The Balance

What follows is evidence of irrevocable harm being done to everyone alive, and to every living thing. To read it is to cross a threshold. To set it aside is to remain on this side of it. Both choices are legitimate. Make yours knowingly.

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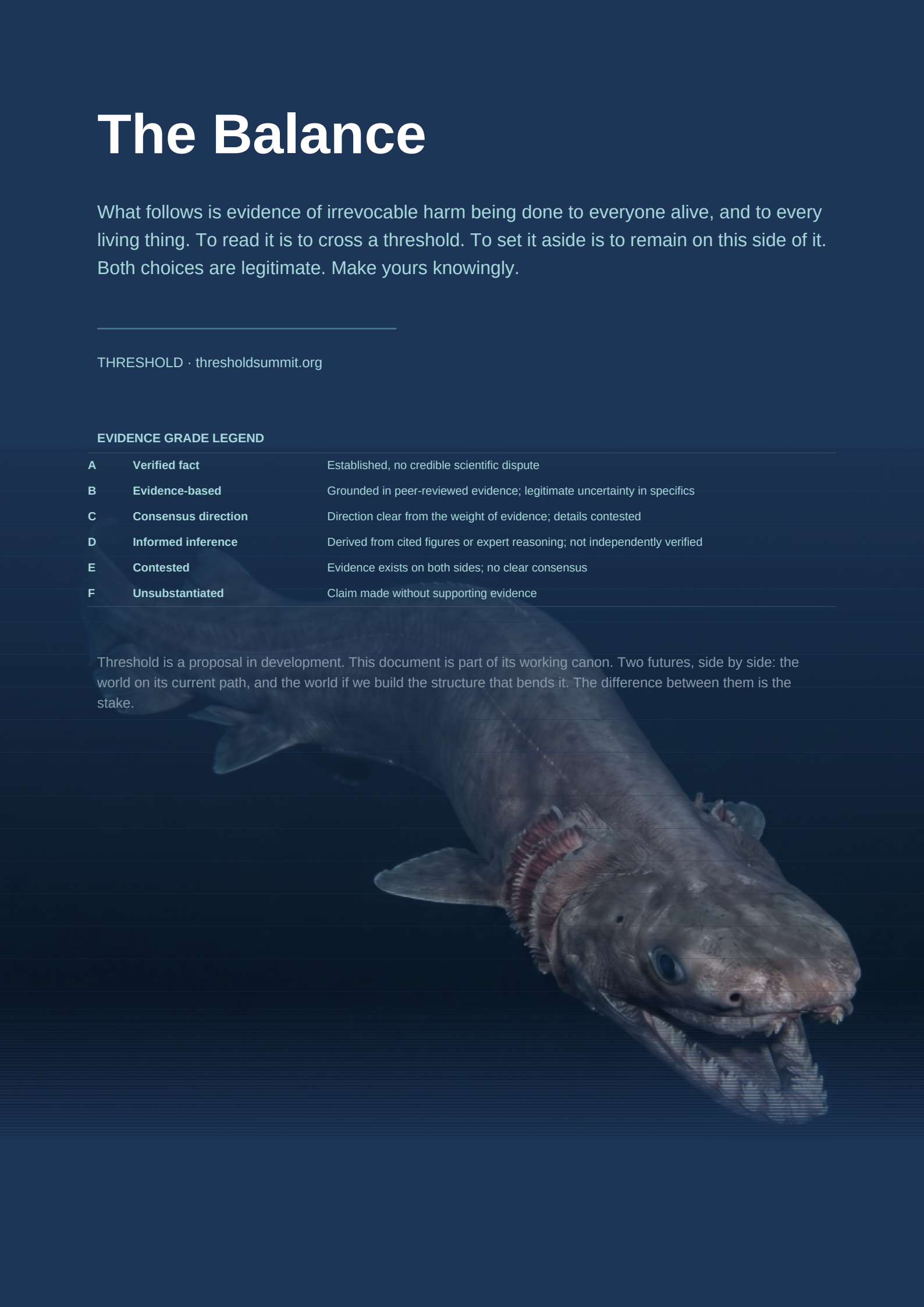
EVIDENCE GRADE LEGEND

A	**Verified fact**	Established, no credible scientific dispute
B	**Evidence-based**	Grounded in peer-reviewed evidence; legitimate uncertainty in specifics
C	**Consensus direction**	Direction clear from the weight of evidence; details contested
D	**Informed inference**	Derived from cited figures or expert reasoning; not independently verified
E	**Contested**	Evidence exists on both sides; no clear consensus
F	**Unsubstantiated**	Claim made without supporting evidence

