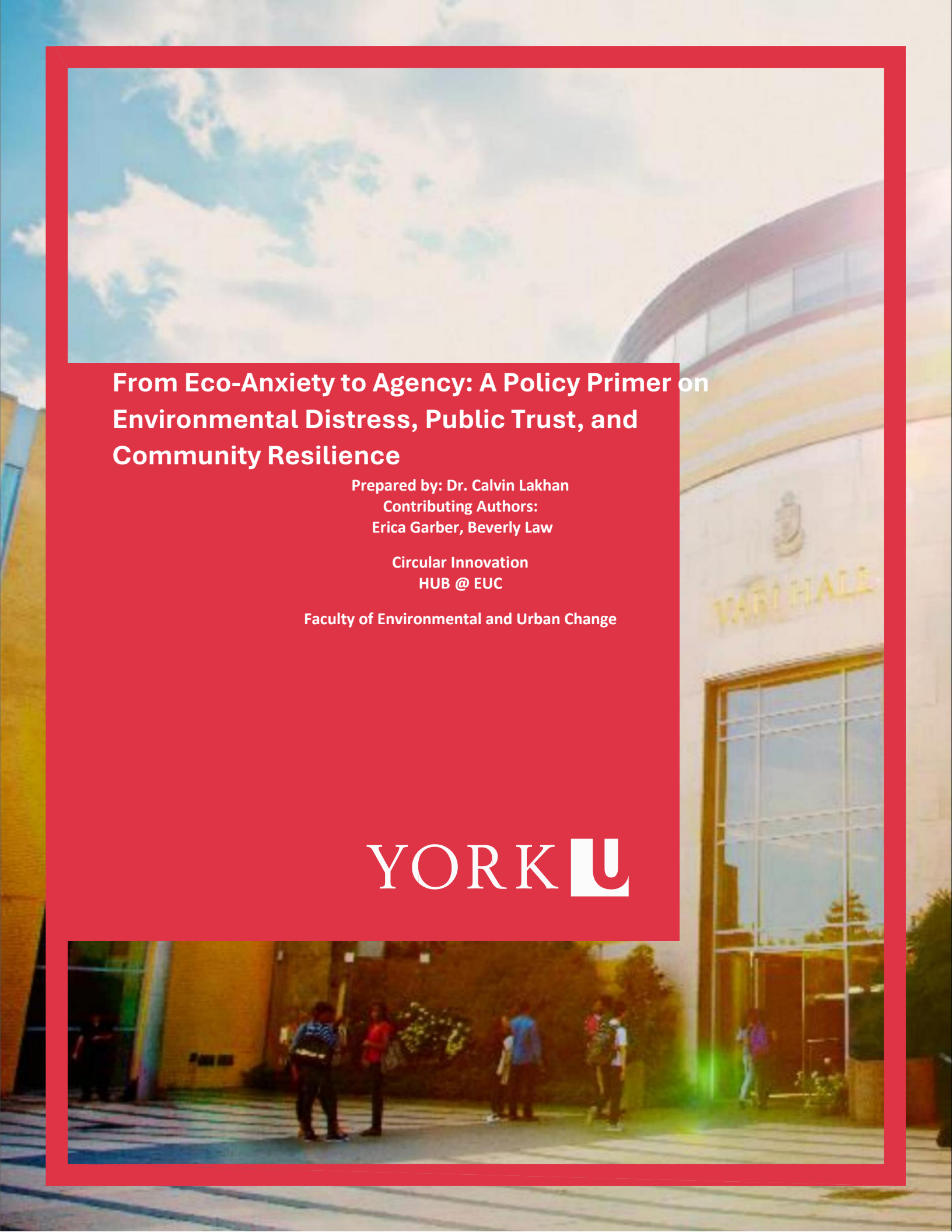




From Eco-Anxiety to Agency: A Policy Primer on Environmental Distress, Public Trust, and Community Resilience

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Executive Summary

Eco-anxiety — the worry, fear, grief, and distress people feel in relation to environmental degradation — has moved from the margins of environmental psychology into the centre of public health, education, and governance. This primer makes a single argument with wide application: environmental distress is shaped not only by environmental risk, but by the institutional conditions surrounding that risk. How institutions communicate, whether they act credibly, how they distribute responsibility, and whom they include all help determine whether public concern becomes constructive capacity or hardens into withdrawal and distrust.

The awareness–agency gap

The organizing idea of the primer is the awareness–agency gap: the distance between what people are made to know about environmental risk and what they are enabled to do about it. Public institutions have become highly effective at raising awareness and far less effective at supplying credible, visible, and equitable ways to act. Eco-anxiety intensifies when awareness outpaces agency. The same concern, met with credible pathways and visible action, becomes learning, preparedness, participation, and trust; left without them, it may develop into avoidance, cynicism, and despair.

A policy issue, not only a clinical one

Eco-anxiety is not inherently a disorder, and treating it primarily as one misreads its causes. For the most part it is a reasonable response to genuine risk, perceived institutional inaction, unequal exposure, and poor communication — causes that lie outside the clinic. Counselling has its place, but a response built only on individual treatment manages the symptom while leaving the structural causes intact. The appropriate response is distributed across education, communication, adaptation planning, participation, and governance, not concentrated in the health system alone.

Five systems carry the cost

Left unaddressed, eco-anxiety can impose real strain on the public systems policymakers run. It adds psychosocial demand to stretched health services; it shapes whether climate education produces capable citizens or disempowered ones; it bears on the public trust on which climate policy depends; it may help shape whether concern

becomes civic participation or withdrawal; and it can influence whether communities prepare for hazards or freeze. None of these can be delegated to a single department.

Where the levers sit

The framework applies to every public institution that communicates environmental risk, but its operational levers are not evenly distributed: local governments and education systems hold the most direct leverage, specialized sectors hold narrower leverage, and senior governments hold the structural levers on which the rest depend. The recommendations are weighted accordingly.

How institutions make it worse

Institutions widen the awareness–agency gap in recognizable ways: fear-based messaging that raises alarm without supplying agency; awareness campaigns that stop at awareness; symbolic or performative policy that acknowledges crisis without proportionate action; the offloading of systemic problems onto individual choices; and tokenistic engagement that invites voice without influence. Each erodes the trust and efficacy that convert concern into capacity, and each falls hardest on the communities already carrying the most exposure and the fewest resources.

The goal: convert concern into capacity

Good policy does not aim to make people less concerned about environmental harm; a population registering no concern would be the graver problem. The goal is to ensure that concern is met by knowledge, agency, social connection, and visible institutional action – so that it strengthens public systems rather than quietly eroding them.

How to read the evidence

The report's evidentiary boundaries – correlational evidence, an analytical lens rather than a demonstrated mechanism, design principles rather than validated interventions – are stated once and in full in the Scope section. They govern every chapter without being restated in each, and Chapter 10 specifies the research that would close them.

Five priority actions for institutions

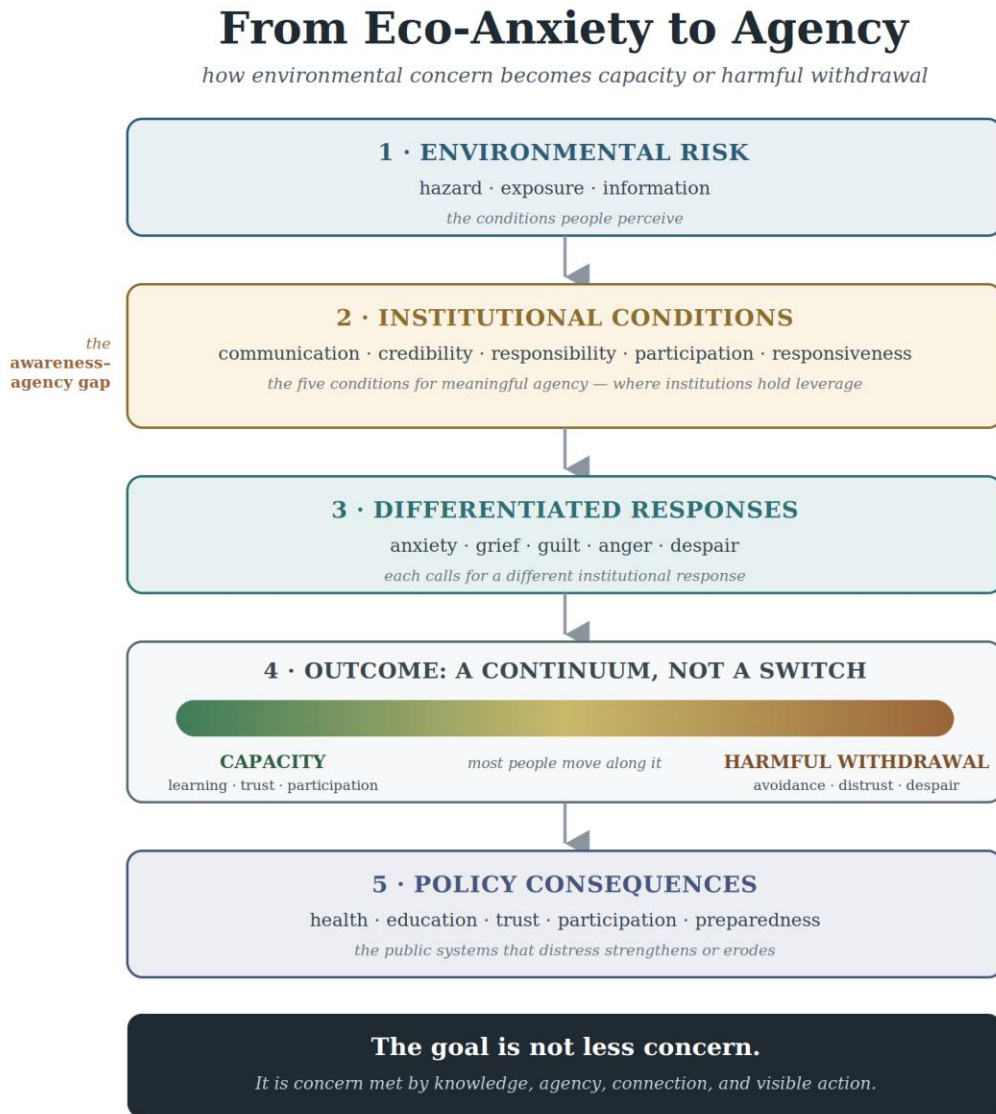
For decision-makers who need a starting point before reading further, five actions follow directly from the argument:

