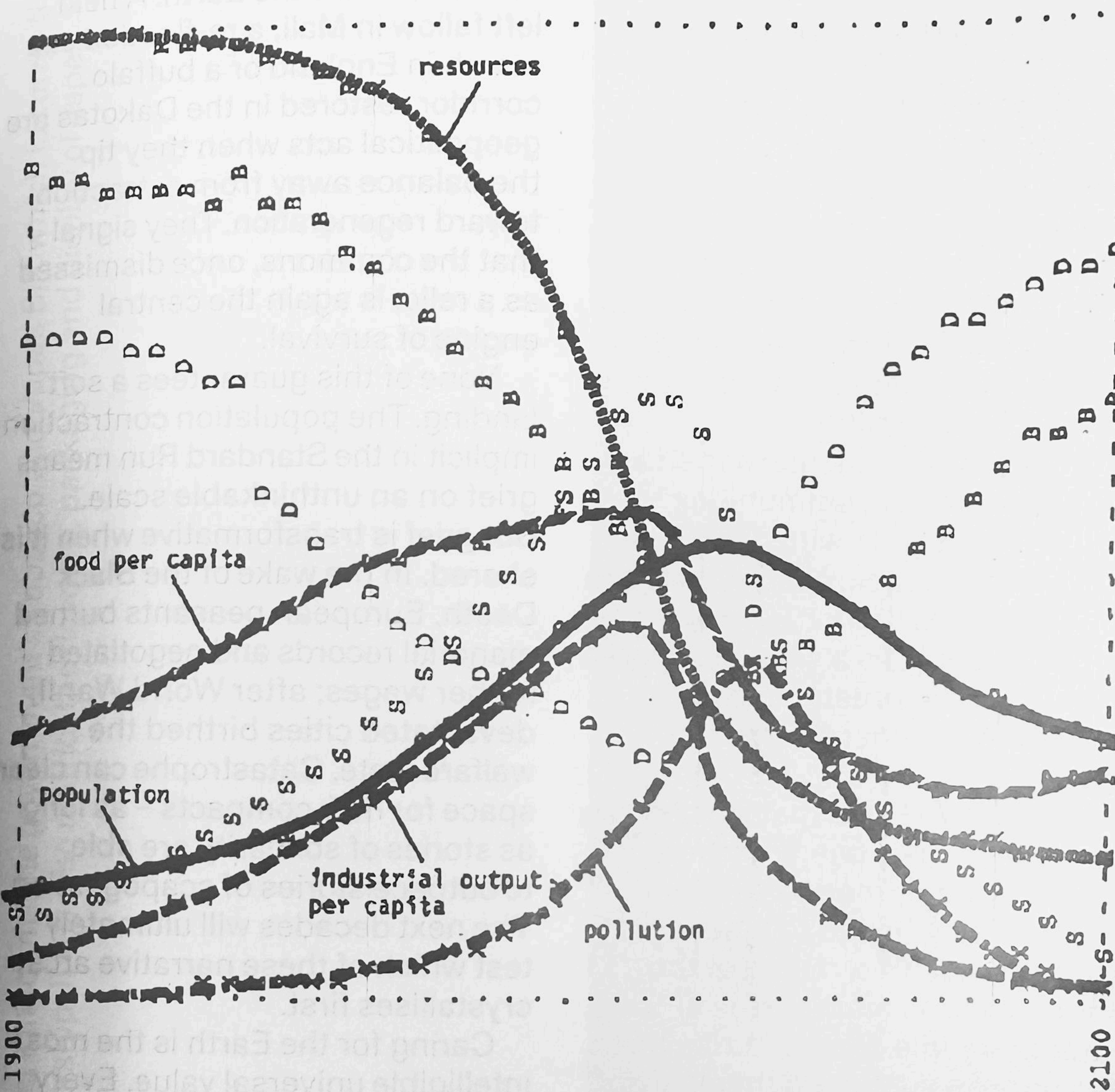


a Figure 35 WORLD MODEL STANDARD RUN



LEARNING TO LOVE THE STANDARD RUN Neo-Metabolism

WORLD MODEL STANDARD RUN, also known as the "business-as-usual" (BAU) scenario, is a simulation model developed for the Club of Rome's 1972 report on *The Limits to Growth*. At the time, the model was not intended as a prediction, but as a warning: unchecked exponential growth on a finite planet leads to collapse. It was a shocking moment at the dawn of cybernetic planning, but alternative futures still seemed attainable. The expectation was, now that this trajectory had been charted, policymakers would effectively pursue sustainable resource use, population stabilisation and deliberate technology transitions. That is not what happened.