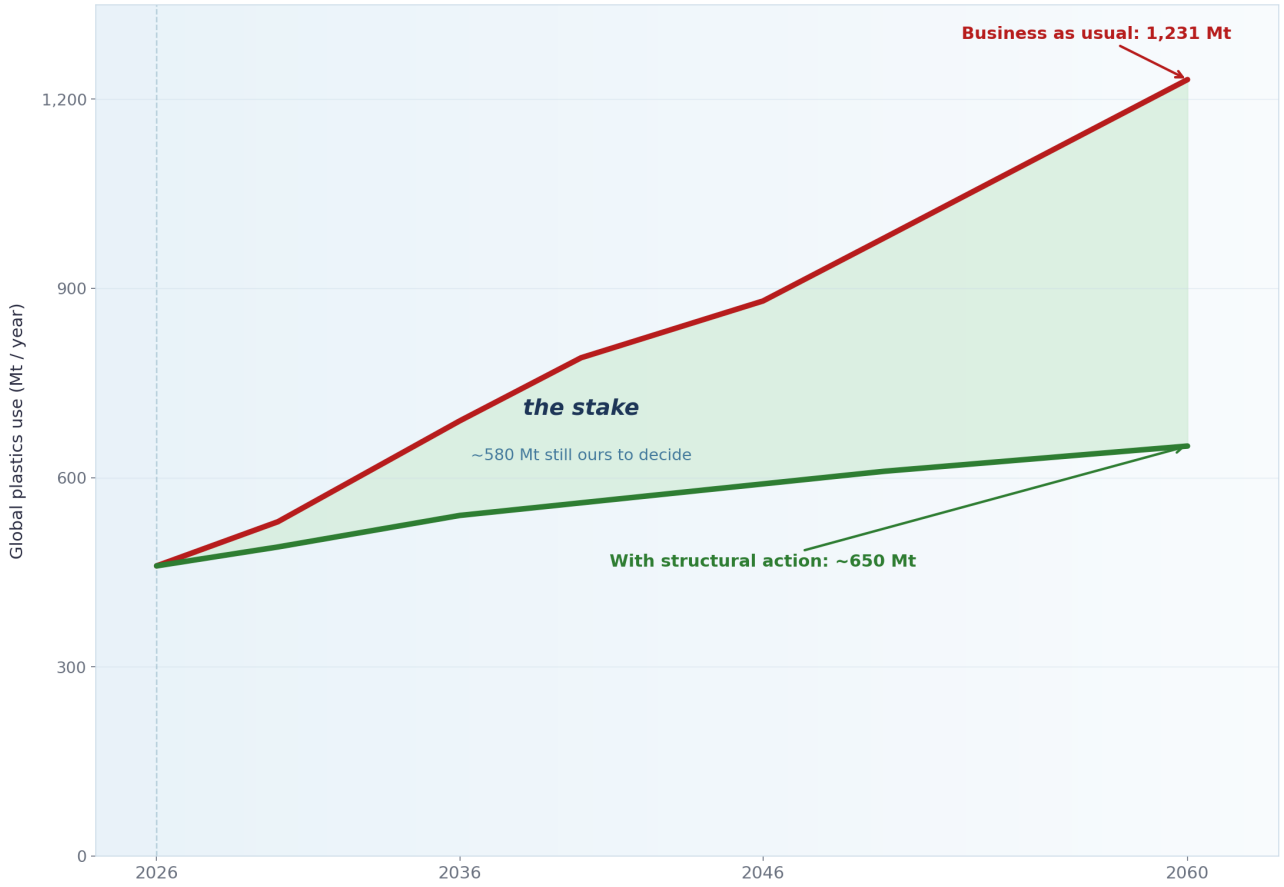
Threshold is a proposal in development. This document is part of its working canon. Two futures, side by side: the world on its current path, and the world if we build the structure that bends it. The difference between them is the stake.



THE COUNTERFACTUAL

Two futures, and the gap between them

The numbers below are not projections anyone chose. They are the mathematically expected outcome of a documented curve. The OECD, the IEA, and the peer-reviewed record provide the anchors. The gap between the two lines is the entire reason the programme exists.



Sources: OECD Global Plastics Outlook 2022 (460 to 1,231 Mt by 2060). Structural action trajectory: interpolated on OECD ambitious-policy scenario [D].

The upper line is business as usual: global plastics use nearly triples, from 460 million tonnes in 2019 to 1,231 million by 2060, rising every single year. The lower line is what structural action makes reachable. The shaded space between them is not a forecast. It is a choice that is still open, and it narrows a little with every year it is not made.

ROLE ONE: ALL OF HUMANITY

The species on autopilot

Play all of humanity as one actor, with the settings it actually has: hundreds of millions who care, no structure that converts caring into consequence, and a political system on electoral cycles far shorter than the harm. This is the world the programme's own Architecture describes: 700 million-plus engaged on social media, 250 million-plus petition signatures, 71 percent of EU consumers wanting refill options, and production rising every year regardless.