1. Audit major communications, campaigns, and curricula for “risk without agency” – messaging that raises alarm without supplying a credible way to act.

2. Establish minimum standards for transparent institutional action and visible progress reporting, so that stated commitments can be checked.
3. Build participation pathways with documented influence, distinguishing genuine engagement from consultation that cannot change a decision.
4. Integrate psychosocial resilience into adaptation and emergency planning, treating preparedness as a mental-health intervention as well as a physical one.
5. Use equity screening to tailor interventions by exposure, resources, and community context, rather than applying a uniform template.

These actions are supported by a practical tool. Appendix A distills the report's five conditions for meaningful agency into a one-page Institutional Agency Audit – a scoring instrument any institution can apply to a communication, campaign, curriculum, or consultation before it reaches the public. Readers who want the framework in its most compact, usable form should start there.

Graphical Abstract



*A research-informed policy primer · Dr. Calvin Lakhan · York University
Source: Author synthesis.*

The report's logic in one page. The arrows indicate the framework's analytical ordering, not a demonstrated causal chain; the institutional conditions shown are the levers institutions hold, which the five conditions for meaningful agency (Chapter 1) express from the public's side. Source: Author synthesis.

Scope, Evidence Base, and Limitations

This publication is a research-informed policy primer. It is built on a targeted narrative synthesis of peer-reviewed literature, foundational policy and participation scholarship, and selected applied and governmental sources. Its purpose is to generate practical, transferable policy-design principles for institutions — not to quantify causal effects, establish prevalence, or issue clinical guidance.

The evidence is drawn primarily from environmental psychology, public health, education research, environmental justice, and public-policy literature, and the underlying evidence base is international. The report itself is written for North American institutions — the school districts and boards, municipalities, health agencies, emergency managers, and senior governments of the United States and Canada — and its illustrations are drawn from across the continent. Within that audience the framework applies universally, but its operational levers are weighted: local governments and education systems hold the most direct leverage over the conditions this report describes, and the sector recommendations of Chapter 8 are proportioned to match. The framework is also intended to transfer beyond North America: readers in other jurisdictions should be able to substitute their own institutional equivalents without loss — though that transferability is asserted rather than demonstrated, and testing it is part of the research agenda in Chapter 10. One further disclosure: the waste-sector illustrations that recur through the report draw on the primary author's own research program; they are used as illustrations of a general structure — responsibility assigned without capacity — not as the evidentiary basis for it. Where the report draws on classic sources — on participation or individualization, for instance — it does so for conceptual grounding, and pairs them with more recent work where available.

Several limitations should be read alongside the argument. Eco-anxiety is measured inconsistently and the instruments are still maturing; much of the strongest evidence concentrates in particular countries and younger age groups, which limits how far prevalence findings generalize. The relationship between distress and action is not uniform — concern can produce engagement, withdrawal, or little change — and much

of the underlying evidence on how institutions shape distress is correlational, qualitative, or interpretive rather than experimental.

For that reason, the central claim is offered as a policy-relevant synthesis rather than a proven causal law. Environmental hazards, social conditions, personal experience, and pre-existing vulnerability shape environmental distress; institutional communication, responsiveness, participation, and infrastructure can amplify, attenuate, or redirect it. The awareness–agency gap is a framework for seeing where institutions hold leverage — not an assertion that institutions are the principal source of all environmental distress. The report is not a systematic review, a clinical guideline, or a prevalence study. Its sections on Indigenous experience draw on Indigenous-authored and Indigenous-led scholarship, and aim to engage that material with care.

READING THE EVIDENCE: A NOTE FOR REVIEWERS

Three boundaries govern every claim in this report. The evidence linking institutional conditions to environmental distress is largely correlational, qualitative, or interpretive rather than experimental. The awareness–agency gap is offered as an analytical lens, not a demonstrated causal mechanism. And the six pillars are design principles resting on uneven evidence — graded explicitly in Chapters 8 and 9 — not validated interventions. Chapter 10 sets out the research agenda that would test each of these boundaries.

Three evidentiary layers should likewise be kept distinct throughout. *Direct evidence*: an institutional condition has been tested in relation to environmental distress itself. *Adjacent evidence*: research on collective efficacy, trust, preparedness, participation, or risk communication supports the proposed mechanism, but in another domain. *Author inference*: the framework connects these literatures in ways not yet directly tested. The evidence grading in Chapter 8 is built on this distinction.

Introduction: Why Eco-Anxiety Is a Policy Issue

IN BRIEF

Eco-anxiety is a policy issue because institutions help shape it. The organizing problem is the awareness–agency gap: the distance between what people are made to know about environmental risk and what they are enabled to do about it. Dismissing distress and medicalizing it both fail for the same reason — each detaches the emotion from the public conditions that generate it. This chapter defines the gap, sets out the five conditions for meaningful agency (operationalized as a practical audit in Appendix A), and names the three stakes: public health, institutional trust, and civic participation.

A school board adopts a new climate literacy curriculum. The material is scientifically accurate: students learn about rising temperatures, wildfire smoke, flooding, biodiversity loss, and the narrowing window for action. Within a term, teachers begin reporting that some students leave the unit frightened, angry, or convinced that nothing they do matters. Parents ask whether the content is too bleak. Administrators ask whether the problem is the curriculum, the students, or the politics surrounding climate change. The problem lies elsewhere: the curriculum increased awareness without increasing agency.

Versions of this scene now play out across public institutions. A municipality on the Gulf Coast publishes a climate adaptation plan that catalogues local hazards in careful detail while saying little about what residents can expect the city itself to do. Public health agencies from Phoenix to Montreal issue escalating heat and smoke advisories to neighbourhoods that have no cooling infrastructure. A waste reduction campaign leans on guilt — bins, footprints, personal shame — while the systems that determine whether materials are actually recovered remain invisible to the household. A youth climate council is convened, photographed, and thanked, then excluded from every decision that follows. In each case, the institution has succeeded at communicating risk and failed at distributing capacity.

Two terms require definition before the argument proceeds. The report's technical umbrella term is *environmental distress*: the full family of worry, fear, grief, guilt, anger,

and despair people experience in relation to environmental degradation and ecological risk. *Eco-anxiety*, the term the public debate has settled on and the one this report carries in its title, names that family's most visible member — in the stricter usage of the research literature, the anticipatory form concerned with possible futures (Coffey et al., 2021). Where the report uses eco-anxiety loosely it does so as shorthand for the broader family; where the distinction matters, the text separates anticipatory anxiety, ecological grief and solastalgia (Cunsolo & Ellis, 2018; Albrecht et al., 2007), responsibility-oriented guilt and anger, the psychological impacts of direct hazard exposure, and impairing distress that disrupts daily functioning. Chapter 2 develops the full taxonomy. One caution runs through the whole report: environmental distress is not one emotion, and policy responses that treat it as one will misfire.

1.1 The Awareness–Agency Gap

Public institutions have become steadily more effective at communicating environmental risk. They have been far less effective at giving people credible, visible, and equitable ways to respond. Eco-anxiety tends to intensify when awareness rises faster than agency — a condition this primer calls the *awareness–agency gap*, and the organizing problem of every chapter that follows.

“Agency” is used throughout this report in a deliberately specific sense, because it is doing real analytical work. It is best understood not as a single quantity but as five conditions — three held by individuals and communities, two supplied by institutions — set out in the box below. Distinguishing them matters for diagnosis. A person may have strong personal efficacy yet no practical capacity to act; a community may have both yet no meaningful voice in the decisions that affect it; a government may invite participation yet show no responsiveness. Each gap produces a different shortfall, and each calls for a different institutional remedy. When the report says agency is “absent,” it means that one or more of these five conditions is missing — not that people lack willpower.