Thirty years later, the research team compared real-world data with their projections and found that industrial output, pollution, resource consumption, and population growth were all tracking the Standard Run. Instead of corrective measures, the very conditions that produced the model's curve had become institutionalised in global neoliberalism, a political-economic ideology currently cruising toward its terminal phase. By 2020 – a full half-century after the report's publication – another audit confirmed the data still converged with the Standard Run. The once-viable "Stabilised Scenario" was deemed effectively impossible. Extractive capitalism, orchestrated environmental degradation and over-consumption had become hallmarks of the Anthropocene.

In the five years since, we have witnessed: a pandemic that has re-engineered supply chains and refocused every government on its relationship (and supply) with critical raw materials; a European land war triggering a global energy crisis; the genocidal destruction of Gaza; the abandonment or denigration of institutions like the ICJ and ICC; and a fascistic Washington that has weaponised trade, severed alliances and is preparing for territorial confrontations with China in the eastern and southern hemispheres. The consequences of pursuing business as usual are no longer theoretical.

For those living within the heart of Empire, it is almost impossible to process or accept the Standard Run forecast: industrial output and global population peak around 2030, by 2050 half of our species are gone (from 8 to 4 billion). The terror lies first and foremost in the anticipated suffering. This is compounded by the fear of the end of life as we have ever known it.

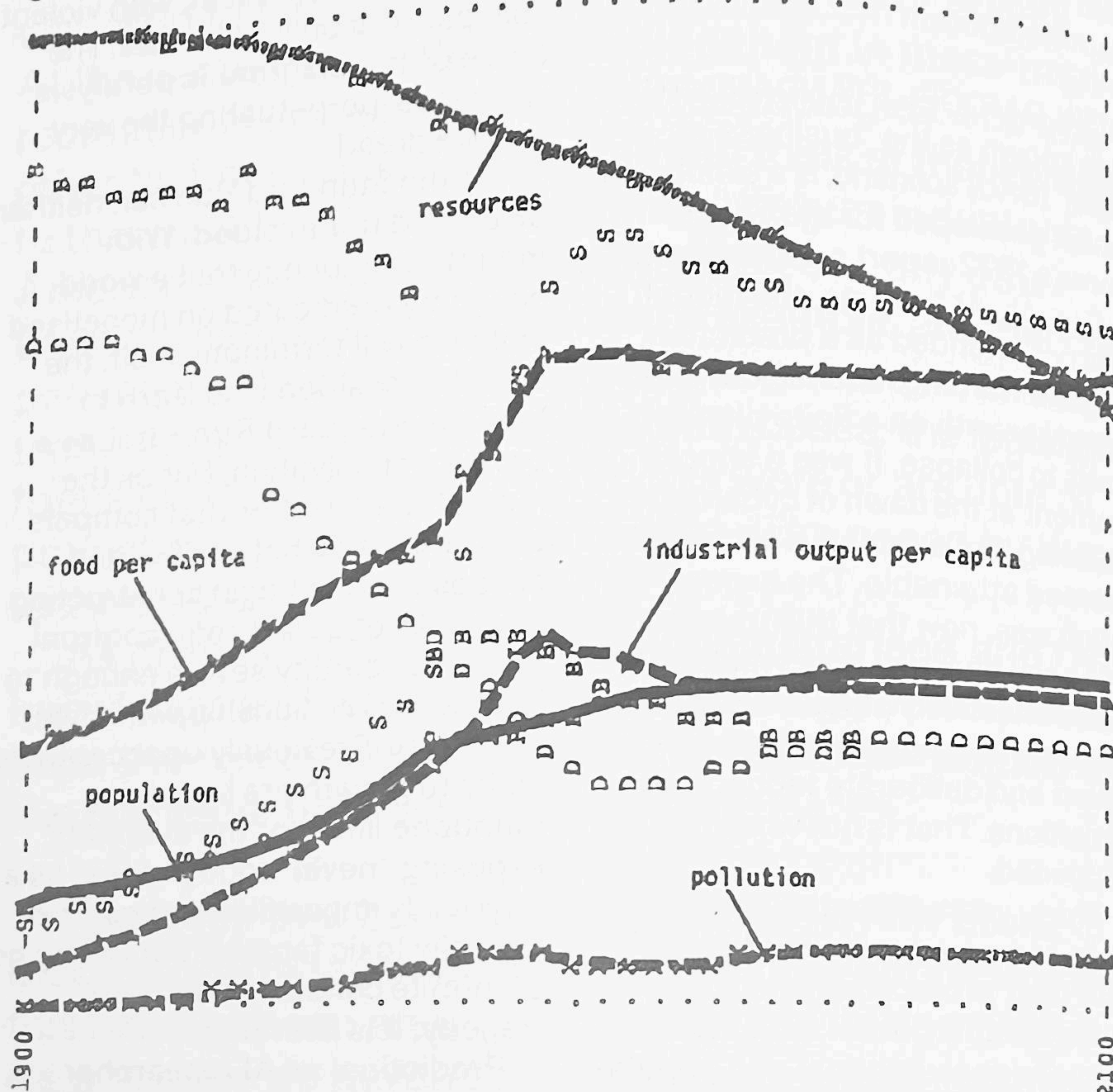
The Standard Run depicts a world designed for implosion, with violent collapse as a built-in feature. The curse of the diagram is paralysis: we freeze, perpetuating the very fate we dread.