> Concern without architecture is not a force. It is weather.

At 10 years (to approximately 2036), business as usual

- Plastics use reaches roughly 690 million tonnes a year, about half again above 2019. [D, OECD baseline]
- A third and fourth global treaty round follow Busan and Geneva into failure, citing the same irreconcilable interests. [D] No binding production cap exists. [C]
- European recycling capacity lost between 2023 and 2025 is not rebuilt; the gap becomes permanent, and rebuilding later costs three to five times more. [C]
- Microplastic health studies accumulate past the point of reasonable doubt, but with no institution positioned to convert a causal finding into consequence, each study is absorbed into the noise. [D]
- The first producer-liability suits are filed and fought to a standstill on causation and admissibility, because the evidence was never built to survive the defence. [D]

At 20 years (to approximately 2046), business as usual

- Plastics use approaches 880 million tonnes a year. [D] Cumulative plastic added to the environment since 2026 exceeds 650 million tonnes. [D]
- The generation born with plastic in its blood is entering the workforce and politics, carrying a documented, involuntary body burden, and no accountable party. [D]
- Concern has not fallen; it has curdled. Absent an orderly channel, frustration finds disorderly ones.
- The public still votes, still recycles, still worries, and the curve still bends upward, because nothing in the architecture of daily life connects the worry to the outcome. [D]

> *"People do not act on what they know because there is nowhere for the action to go."*
> *Business as usual is that sentence, extended across two decades and eight billion people.*

ROLE TWO: THE PETROCHEMICAL MAJORS

The profit plan, taken to its conclusion

Play the other side: not defending litigation, but simply executing their growth strategy in a world where no one has organised against them. Business as usual is not a threat to the petrochemical majors. It is their base case, and a good one. As transport electrifies and fuel demand for engines softens, plastics are the designated growth engine of oil. The plan is already funded and pouring concrete.

The plan	The figure	Confidence
Plastics as the growth engine of oil	Petrochemicals are the largest single driver of world oil demand: over a third of demand growth to 2030, nearly half to 2050, adding approximately 7 million barrels a day	[C] IEA
Feedstock share rising	Petrochemical feedstock rises from roughly 12% of global oil demand toward 20% by 2050	[C] IEA
The market	Global plastics market approximately USD 650 billion in 2024; petrochemical-based plastics account for roughly 85% of it, growing to USD 800 billion-plus by the early 2030s	[C]
New capacity	More than 50 million tonnes of new annual polymer capacity coming online 2026 to 2029; built for 30-year paybacks	[C]
The narrative	Extended producer responsibility, "advanced recycling" and voluntary pledges keep the public focused on managing the problem rather than reducing production	[D]

Why business as usual is the producers' preferred future

Every element of the plan compounds. New capacity locks in decades of production. The recycling narrative absorbs the criticism. The treaty failures remove the only instrument that could cap volume. The consumer-responsibility story, running for fifty years, keeps the liability diffuse.

The plan does not need to win an argument.

It only needs the argument never to be organised. That is exactly what the absence of a Threshold-type structure guarantees. In the business-as-usual world, the majors book record margins on the very trajectory that the health and environmental record marks as catastrophic, and they book them for twenty years before the bill even begins to arrive. By which time the corporate form has been restructured to ensure the bill lands on a ring-fenced shell rather than the group.

This is not a moral failing of individuals. It is the operating logic of the system doing exactly what it rewards. The only variable that changes that logic is an organised counter-force at a scale the plan cannot absorb.

ROLE THREE: EVERY OTHER LIVING THING

The biosphere ledger

The third role has no lobbyist, no vote and no counsel. It is every other creature on earth and the systems that hold them, and it pays the externality that the first two roles generate. This is the ledger business as usual runs up, stated in the peer-reviewed record.

The living world

- Roughly one million seabirds and 100,000 marine mammals are killed by plastic each year, before any growth in this projection is counted. [C]
- Some 73 percent of North Atlantic fish have ingested plastic; ghost fishing nets continue killing for centuries after they are lost. [C]
- Plastic is now found from the summit of Everest to the deepest ocean trench, in Arctic sea ice, in soil where it may suppress crop root systems, and in the tissue of animals across every biome. [C]
- Accumulated plastic in rivers and oceans more than triples: from 140 million tonnes in 2019 toward 286 million by 2036, 372 million by 2046, and 493 million by 2060. [D, OECD anchors]
- By 2050 the ocean is projected on current trajectories to hold more plastic than fish by weight. [C]