CONDITIONS FOR MEANINGFUL AGENCY: FIVE DIMENSIONS

Individual and collective agency — the capacities people hold:

Personal efficacy — a person's belief that their own actions can make a difference.

Practical capacity — actual access to the resources, infrastructure, time, and knowledge an action requires.

Collective support — acting alongside others, and the shared belief that a group can accomplish what no individual could alone.

Institutional conditions that make agency consequential — what lets that capacity matter:

Meaningful participation — a genuine ability to influence the decisions that shape one's environment, backed by transparent action and accountability.

Institutional responsiveness — visible, credible action by the institutions responsible, so that individual and collective effort is met rather than wasted.

These five conditions do practical work throughout the report, and they are operationalized directly in Appendix A, which converts them into a one-page Institutional Agency Audit — a scoring tool for testing any public-facing initiative against them before it launches.

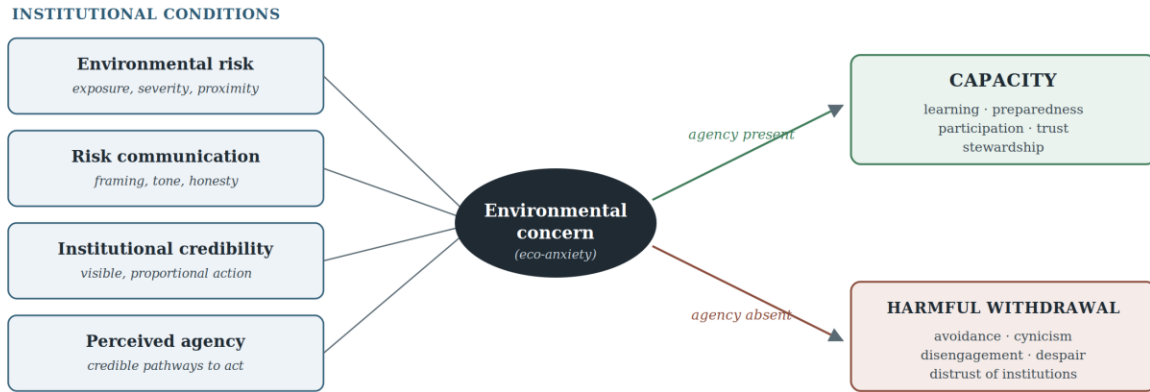
The gap has a long theoretical pedigree. Four decades of fear-appeal research, synthesized in the extended parallel process model, converge on a two-factor calculus: when perceived threat is high and perceived efficacy is low, audiences manage the fear rather than the danger — through avoidance, denial, and reactance — while the same threat paired with efficacy motivates protective action (Witte, 1992; Witte & Allen, 2000). Meta-analysis confirms that fear appeals can be effective, and are most reliably so when accompanied by efficacy messages (Tannenbaum et al., 2015); in the climate domain specifically, fear-based imagery has been found to raise the perceived importance of the issue while reducing viewers' sense of being able to act on it (O'Neill & Nicholson-Cole, 2009). Decades of environmental messaging have compounded the problem by individualizing responsibility, translating systemic challenges into instructions to plant a tree, buy differently, or sort waste more carefully (Maniates, 2001). The waste sector offers a telling illustration: municipal investment in recycling promotion and education does not, on its own, reliably improve recycling performance, because outcomes depend on system design, infrastructure, and material markets

rather than household enthusiasm alone (Lakhan, 2014). People are often handed responsibility without capacity, and the emotional residue of that transaction is the subject of this report.

What the awareness–agency gap adds to this pedigree should be stated plainly, because the construct has close neighbours. The fear-appeal literature operates at the level of the message; response-efficacy and “hope gap” constructs describe audiences; Stoknes's account of apocalypse fatigue describes a communication culture (Stoknes, 2015). This report scales the same two-factor logic to the institutional and governance level: it treats efficacy not as a message attribute but as a public condition, decomposes it into the five conditions above — two of which only institutions can supply — and attaches an instrument (Appendix A) for auditing it. The claim is not that the underlying psychology is new. It is that the institutional half of the calculus has been the neglected half.

Figure 1-1 sets out the model that runs through the chapters ahead. Four conditions — environmental risk (its severity and proximity), the quality of risk communication, institutional credibility, and perceived agency — combine to shape environmental concern. That concern is best understood not as a switch with two settings but as a continuum: at one end, concern that has become learning, preparedness, participation, and trust; at the other, concern that has hardened into avoidance, distrust, disengagement, and despair. Most people sit somewhere between, and can be moved either way — worried but active, informed but disengaged, anxious while still participating. Institutional conditions shape where people sit and which direction they move.

What turns the same concern into capacity or collapse



Concern moves along a continuum; institutional conditions shape where people sit and which way they move.

Figure 1-1. The awareness–agency gap. Institutional conditions shape whether environmental concern moves toward capacity or toward harmful withdrawal. Environmental risk enters the model as a perceived condition rather than an institutional lever, and the concern at the model's centre is not itself pathological – the continuum describes what it can become. Source: Author synthesis.

1.2 Why Eco-Anxiety Has Entered the Policy Conversation

Eco-anxiety spent its first decades as a niche concept in environmental psychology. Its migration into public health, education, and policy discussion reflects a convergence of forces rather than a fashion. Climate impacts are more visible and more local. The 2021 heat dome killed hundreds of people across British Columbia, Washington, and Oregon; two summers later, smoke from distant wildfires turned the sky over New York City orange and closed outdoor programs across the Midwest. Smoke days, flood notices, and heat warnings have turned ecological risk from an abstraction into a recurring household experience. Young people encounter climate information earlier and more often than any previous generation, while the emotional-support frameworks surrounding that information have not kept pace. Social media compresses distant disasters into continuous daily exposure. Institutions, meanwhile, communicate urgency at a volume their visible actions rarely match.

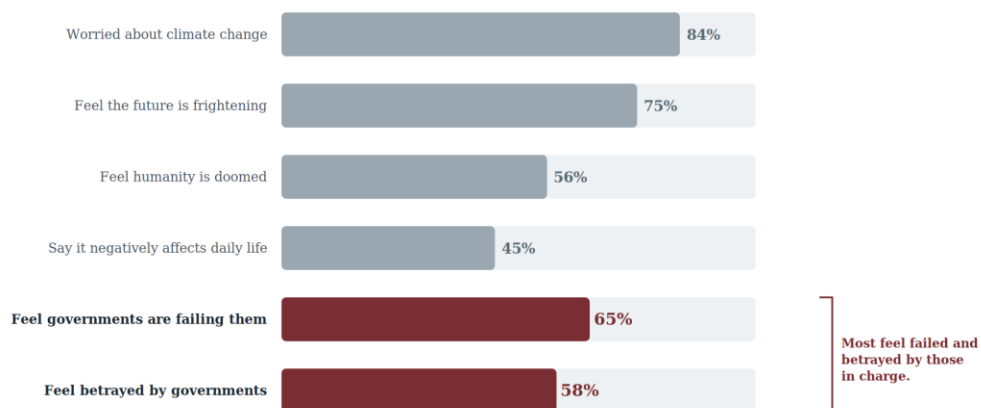
WHY THIS MATTERS NOW

Climate impacts have become recurring household experiences rather than distant projections. Environmental education has expanded faster than the emotional-support frameworks around it. Social media compresses global crisis into continuous personal exposure. Public institutions communicate urgency at a volume their visible actions rarely match. Each of these trends is intensifying, and together they make it likely that the share of the public processing environmental risk emotionally will keep growing — with or without policy attention.

The scale of the phenomenon is no longer speculative. A large multinational survey of 10,000 young people aged 16 to 25 across ten countries — the United States among them — found that 59 percent were very or extremely worried about climate change, three-quarters agreed that the future is frightening, and more than 45 percent said these feelings interfered with daily functioning (Hickman et al., 2021). The study's most consequential finding for policymakers, however, was not prevalence. Distress was strongly associated with perceptions of inadequate government response and with feelings of betrayal by the adults and institutions responsible for acting. Eco-anxiety, in other words, is not only an emotional state. It is a governance signal — a running public judgment about whether institutions are honest, responsive, and capable of acting at the scale of the problem.

Eco-anxiety is a governance signal, not only a climate one

how 16-to-25-year-olds feel — selected findings from a 10,000-respondent survey across ten countries



Source: Hickman et al. (2021), *The Lancet Planetary Health*. Figures rounded; "worried" = at least moderate worry.

Figure 1-2. Selected findings from Hickman et al. (2021), a survey of 10,000 people aged 16–25 across ten countries. Percentages are rounded; “worried” denotes at least moderate worry. Source: chart by author from published figures.