Yet the Standard Run can neither be denied nor avoided. With mounting evidence that a world economy predicated on monetised violence will terminate itself, the sensible position is to learn to love the Standard Run – not as a promise of salvation, but as the inscrutable teacher that compels us to imagine what lies beyond collapse and to begin constructing it now. All of us will soon confront resource scarcity severe enough to redraw our relationship with material reality. Previously unacceptable limits to growth are becoming mundane limits of the everyday, exposing "never-enoughness" as a physically impossible and psychologically toxic fantasy. But letting go of infinite consumption is no tragedy; it is liberation.

Prediction, as AI researcher Blaise Agüera y Arcas argues, can be understood as the essence of intelligence. By that measure the 1972 model has been smarter than the civilisation it diagnosed. Its line on the graph has proved more reliable than half a century of diplomatic summits, carbon markets and green branding. One reaction is to marvel at the accuracy of the machine and accept its verdict as fate. Another is to ask why a civilisation equipped with such foresight still chooses suicide. The answer is brutally simple: for the minuscule fraction of humanity whose wealth insulates them from early impacts, running the engine until it breaks remains "optimal". In the short term, endless extraction preserves their advantage; in the long term, they imagine fortified refuges still serving as power centers. The rational calculus from a penthouse is an ethical monstrosity to everyone else.

Acceptance of the Standard Run is therefore not quietism but moral clarity. It refuses the twin narcotics of denial and techno-optimism. Neoliberalism itself can be read as a fifty-year coping strategy: an ideological doubling-down precisely because the limits were understood. Each update to the data – 1982, 2004, 2020 – has tightened the trap. Even the wild card of artificial super-intelligence offers no guaranteed reprieve; if anything, machine optimisation without a new ethic will accelerate extraction. People already compete for water with data centers. Acceptance is simply the clearing of mental fog, the psychological prerequisite for life-affirming design on a contracting planet.

C Figure 47 STABILIZED WORLD MODEL II



Human cultures have always generated end times stories: by staring at doom, societies clarified what ought to be cherished. Today, the apocalyptic narrative is no longer allegorical. Five mass extinctions demonstrate that planetary biology reboots periodically. However, the sixth will be unique: it is induced by a sentient species that knows it is the cause. Mortality, whether personal or civilisational, is a mirror; refusing to look blinds us to meaning. The emerging longevity movement, with its fetish for radical life-extension, reveals the same refusal. To deny death is to evade the reckoning, to remain in adolescent disbelief rather than become an adult species.

But there are alternatives, such as Jem Bendell's agenda for Deep Adaptation: Resilience, Relinquishment, and Restoration. What must be cultivated? What must be surrendered? What rituals of care and relationships – with soil microbes, waterways – must be repaired? All three moves depend on repudiating the religion of growth and saying yes to less. Enoughness is not austerity but the art of precise sufficiency: meeting real needs within biophysical limits, thereby shrinking harm and expanding freedom.

To translate that ethic into material practice, one must face power. The US pledged to invest a trillion dollars in their military over the coming three years – more than the next ten nations combined. BRICS realignments, European fragmentation and corporate-funded space programmes sketch a future of muscular blocs and brittle states.

Some polities may dissolve altogether while oligarchs erect network states with private satellites and hired battalions. Historical precedent is instructive: Venice, physically small yet unmatched in strategy and wealth for centuries, leveraged maritime trade, cultural soft power and a navy scaled precisely for deterrence. While Venice was a violent colonial power, any community serious about post-collapse survival can learn from studying it. Pacifism without deterrence is an invitation to pillage; militarism without ethics replays the cycle of domination. The challenge is to combine sufficiency with strategic competence – to be too resilient to crush, yet too reciprocal to threaten.