The human animal, one creature among many

- Microplastics are in human blood, placental tissue and foetal brains. The children born today are the most contaminated generation in recorded history. [C]
- People with microplastics in their arterial plaques show a 4.5 times higher rate of heart attack, stroke and death compared with those without. [C, NEJM 2024]
- Male sperm counts have fallen roughly 50 percent in fifty years, with endocrine-disrupting plastic chemicals a named contributing factor. [B/C]
- Annual leakage to the environment doubles: from 22 million tonnes in 2019 to 44 million by 2060. The social cost of each tonne leaked runs EUR 1,380 to 3,400. [C, OECD/WWF/Ellen MacArthur]

The stake that cannot be restructured

A corporation can spin off its liability. A generation cannot spin off its body burden, and an extinct species cannot be re-listed on a healthier balance sheet. The biosphere ledger is the one account in this analysis with no bankruptcy trust, no channelling injunction and no appeal. What is lost in these two decades is, for the creatures that carry it, permanent. That asymmetry is the moral centre of the whole programme.

THE BALANCE

With Threshold, and without

The honest claim is not that Threshold reverses the trajectory. No single programme can, and the programme's own Risk Analysis says so plainly. The claim is a shift in probability, and the shift is large.

	Business as usual (no structure)	With a Threshold-type structure
Production	~690 Mt by 2036 rising to ~880 Mt by 2046; unbroken [D]	Same near-term curve, but a levy and liability path advancing in 2 to 3 jurisdictions [D]
Accountability	Diffuse; liability fought to a standstill on causation [D]	Evidence built upstream to survive the defence; a first producer-liability precedent becomes reachable [D]
Evidence record	Studies accumulate and dissipate into noise [D]	A verified, timestamped, legally usable archive dates what was known and when [C]
Financial logic	Record margins for two decades before any bill arrives [D]	Insurer pricing and a producer defection begin to change the logic from inside [D]
Probability of structural change within 10 years	5 to 20% [C]	35 to 65% [C]
The biosphere	The full ledger, unopposed	The same harm already locked in, but the reckoning arrives sooner and at the group, not a shell

What the balance actually weighs

Threshold does not undo the harm of the next twenty years. Most of that is already committed. What it changes is when the accounting starts and who it lands on. Business as usual defers the reckoning past the point where the worst damage is done, and past the entities that did it. A Threshold-type structure pulls the reckoning forward: into the window where it can still bend the curve, and onto the group rather than a ring-fenced successor.

That is the whole stake: not whether the bill is paid, but whether it is paid in time to matter, and by those who ran it up.

> *"It is almost always too late to prevent most of the harm. But it is never too late for accountability." The balance is the distance between a world that never holds the account, and one that does, a decade sooner than it otherwise would.*

WHAT FOLLOWS FROM READING THIS

You are now an informed witness

You have read the plan. Not ours: theirs. Fifty million tonnes of new capacity pouring concrete for thirty-year paybacks. A recycling narrative, fifty years old, designed to keep the pressure on consumers and off production. The liability architecture already pre-structured so the bill arrives on a shell rather than the group. This is not a conspiracy. It is a business plan, executed rationally, and it is working.

It works because there is no organised opposition at the scale the plan requires. The 700 million people who express concern about plastic pollution provide, in the current architecture, no counter-force. Concern without structure is not a force. It is weather. The petition is signed, the documentary is watched, the bag is reused, and the production curve bends upward regardless, because nothing in the architecture of daily life connects the concern to the outcome.

That is the gap this programme exists to close.

> From this point the distinction is not between those who care and those who do not. It is between those who act and those who do not.

Three acts. These specifically.

VOTE

for representatives who will price the externality, build the producer-liability framework, and end fifty years of consumer-responsibility misdirection. The producers are organised on this. The response needs to be too.

ADD YOUR VOICE

to the Threshold Poll when it publishes: ranked interventions, verified, impossible for policymakers to ignore at scale.

WRITE YOUR PLEDGE

in your own words, to the generation that inherits what this one decides. What you knew. What you did. What you hope, in spite of everything, they will inherit. The archive holds it.

The producers are organised. The case is built. The only question is whether the response is.

The case has crossed every threshold but yours. Whether you cross it is now observed. That is not a warning. It is an invitation, and the door is open.

THRESHOLD · thresholdsummit.org · The Threshold Initiative is an independent initiative. No funder influences its findings. Sources: OECD Global Plastics Outlook 2022 (460 to 1,231 Mt by 2060; leakage 22 to 44 Mt; ocean stock 140 to 493 Mt); IEA The Future of Petrochemicals; NEJM 2024

(Marfella et al., 7 March 2024); Ragusa et al. 2021; Landrigan et al. 2023; PlasticsEurope market data. Interim-year figures interpolated on OECD baseline anchors [D]. Threshold Effect concept (c) Andrew Henderson, Marans, France, 2026.