1.3 The Limits of Treating Eco-Anxiety as a Private Problem

The instinctive institutional response to distress is referral: route the problem to counselling, and treat it as a private matter between an individual and a clinician. Some environmental distress genuinely requires that support, and mental health systems should be prepared for the demand (Clayton et al., 2017). As a primary framing, however, referral misreads the problem. Most ecological worry is not pathological. It tracks real conditions, and it can coexist with — and even support — constructive engagement (Verplanken & Roy, 2013). When the drivers of distress include genuine ecological risk, perceived institutional inaction, unequal exposure, and poor communication, a response built on individual treatment manages the symptom while leaving every cause intact.

The health literature itself has reached the same conclusion. Climate-related mental health effects emerge from interacting social, economic, and environmental systems, and they call for systems-level responses rather than clinical services alone (Berry et al., 2018). Education policy, communication practice, adaptation planning, and governance reform belong in the response alongside counselling — not as supplements to it, but as the parts that address causes.

1.4 Two Policy Mistakes: Dismissal and Medicalization

The policy conversation tends to make one of two mistakes. The first treats eco-anxiety as exaggerated emotion: youth fragility, media panic, an overreaction that better information or simple maturity will correct. The second treats it as a private clinical disorder, detached from the environmental conditions that produce it. Both framings fail for the same reason. Each separates distress from the public conditions that help generate it.

Dismissal is empirically weak and strategically self-defeating. Distress tracks exposure — to smoke, heat, flooding, and the institutional responses that follow — and people whose concerns are waved away by public institutions tend to trust those institutions less. Dismissal thereby deepens the very alienation that intensified the distress in the

first place. Medicalization makes the opposite error and arrives at the same destination. It converts a largely rational response to genuine risk into an individual symptom, shifting attention from structural causes toward personal coping. It also obscures something the evidence increasingly makes clear: climate emotions are differentiated, and their consequences diverge. Anger at institutional failure predicts engagement, while unsupported anxiety and despair predict withdrawal and poorer well-being (Stanley et al., 2021). A policy regime that suppresses or pathologizes all environmental emotion forfeits the constructive forms along with the corrosive ones.

The useful question, then, is not whether eco-anxiety is real, or whether people should be concerned about environmental degradation. The useful question is why some forms of concern become learning, preparedness, and civic participation, while others become paralysis, distrust, or despair. The answer often turns less on the individuals involved than on the conditions around them: the intensity of exposure, the supports available, the credibility of institutions, and above all the agency people hold.

1.5 What Is at Stake for Public Institutions

Three stakes make eco-anxiety a policy matter rather than a cultural curiosity. Chapter 4 gives each a full accounting; they are only introduced here.

The first is public health and well-being. Environmental distress adds psychosocial demand to health systems that are already strained, and it carries a preparedness dimension that planning routinely ignores: concerned people are often motivated to prepare for heat, smoke, and flooding, while overwhelmed people avoid planning altogether. Every advisory a public health agency issues lands somewhere on that spectrum, whether or not the agency has thought about where.

The second is public trust and institutional legitimacy. Meta-analysis across dozens of studies finds trust in public institutions consistently associated with whether people accept and act on climate policy, though effect sizes vary by context (Cologna & Siegrist, 2020). Eco-anxiety intensifies wherever people perceive a gap between official recognition of environmental risk and visible public action — declared targets without implementation plans, consultations without consequences, campaigns without infrastructure. Policies that depend on public cooperation cannot survive public disbelief.

The third is participation and resilience. Environmental concern is among the most powerful motivators of civic engagement available to democratic societies when it is paired with credible pathways for action (Ojala, 2012); without them, the same concern can decay into avoidance, fatalism, and disengagement. And it does so unequally: communities already facing heat, smoke, flooding, or contamination carry ecological concern as a compounding burden, with fewer resources and less institutional attention. Tokenistic participation deserves particular mention, because it has been recognized as a distinct failure mode for more than three decades (Hart, 1992); the climate era has simply raised its cost. Distress, like exposure, is an equity issue.

1.6 What This Primer Sets Out to Do

The chapters that follow develop the argument in three movements. Chapters 2 through 5 establish the terrain: what eco-anxiety is and is not, where it comes from, why it matters for policy, and how unevenly it is distributed across age, exposure, and social position. Chapter 6 turns the lens on institutions themselves, examining how fear-based messaging, symbolic action, individualized responsibility, and tokenistic engagement actively make the problem worse. Chapters 7 through 10 are constructive, setting out strategies for converting distress into agency, recommendations by sector, an implementation framework, and the research agenda that remains.

HOW TO READ THIS PRIMER

This primer is written for policymakers, educators, public health officials, municipal leaders, and community organizations seeking to understand eco-anxiety as a public issue rather than a private weakness. It does not provide clinical diagnosis or therapeutic guidance, and nothing in it substitutes for professional care where care is needed. Its concern is institutional: how public bodies can reduce harmful distress by improving communication, strengthening agency, addressing inequity, and creating credible pathways for participation. It is best used as a framing and diagnostic resource paired with local design work, and a companion executive brief distills its actionable core for readers who need the argument in a few pages.

1.7 Implications for Practice

The argument of this chapter carries immediate operational consequences. Each is developed fully in Chapters 6 through 9, but the direction of travel is worth stating at the outset.

Table 1-1. First-order implications of the awareness–agency gap, by audience. Source: Author synthesis.

For this audience	The implication
Municipalities	Do not communicate risk without pairing it with visible action pathways and a clear account of what the institution itself will do.
Schools and school boards	Pair climate literacy with emotional support, efficacy-building, and age-appropriate forms of agency. Never assign children responsibility for systemic problems.
Public health agencies	Design heat, smoke, and flood advisories around capacity — what recipients can actually do and access — not hazard notification alone.
Waste and recycling programs	Avoid guilt-based messaging where system performance lies outside household control. Communicate what the system does with materials, not only what households owe the system.
Youth engagement bodies	Do not convene youth voice without a real decision pathway. Tokenistic consultation damages trust more than no consultation at all.

The next chapter supplies the vocabulary that makes the problem tractable, because the first step in closing the gap is knowing which emotion an institution is actually facing.

Defining Eco-Anxiety and Related Concepts

IN BRIEF

Eco-anxiety is an umbrella over distinct emotions — anticipatory anxiety about the future, grief and solastalgia over what is already lost, guilt and anger about responsibility, and the terminal states of despair and paralysis. Each calls for a different institutional response, and misnaming the emotion misdirects the intervention: reassurance does nothing for grief, and counselling does nothing for well-founded anger. Anger is the emotion most associated with action; despair is the hardest to reverse. Table 2-1 maps each term to the response it actually calls for.

Three residents of the same city would all, if surveyed, report feeling anxious about the environment. The first is sixteen and has just finished a climate unit at school. Her distress is anticipatory, fixed on a future she expects to inherit and does not believe she can influence. The second is seventy-one and has watched the wetland behind his house drained, filled, and built over across four decades. His distress is not about what might happen; it is about what is already gone. The third runs her household by the book — sorting, composting, carrying reusable bags — and has just read that a meaningful share of what she sorts is ultimately landfilled. Her distress is a compound of guilt, betrayal, and anger at a system that asked for her effort and then wasted it.

A survey instrument records all three as eco-anxiety. A program built on that record will fail at least two of them. Reassurance about the future does nothing for grief over a vanished wetland. Counselling alone does not address the institutional source of anger that is, on the facts, well founded. Researchers now distinguish dozens of climate-related emotional states (Pihkala, 2022), but policymakers do not need the full map — only the handful of distinctions that change what an institution should do. Four organize this chapter: distress about what may happen, distress about what is already lost, distress about responsibility, and the states in which concern stops working altogether. Two further categories sit alongside these emotional families and should not be conflated with them: the clinical sequelae of direct hazard exposure — the post-traumatic stress, depression, and anxiety that follow fire, flood, and heat, examined in

Chapter 3 — and impairing distress of any form, which disrupts functioning and warrants clinical support (Section 2.5).

2.1 The Anxiety Family: Distress About What May Happen

Eco-anxiety in the strict sense is anticipatory. Its object is a possible future — degraded living conditions, displacement, diminished prospects for one's children — rather than a present event. Climate anxiety is its most prominent member, global in scope and saturated with political conflict, and the one for which validated measures now exist, distinguishing ordinary concern from genuine impairment (Clayton & Karazsia, 2020). Conceptual work in the field is consistent on one point: eco-anxiety is not, in itself, a disorder (Pihkala, 2020a).

One feature of anticipatory distress matters especially for policymakers. Worry about an event can be settled by the event. Worry about a trajectory can be settled only by a change in trajectory — and institutions can materially influence the trajectory people perceive. No coping strategy, however well taught, can resolve that fear on its own. Anticipatory distress is therefore the emotion over which public institutions hold the most direct leverage.

2.2 Grief and Solastalgia: Distress About What Is Already Lost

Ecological grief is mourning. Its object is loss rather than risk: species that are gone, landscapes that have changed, seasons that no longer arrive on time, livelihoods and forms of knowledge that no longer fit the land that sustained them (Cunsolo & Ellis, 2018). Solastalgia names a closely related experience — the distress of watching one's home place degrade while still living in it, a homesickness that occurs without leaving home (Albrecht et al., 2007).