That synthesis begins at the level of narrative. Alliances built on mutual interest alone – cheap fossil fuel, open shipping lanes, Amazon data centers on every continent – shatter when external shocks redraw the balance sheet. Alliances built on shared values endure longer, but only if those values are felt viscerally. Fascist movements have long understood that myth outguns logic; stories of blood and soil can mobilise millions against their own interests.

A counter-myth must be equally vivid yet emancipatory, capable of binding heterogeneous actors across the lines of class, region, and species. Enoughness could be a cornerstone to a diversity of counter-myths because it reframes scarcity as relational (rather than competitive). Planetary limits are not a zero-sum battleground but a commons that flourishes when no

one takes more than their share – or more than Earth can regenerate.

Prototypes of such a commons-based civilisation flicker at the margins. Imagine communities that are simultaneously land-rooted and globally networked. Distributed ledgers track material flows; consent-based councils adjudicate conflict; every member trains in ecological maintenance and non-hegemonic defence. Trade is redesigned as nutrient exchange, closing loops rather than widening deficits. The ambition is not autarky but mutual interdependence: a lattice of communities resilient enough to withstand coercion yet permeable enough to share knowledge. Military capacity exists, but only as a shield proportionate to the threat, never as an engine of hegemony or expansion.

Sceptics will note that small-scale communes have been crushed before – sometimes by the very empires they hoped to ignore. Amitav Ghosh's retelling of the Banda Islands massacre is a cautionary tale. For centuries the Bandanese sustained themselves through a non-hierarchical spice trade among neighbouring islands. When the Dutch demanded a monopoly on nutmeg, the Bandanese refused. The Dutch responded with genocide and plantation slavery. The lesson is not that reciprocity is naïve, but that reciprocity without defence invites conquest.

Decolonisation thus requires more than preaching non-colonial ideals; it demands the capability to resist colonisers, utilising weapons, strategic alliances, robust exchange protocols and cultural influence that is potent enough to deter aggression.

Bottom-up movements rooted in the commons can gain such leverage if they pair moral vision with pragmatic strategy. Silvia Federici's call to re-enchant the commons insists on collective stewardship of land, water and reproductive labour. Yet even local commons must federate into larger protective constellations or risk being devoured piecemeal. The task, then, is to weave value-based alliances that are supple enough to adapt but strong enough to hold. Culture becomes infrastructure in that weaving. A meme, a rave, a seed-sharing ritual can ripple faster than armies can travel, embedding the grammar of enoughness in places the market cannot reach.

Diplomacy in this context is no longer the domain of states alone. It is the everyday art of aligning desires across differences. Interest-based treaties will persist

– grain for lithium, data for hydro-power – but their durability will depend on underlying narratives of mutual care for the Earth. A field left fallow in Mali, a re-flooded salt marsh in England or a buffalo corridor restored in the Dakotas are geopolitical acts when they tip the balance away from extraction toward regeneration. They signal that the commons, once dismissed as a relic, is again the central engine of survival.

None of this guarantees a soft landing. The population contraction implicit in the Standard Run means grief on an unthinkable scale. But grief is transformative when it is shared. In the wake of the Black Death, European peasants burned manorial records and negotiated higher wages; after World War II, devastated cities birthed the welfare state. Catastrophe can clear space for new compacts – as long as stories of solidarity are able to outpace stories of scapegoating. The next decades will ultimately test which of these narrative arcs crystallises first.

Caring for the Earth is the most intelligible universal value. Every being depends on the planet's health; every climate feedback reminds us that taking more than the biosphere can replenish is self-mutilation.

Enoughness names the ethic of that care. It asserts that dignity is compatible with limits, that prosperity measured in relational richness outlasts prosperity measured in throughput – and that an economy can be designed to be smaller tomorrow than today and still feel like abundance.

To love the Standard Run is not to celebrate collapse but to accept its verdict as the zero-point of honest design.

From here the question is no longer how to avert the inevitable but how to live with dignity through contraction and come out the other side with a civilisation that deserves to endure – one rooted in reciprocity, defended with proportional force, governed by transparent tools and animated by narratives that make restraint aspirational rather than punitive. The work begins wherever people choose: to meet a need without exploiting a neighbour; to surrender a convenience in exchange for a living river; or to plant a garden that will feed strangers after the grid goes dark.

The future that can be built on such gestures may never again reach ten billion bodies or trillion-dollar armies, but it could achieve something rarer: a species that graduated from adolescence by recognising precisely how much is enough.