 16-1104.

VII. CONCLUSION: FROM COMBUSTION TO COHERENCE

Environmental law has long evolved in response to crisis: oil spills, poisoned rivers, deforestation, extinction. These events have shaped regulatory norms because they are **visible**, **measurable**, and **morally indictable**. But in an era defined by climate destabilisation, mass extinction, and ecological overshoot, the most consequential acts may no longer be those we punish after the fact, but those we never see, because someone, somewhere, chose not to act destructively.

The **Negatrope** addresses a longstanding jurisprudential blind spot: the legal invisibility of deliberate ecological restraint. In an age defined by climate destabilisation and biospheric overshoot, such restraint is neither passive nor peripheral—it is foundational. Coupled with the **PoC**, the Negatrope transforms **absence into evidence**, enabling legal systems to recognise conservation not as an omission, but as an intentional, verifiable act of coherence. Rather than restating its definition, this conclusion affirms its doctrinal necessity: to extend environmental law beyond reactivity and toward a lawful architecture of foresight.

This framework is neither hypothetical nor utopian. Across energy markets, land use decisions, and sovereign governance, actors are already electing **not to extract, not to emit, and not to degrade**—yet these decisions remain legally invisible. The Negatrope offers a **legal vocabulary of conservation:** a principled structure and evidentiary toolkit for recognising the ecological and juridical value of deliberate non-exploitation. It complements the emerging architecture of environmental law—such as ecocide, which penalises wilful

destruction—and fills a doctrinal void left by market-based mechanisms like offsets, which often fail to credit primary restraint.⁷⁰

Recognising Withheld Harm

As the **post-combustion economy** takes shape, legal systems must evolve not only to deter harm, but to recognise **withheld harm**. This shift is not merely normative; it is operational. PoCs can be embedded in planning processes, recognised by regulators, encoded in public registries, and enforced through digital trust frameworks. They allow landholders, communities, and sovereigns to claim lawful credit for decisions that **preserve rather than exploit**, that **stabilise rather than degrade**.

Where ecocide imposes liability for ecological destruction, the Negatrope enables recognition for its lawful avoidance. Together, they complete a necessary legal spectrum: from punishing what degrades to affirming what conserves. Without this dual architecture, environmental law risks remaining reactive—forever chasing harm after the fact, instead of securing its lawful prevention.

A Law of Conservation

The Negatrope thus signals the emergence of a new legal sensibility, grounded not only in thermodynamics and jurisprudence, but in **biosphere coherence**. It extends the reach of environmental law from what has been damaged to what has been **deliberately spared**. And

⁷⁰ Andrew Macintosh et al., **Widespread Non-Compliance and Poor Performance in World's Largest**Nature-Based Carbon Removal Project, 46 Rangeland J. (2024), https://doi.org/10.1071/RJ24024.

in doing so, it lays the foundation for a world in which the most consequential act is often the one that never happened.

With instruments like PoCs and SNIs, the Negatrope provides a practical foundation for lawful restraint in both public and private governance. It does not require the reinvention of law—only its reorientation, toward what we conserve.

In an age where restraint may be our last safeguard, the Negatrope names what matters: the **law of conservation** itself.