These terms did not come out of seminar rooms. Cunsolo and Ellis built the case for ecological grief on years of work with Inuit communities in northern Canada watching sea ice thin and travel routes close, and with farming families in the Australian Wheatbelt watching drought remake land they had worked for generations. Albrecht coined solastalgia among residents of Australia's Upper Hunter Valley, living amid open-cut coal mining and persistent drought — people who had not moved an inch and yet no longer recognized home. The grounding matters, because it shows these are not exotic emotional states. The residents of coastal Louisiana, where the parishes have

been losing land for decades and the community of Isle de Jean Charles has already been relocated, know them. So do the towns of western fire country — Lytton, British Columbia, set a national heat record one day and burned the next — and the Great Lakes communities watching winters shorten and ice thin within living memory. Any community that has lost a shoreline, an orchard belt, a fishery, or a familiar winter knows them, named or not.

The policy mismatch here is specific and common. Risk communication, preparedness campaigns, and reassurance about the future are instruments aimed at anticipatory anxiety, and they do nothing for grief; a person mourning a drained wetland is not soothed by a flood-readiness pamphlet. Grief responds to acknowledgment, commemoration, restoration, and continuity of place and practice. Recovery programs that rebuild infrastructure while ignoring loss leave the emotional damage standing, and communities notice the omission. The stakes are highest for Indigenous and land-connected communities, where environmental loss is entangled with culture, sovereignty, and identity — Chapter 5 returns to this at length.

2.3 Guilt and Anger: Distress About Responsibility

Guilt and anger both concern responsibility, but they assign it in different directions. Eco-guilt points inward, and much of it is manufactured by communication choices rather than discovered in people's consciences. The individualization of responsibility described in Chapter 1 assigns households a moral burden proportioned to problems they did not create and cannot solve alone (Maniates, 2001). The household recycler from this chapter's opening is the standard case: given an obligation, given no feedback about whether the system honours her effort, and left holding the guilt when it does not. Moderate guilt can motivate. Guilt attached to obligations a person cannot actually discharge curdles into shame and avoidance.

Anger deserves more institutional respect than it usually receives. Among the climate emotions studied, it is the most reliably associated with action, and with better well-being than anxious or despairing forms of distress (Stanley et al., 2021). Anger is also informational. It encodes a judgment that an identifiable actor with identifiable responsibilities has failed to meet them — the same judgment that surfaced as betrayal in the ten-country youth survey cited in Chapter 1. The triggers are rarely mysterious: a missed emissions target, a sustainability claim quietly retracted, a consultation whose

conclusions were written in advance. Institutions that treat public anger as a threat to be managed confirm the judgment that produced it. Given a credible channel, anger is the raw material of participation; denied one, it corrodes into the states described next.

2.4 Despair and Paralysis: Where Concern Stops Working

Eco-despair is settled hopelessness. Eco-paralysis is its behavioural counterpart: concern so overwhelming that a person avoids the topic, disengages, and stops believing participation matters. These are the most severe, disengaged states of unsupported concern — what the other emotions in this chapter can decay into when intensity stays high and agency stays absent. Communication contributes directly, through the fear-without-efficacy mechanism documented in Chapter 1: catastrophic framing raises the salience of threat while draining the audience's sense of being able to respond, a combination that produces avoidance rather than action (O'Neill & Nicholson-Cole, 2009). The public debate over David Wallace-Wells's 2017 essay “The Uninhabitable Earth” rehearsed exactly this point (Wallace-Wells, 2017). The piece reached an enormous readership; climate scientists disputed several of its factual claims, and communication scholars its architecture — catastrophe at length, agency almost nowhere (Mann et al., 2017).

Despair warrants a different institutional posture than the other emotions. A person who has concluded that nothing matters rarely re-engages in response to better information; the conclusion tends to filter new information out. Prevention is cheaper than cure, and prevention is a design question — the moment to worry about despair is the moment a draft message contains urgency and no agency. Where paralysis is already established, recovery tends to run through collective, local, visible action rather than through argument. Chapter 7 builds on this.

2.5 Adaptive and Maladaptive Forms

Running across all of these categories is a distinction that matters more than any single term. Habitual ecological worry, studied on its own, looks more like moral attention than affliction (Verplanken & Roy, 2013), and concern joined to hope grounded in action sustains engagement over time (Ojala, 2012). The harmful forms announce themselves as impairment: disrupted sleep, school, work, or relationships; persistent rumination; withdrawal from the social connection that protects against them. Impairment exists at

scale — the ten-country survey found climate feelings affecting daily functioning for more than 45 percent of young respondents (Hickman et al., 2021). Intensity alone does not draw the line between the two. Intensity in the absence of support and agency does, which makes the line partly a policy variable rather than a purely clinical one.

2.6 Why Naming Matters

Misnaming the emotion misdirects the intervention. Reassurance aimed at grief reads as indifference to the loss. Pathologizing anger converts feedback into symptom. Answering guilt with more individual asks compounds the original error. Meeting despair with more risk information feeds the overwhelm that produced it. Table 2-1 sets out the working taxonomy this report uses, with the institutional response each state actually calls for. The table should be read loosely — the literature applies these terms inconsistently, and real people rarely present one emotion at a time (Coffey et al., 2021). One habit is worth keeping regardless of terminology: record what the distress is about — a possible future, a realized loss, one's own conduct, or an institution's — and not merely that it exists.

Table 2-1. Policy response matrix: key terms in environmental distress and the institutional responses they call for.
Source: Author synthesis.

Term	What it names and what triggers it	Policy relevance	Example institutional response
Eco-anxiety	Anticipatory worry or fear about environmental futures; triggered by risk information, uncertainty, and perceived inaction	Communication and education design; youth policy	Pair every statement of risk with credible action pathways and visible institutional commitments
Climate anxiety	The climate-specific form; triggered by projections, extreme-weather coverage, and political conflict over response	Climate policy communication; trust in government	Transparent progress reporting against stated targets, including what has not yet been achieved
Ecological grief	Mourning for actual or anticipated ecological loss — species, landscapes, seasons, livelihoods	Adaptation planning; disaster recovery; land-connected communities	Acknowledgment of loss; restoration projects; community commemoration alongside rebuilding
Solastalgia	Distress at the degradation of one's home place while still living in it; triggered by local change — fire, drought, development, contamination	Land use; remediation; community consultation	Place-based restoration with residents as participants rather than spectators

Term	What it names and what triggers it	Policy relevance	Example institutional response
Eco-guilt	Distress over one's own perceived contribution to harm; intensified by individual-responsibility messaging	Campaign and program design	Shift emphasis from personal blame to system performance and shared responsibility
Eco-anger	Anger at institutional failure, injustice, or broken commitments; the most action-oriented climate emotion	Trust, legitimacy, and participation design	Credible participation channels; accountability reporting; treating anger as feedback rather than threat
Eco-despair and eco-paralysis	Settled hopelessness; disengagement through overwhelm; the severe, disengaged forms of unsupported concern	Warning indicator for communication strategy	Reintroduce efficacy through collective, local, visible projects; provide support services where impairment is present

Each of these terms points to a different institutional task: trajectory and credibility for anticipatory anxiety, acknowledgment and restoration for grief, campaign design for guilt, channels and accountability for anger, prevention for despair. Chapter 3 turns from what people feel to why they feel it.

Where Eco-Anxiety Comes From

IN BRIEF

Distress is not produced by environmental facts alone. A threat signal — direct exposure, vicarious exposure, future-oriented risk — is filtered through institutional amplifiers: distrust, the awareness–agency gap, individualized responsibility, and poor communication. The result lands unequally, concentrated where environmental injustice has already stacked exposure on top of scarce resources and where identity is bound to place. Because the amplifiers are institutional, they are also where policy holds leverage.

It is tempting to assume that eco-anxiety comes from environmental facts — that people learn how bad things are and feel proportionally worse. The assumption is intuitive, and it is incomplete in a way that matters for policy. If distress were simply a function of information, the response would be obvious: manage the information. Soften the message, or withhold it. Both instincts are common, and both fail, because facts are only one input. Eco-anxiety tends to emerge where a serious environmental threat is perceived but the control, confidence, trust, support, and credible pathways for action that would let a person do something about it are limited or missing. Threat supplies the conditions for distress; limited agency, support, and institutional responsiveness can intensify it.

This distinction organizes the chapter. The sections that follow move through three kinds of cause. The first is the threat signal itself — how people come to perceive environmental risk, whether through direct exposure, vicarious exposure, or future-oriented risk. The second, and the most consequential for institutions, is the set of conditions that determine whether that signal becomes capacity or collapse: institutional trust, the gap between awareness and agency, the way responsibility is assigned, and the quality of public communication. The third is distribution — why the same forces land far harder on some communities than others. Figure 3-1 maps these drivers and the groups they fall into.

KEY MECHANISM: THREAT WITHOUT AGENCY

Environmental risk supplies the threat. Whether that threat becomes constructive concern or corrosive distress depends on what surrounds it — control, trust, support, and credible ways to act. The same wildfire season, the same scientific projection, the same news cycle can produce preparedness in one community and paralysis in another. Hazard severity matters, but support, trust, and agency often shape whether concern becomes preparedness or paralysis — and institutions can expand or constrain the agency available to people.

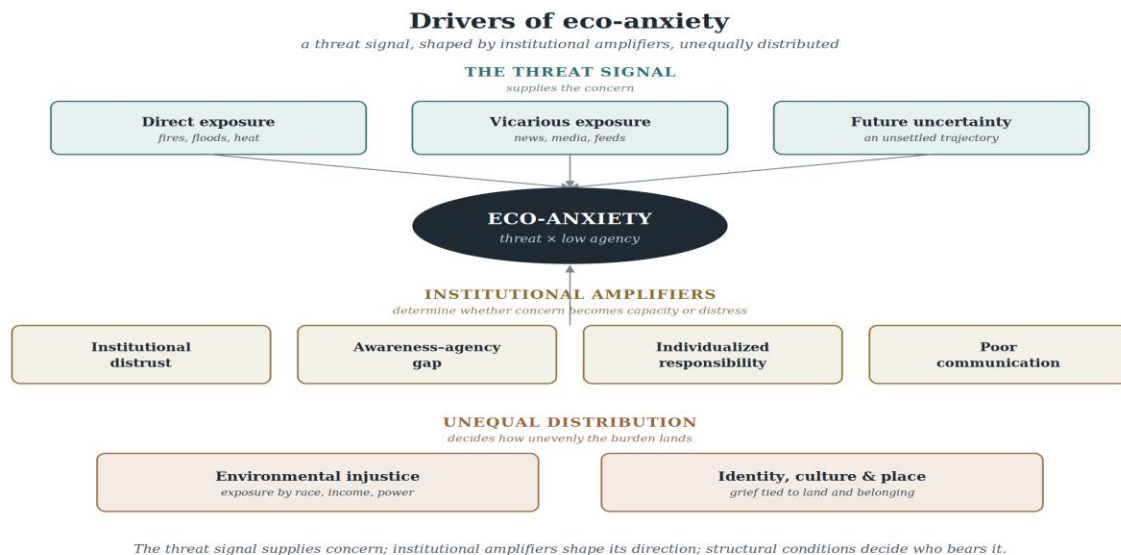


Figure 3-1. Drivers of eco-anxiety. The threat signal supplies environmental concern; institutional amplifiers shape whether it becomes capacity or distress; and structural conditions shape how unevenly it is distributed. The threat-and-agency relationship shown is a conceptual proposition, not a tested formula: harmful distress may become more likely when perceived threat is high and agency, trust, support, and responsiveness are limited. Source: Author synthesis.

The Threat Signal: How People Come to Perceive Risk

3.1 Direct Exposure to Environmental Harm

The most immediate source of environmental distress is direct experience: wildfire, flood, extreme heat, drought, severe storms, smoke, water contamination, and the displacement and loss that follow. The mental health consequences of such events are well documented and not subtle. A systematic review of the field found consistent

associations between climate-related disasters and elevated rates of post-traumatic stress, depression, anxiety, and substance use (Cianconi et al., 2020).

The 2016 wildfire that forced the evacuation of Fort McMurray, Alberta, and destroyed roughly a tenth of its homes left a measurable imprint on the city's young people. Eighteen months on, students who had lived through the fire showed markedly higher symptoms of post-traumatic stress, depression, and anxiety than a comparison population elsewhere in the province, with the heaviest burden among those whose homes were destroyed (Brown et al., 2019). A larger follow-up was more troubling still: rather than fading with time, symptom levels among local students were higher three and a half years after the fire than they had been at eighteen months (Brown et al., 2021). Direct exposure does not always resolve on its own, and the institutions that meet survivors afterward — schools, health services, recovery agencies — shape whether it does. The same questions now attend the survivors of Paradise, California, and the Gulf Coast communities that have rebuilt more than once in a decade.

Exposure also operates in slower and less visible registers. Sustained heat is the clearest example. Beyond its physical toll, higher temperature has been linked at population scale to worsening mental health, including a measurable rise in suicide rates across the United States and Mexico as monthly temperatures climb (Burke et al., 2018). Hazards of this kind do not announce themselves as disasters, which makes them easy for planning to overlook even as they accumulate. These studies establish that hazards carry psychological consequences, not that institutional conditions moderated them — a distinction the evidence grading of Chapter 8 preserves.

3.2 Vicarious Exposure and Secondhand Distress

A person need not stand in the smoke to be affected by it. Eco-anxiety travels through news coverage, social media, documentaries, classroom lessons, political argument, and conversation, and the secondhand signal is potent. A 32-country study of climate anxiety, wellbeing, and pro-environmental behaviour, spanning more than twelve thousand respondents, found that climate anxiety rose with the rate of exposure to climate-change information and with the amount of attention people paid to it (Ogunbode et al., 2022). Awareness, in other words, is itself a route to distress — the unavoidable byproduct of an information environment that delivers planetary crisis in a continuous personal feed.

That same study carried a warning that runs to the heart of this report. Across the 32 countries, climate anxiety was inversely related to mental wellbeing in 31 of them, yet it predicted actual pro-environmental behaviour in fewer, and environmental activism in fewer still (Ogunbode et al., 2022). The hopeful assumption that anxious people will simply convert their distress into action does not hold uniformly; whether they can depends on the conditions around them. Where credible avenues for action exist, concern has somewhere to go. Where they do not, it accumulates as wellbeing cost with no behavioural return.

3.3 Future-Oriented Risk

Much eco-anxiety is not about the present at all. Its object is the future — future safety, livability, food and water security, economic stability, health, and the prospects of one's children. Anticipatory distress of this kind weighs most heavily on the young, whose lives are oriented forward and who expect to inherit conditions they had no part in creating — the sense, documented across the ten-country youth survey, that the future itself is frightening (Hickman et al., 2021).

For some, the anticipation reaches into the most consequential personal decisions. A study of people whose reproductive choices are shaped by climate concern found that many cited a bleak outlook for any children they might have, and a carbon-footprint logic that framed having fewer children as an environmental act (Schneider-Mayerson & Leong, 2020). Whatever one makes of that reasoning, it marks the depth of the issue. Distress about a trajectory, as Chapter 2 noted, cannot be resolved by the passage of any single event; it can be answered only by a credible change in the trajectory itself, which is a matter of policy rather than reassurance.

The Institutional Amplifiers: What Turns Threat Into Distress

The three sources above explain how people come to perceive environmental risk. They do not explain why the same perception produces resolve in one person and despair in another, or why one community absorbs a hard season and another is destabilized by it. That difference is shaped substantially by institutional conditions, and it is where policy has the most leverage. Four conditions do most of the work.

One boundary should be stated before the sections that develop it: institutional conditions are not the only amplifiers. Continuous media and social-media exposure,

partisan polarization, the actual severity and frequency of hazards, pre-existing mental-health vulnerability, and economic precarity all shape how threat becomes distress. The report concentrates on the institutional amplifiers because they are the ones public institutions can change — an emphasis, not a claim about total variance explained.

3.4 Institutional Distrust

Distress intensifies sharply when people conclude that the institutions responsible for protecting them are not acting at the scale or speed the situation demands. The youth survey introduced in Chapter 1 made the link explicit: climate anxiety was associated not only with the threat itself but with the belief that governments were failing to respond, and with a corresponding sense of betrayal (Hickman et al., 2021). Trust, here, is not a sentiment but a structural variable, consistently associated with acceptance of climate policy across a large meta-analytic literature (Cologna & Siegrist, 2020). Weak implementation, political delay, greenwashing, confusing messaging, and broken commitments each erode that trust, and each, in eroding it, converts manageable concern into something harder and more corrosive.

3.5 The Awareness–Agency Gap

Chapter 1 named the awareness–agency gap as the organizing problem of this report; its mechanics belong here, among the causes. Decades of effort have raised awareness impressively. The capacity to act on that awareness — individually meaningful, visibly supported, fairly shared — has not kept pace, and the shortfall is felt as distress.

The evidence already cited converges on this point from several directions. Exposure to information raises anxiety (Ogunbode et al., 2022); action buffers it only where action is genuinely available, which is why the buffering effect appears inconsistently across contexts; and fear-based imagery raises the salience of threat while lowering the viewer's sense of efficacy (O'Neill & Nicholson-Cole, 2009). The common thread is a mismatch: the awareness side of the ledger is loaded faster than the agency side, and the imbalance is often what people experience as helplessness. More information rarely closes a gap that more information helped open; expanding agency, support, and institutional responsiveness is what tends to close it.

3.6 The Burden of Individual Responsibility

Environmental messaging has long translated systemic problems into personal instructions — the individualization of responsibility that Chapter 1 introduced (Maniates, 2001). The actions requested are not worthless, but the framing quietly relocates responsibility for structural problems onto individuals, and its emotional residue is predictable. People asked to solve large problems through small private acts come to feel both guilty, when their efforts fall short, and powerless, when they recognize that the acts were never proportioned to the problem.

This trap is not unique to any one domain. It appears wherever a household is asked to perform conscientiously while the determinants of success sit elsewhere — in recycling systems whose results depend on infrastructure and markets more than on diligence, in home-energy choices constrained by the building stock, in heat preparedness shaped by housing and neighbourhood design. The common structure is an obligation handed over without the capacity to meet it. Messaging that fails to distinguish what individuals can do from what institutions and producers must do risks intensifying distress as a byproduct of its own imprecision.

3.7 Communication and Education Failures

Communication can intensify eco-anxiety in ways that are now well understood, and most of the failures share a structure: they deliver threat without the resources that would let an audience metabolize it. Catastrophe framing without solutions is the classic case — persuasive in the moment and demobilizing thereafter, by the fear-without-efficacy mechanism documented in Chapter 1. Reliance on guilt and shame, oversimplified moral binaries, facts delivered without emotional acknowledgment, the overpromising of easy fixes, and the flattening of genuine uncertainty all compound the problem. So does the opposite failure — the “it is too late” message that forecloses action entirely.

Education is not exempt. Environmental curricula that present problems without pathways can leave students more informed and more frightened in equal measure, which is the precise outcome the Chapter 1 classroom scene described. The corrective is not less honesty but better pairing. Research on young people consistently finds that hope grounded in action — not denial, and not naive optimism — supports sustained engagement, while despair and unsupported fear do the reverse (Ojala, 2012).

Communication and education are, in this sense, not neutral conduits for environmental information. They are among the conditions that determine whether the information builds capacity or erodes it, and Chapter 6 examines the institutional versions of these failures in detail.

Unequal Distribution: Why the Same Forces Land Differently

Eco-anxiety is not spread evenly across a population, and the unevenness is not random. The communities that carry the heaviest environmental burdens are frequently those with the fewest resources to respond, so that exposure and powerlessness compound rather than offset each other. Two structural patterns account for much of the disparity.

3.8 Environmental Injustice

Decades of environmental justice scholarship have established that environmental hazards are distributed along lines of race, income, and political power, with disadvantaged communities bearing disproportionate exposure to pollution, contamination, and degraded surroundings (Bullard, 1990). The same communities tend to face poor housing quality, limited green space, heat and flood vulnerability, food insecurity, constrained health care, and a history of disinvestment — conditions that both intensify environmental risk and narrow the capacity to absorb it. Eco-anxiety in this context is rarely an abstraction about distant futures. It is bound up with present, material insecurity — the residents of Flint, Michigan, or of First Nations communities living under long-term drinking-water advisories, did not need a projection to feel it — and lifestyle-based messaging that ignores those material conditions tends to read, accurately, as irrelevant or unfair. The agency that buffers distress is exactly what disadvantaged communities have been structurally denied, which is why environmental injustice belongs among the causes of environmental distress and not merely alongside them.

3.9 Identity, Culture, and Place

Environmental change can threaten more than safety; it can threaten belonging. For communities whose identity is bound to particular landscapes and practices — farming, fishing, hunting and harvesting, outdoor work, coastal and rural life, and above all Indigenous relationships to land and water — ecological loss registers as a loss of self

and continuity, not only of resources. This is the terrain of the solastalgia and ecological grief mapped in Chapter 2 (Albrecht et al., 2007; Cunsolo & Ellis, 2018), which for many Indigenous communities is inseparable from the cultural and historical injuries of colonization. Distress rooted in identity and place does not respond to the instruments designed for anticipatory anxiety, and it cannot be addressed without attention to sovereignty, cultural practice, and the specific meaning of the land in question — a demand that Chapter 5 takes up directly.

Chapter 3 Conclusion

Eco-anxiety is not caused by environmental facts alone, and it cannot be managed by managing the facts. Threat arrives through direct exposure, vicarious exposure, and anticipation of the future; whether it becomes resolve or despair is shaped substantially by institutional conditions; and it falls hardest where injustice has already concentrated exposure and stripped away the means to respond. Each of these is a place where policy acts, and the next chapter turns to why these dynamics matter enough to warrant it.

Why Eco-Anxiety Matters for Public Policy

IN BRIEF

The costs of unaddressed eco-anxiety land in five systems policymakers run: public health, education, trust and participation, emergency preparedness, and public communication. Acute and chronic distress call for different responses, and most of the leverage lies in prevention — in the public conditions that determine how much distress reaches the clinic at all. Section 4.6 translates these costs into fiscal terms: acute-care surges, the administrative price of distrust, and stranded infrastructure capital.

The stakes named in Chapter 1 — health, trust, participation — are stakes in principle. This chapter is concerned with something more concrete: how the cost actually arrives, and in which institutions it is paid. Eco-anxiety is not an abstraction that hovers over public life. It lands in specific systems — in clinics, classrooms, council chambers, emergency plans, and the channels through which institutions speak to the people they serve. Left unaddressed, it does not stay quietly emotional. It shows up as load, as attrition, and as withdrawal, in places that policymakers are responsible for keeping functional.

A clarifying point should be made at the outset, because it shapes everything that follows. The cost of eco-anxiety is not principally the cost of treating a disorder. Most environmental distress never reaches a clinical threshold, as Chapter 2 established. Its policy significance lies elsewhere — in how it changes the way people learn, trust, prepare, and engage. That is why the consequences are spread across so many systems rather than concentrated in the health sector, and why the response must be too.

4.1 Public Health and Psychosocial Load

The health system is the most obvious place to look, and the least sufficient place to stop. Climate-related distress adds psychosocial demand to services that are already stretched, and the demand is not evenly anticipated. Systematic review confirms that climate impacts raise rates of anxiety, depression, post-traumatic stress, and related conditions, particularly after acute events (Cianconi et al., 2020), and a more recent

systematic review finds a consistent association between eco-anxiety and psychological distress, while noting that measures remain heterogeneous and the evidence is still maturing (Cosh et al., 2024).

A distinction between two forms of distress sharpens the policy task. Acute distress is event-related: the spike in anxiety, trauma, and grief that follows a wildfire, flood, or heat disaster, concentrated in time and place and most visible to the health system. Chronic distress is the lower-intensity, longer-running background stress of living with a deteriorating environment and a sense that institutions are not responding — more diffuse, harder to count, and largely invisible to clinical services until it surfaces as something else. The two call for different responses. Acute distress needs reactive clinical and crisis support, available where and when events strike. Chronic distress is better met by preventive public conditions — credible communication, visible action, participation, and social connection — that the health system does not control and cannot supply alone (Berry et al., 2018; Clayton et al., 2017). The policy implication is a shift in orientation: from treatment toward prevention, and from the clinic outward to the conditions — housing, communication, participation, preparedness — that determine how much distress reaches the clinic in the first place.

4.2 Education and Youth Development

The classroom is where eco-anxiety and public policy meet most directly, and where the cost of getting the response wrong compounds over the longest horizon. Young people are among the groups reporting the highest levels of climate-related distress, and the ones whose developmental trajectory is most exposed to how environmental information is handled. A qualitative study of young adults reflecting on their climate education is instructive. Most reported that the experience had left them feeling not informed and capable but disempowered; the researchers organized the accounts under three themes — being “stripped of power,” “stranded by the generation gap,” and “daunted by the future” (Jones & Davison, 2021). Education intended to build understanding had, for many, built helplessness instead.

This is not an argument against teaching climate change. It is an argument about how. The same body of research that documents the harm of problem-centred, agency-poor instruction also identifies the corrective: hope grounded in action, paired honestly with the realities of environmental risk, supports engagement and protects wellbeing,

whereas despair and unsupported fear do neither (Ojala, 2012). The stakes extend well past any individual lesson. The “generation gap” theme points to the sense of betrayal that the ten-country survey placed at the centre of youth climate distress (Hickman et al., 2021). When young people conclude that adults and institutions have registered the problem and declined to act, the damage is not only emotional. It is a withdrawal of the trust on which future civic life depends.

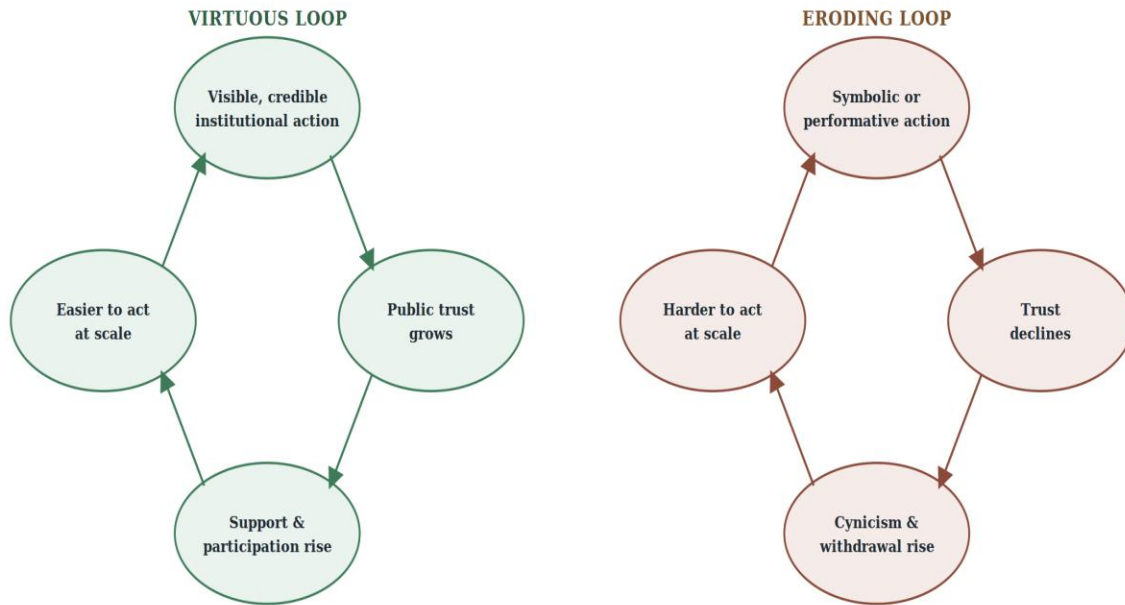
Three burdens follow for education systems specifically. Curricula often deliver problems without pathways, which is the structural error described above. Teachers are often asked to manage student distress without training to address it, while frequently carrying their own. And youth engagement, where it exists, is too often symbolic — a point Chapter 6 develops, since tokenistic participation does not merely fail to help but actively deepens the betrayal it was meant to ease.

4.3 Trust and the Fork in Civic Participation

Eco-anxiety and institutional trust move together, and the relationship runs in both directions. Distress intensifies when institutions are seen to fail, and the resulting distrust makes people less willing to accept the very policies that would address the underlying risk (Cologna & Siegrist, 2020). Left unmanaged, this becomes a loop: weak or symbolic action breeds distress, distress breeds distrust, distrust weakens the mandate for action. The same structure can also run the other way. Figure 4-1 sets out both directions: visible, credible action builds trust, which supports participation and makes further action easier, while symbolic action erodes trust and makes action harder. The difference between the two loops turns largely on one thing — whether the public can see and verify that something is actually being done.

Two trust loops in environmental policy

the same cycle can reinforce trust and engagement, or erode them



Whether the loop builds capacity or erodes it turns largely on one thing: action the public can see and verify.

Figure 4-1. Two trust loops. The same civic cycle can reinforce trust and participation or erode them, depending on whether institutional action is visible and credible. Source: Author synthesis.

The same distress can also resolve into participation rather than withdrawal, and which way it breaks is the practical question for policy. The evidence offers no guarantee in either direction: climate anxiety predicts pro-environmental behaviour in some national contexts but not others (Ogunbode et al., 2022), and anger at institutional failure tends toward engagement where anxiety and despair tend toward retreat (Stanley et al., 2021). The fork is shaped less by the intensity of feeling than by whether credible avenues for participation exist – which means the outcome can be materially influenced by institutional conditions.

4.4 Emergency Preparedness and Resilience

Preparedness is where the relationship between distress and behaviour becomes operationally concrete. Concern can motivate people to ready themselves for heat, smoke, and flooding; overwhelm pushes them the other way, toward avoidance of planning altogether. An emergency communication that raises alarm without supplying achievable next steps can therefore depress the preparedness it intended to promote.

The lesson for adaptation planning is that psychosocial dimensions are not a soft addition to the hard infrastructure of resilience. Social connection itself functions as resilience infrastructure: the classic social autopsy of the 1995 Chicago heat disaster found that the neighbourhoods that fared best were not the wealthiest but the most socially connected, where residents checked on one another (Klinenberg, 2002). The 2021 heat dome repeated the lesson, when so many of those who died were older people living alone. Cooling centres, resilience hubs, and neighbourhood check-in systems do practical work and emotional work at once, and plans that account only for the physical infrastructure tend to underperform on both.

4.5 Communication and Policy Support

Public communication shapes whether people support environmental policy at all. Messages too technical to engage, too catastrophic to absorb, or too optimistic to believe each cost credibility in their own way — the communication face of the fear-without-agency dynamic documented in Chapters 2 and 3. The consequence for policy is direct, because environmental measures frequently depend on public cooperation, and cooperation depends on communication that is credible, transparent, specific, and paired with genuine pathways to act.

A thread runs through all five systems and deserves naming on its own. The burdens described here fall hardest on the communities Chapter 3 identified — those already carrying disproportionate environmental exposure and holding the fewest resources to respond. Distress, like the hazards that produce it, is unequally distributed, and a policy response that treats the population as uniform will protect the already-protected while missing the people for whom the stakes are highest.

4.6 The Cost of Inaction

The costs traced in this chapter are psychosocial, civic, and institutional — but each carries a fiscal shadow that budget-holders will recognize, and the magnitudes involved are not small. The 2016 Fort McMurray wildfire remains the costliest insured disaster in Canadian history, at roughly four billion dollars in insured losses — and, as Chapter 3 documented, its mental-health effects among students were still measurable more than three years later, a long-tail service demand no insurance settlement covered. During the 2021 heat dome, heat-related emergency department visits in the Pacific

Northwest ran as much as sixty-nine times higher than on the same days two years earlier, while British Columbia recorded more than six hundred heat-related deaths. The United States now routinely records well over a dozen separate billion-dollar weather disasters in a single year. These are the acute lines: they arrive as emergency-department volume, crisis-line demand, and long-tail counselling caseloads, in health systems already operating at capacity. The figures size the fiscal systems involved; they measure the cost of the events, not of distress itself — the report's narrower claim is that an uncounsed psychosocial and participatory component rides on them.

The chronic lines are quieter but recurring. Distrust is an administrative cost: projects facing organized public opposition move slowly or not at all, consuming staff time, legal budgets, and political capital in prolonged consultation and litigation — delay that infrastructure economics prices in years and financing costs. Participation failure strands capital: recycling systems, transit expansions, retrofit programs, and cooling infrastructure are all sized on assumptions about public uptake, and underperform their business cases when a distrustful or disengaged public declines to use them. And workforce attrition — the burnout Chapter 5 documents among teachers, health workers, and emergency responders — arrives as recruitment, retraining, and overtime costs in precisely the systems a hazard-heavy decade needs most.

Two disciplines keep this argument honest. The event costs above are well documented; the marginal share attributable to distress, distrust, and participation failure specifically is asserted here, not measured — no study yet apportions it, and putting jurisdiction-level numbers on it belongs to the research agenda of Chapter 10. This section therefore describes fiscal exposure, not a quantified cost of inaction. Directionally, however, the asymmetry is clear: the interventions this report recommends concentrate in the low-cost tiers of Chapter 9's triage, while the costs of inaction concentrate in emergency response, acute care, and capital infrastructure — the places where public money is spent least efficiently. Prevention here is not only better policy; it is cheaper accounting. (Event figures are drawn from public agency reporting — the BC Coroners Service, the US CDC, NOAA, and the Insurance Bureau of Canada — and will be formally cited at the citation audit.)

Table 4-1. Where eco-anxiety lands across five policy systems, and the practical response in each. Source: Author synthesis.

Policy system	What eco-anxiety changes	Institutional risk	Practical response
Public health	Service demand, distress, avoidance	Pressure on already-stretched supports	Prevention; psychosocial preparedness; referral pathways
Education	Learning, efficacy, trust	Helplessness and disengagement	Climate literacy paired with agency and support
Public participation	Trust, cooperation, legitimacy	Cynicism and withdrawal	Credible influence; feedback loops; transparency
Emergency planning	Preparedness behaviours	Avoidance and reduced readiness	Specific, achievable, supported preparedness actions
Public communication	Policy support and credibility	Distrust, backlash, fatalism	Honest, transparent, efficacy-based communication

None of the costs traced in this chapter is a fringe concern, and none can be delegated to a single department. The chapter that follows asks who, exactly, is affected — because the answer is not everyone in the same way.

Eco-Anxiety Across Demographics

IN BRIEF

There is no generic sufferer. Distress varies along three axes — the life course, social position and exposure, and occupational role — and a response calibrated to an imagined average citizen fits almost no one. The chapter profiles children through older adults; Indigenous, low-income, and racialized communities; climate-exposed workers; and the educators and professionals who carry others' distress alongside their own. Tables 5-1a–c distill the supports each group needs.

Environmental distress is not a single experience distributed evenly across a population, and the differences are not matters of degree alone. A ten-year-old frightened by a documentary, a twenty-two-year-old reconsidering whether to have children, an Inuit hunter watching the ice fail, and a farmworker labouring through a smoke advisory are not feeling stronger and weaker versions of the same thing. They are feeling different things, for different reasons, with different supports available and different stakes attached. Policy that treats them as one constituency will reach almost none of them well.

The variation is patterned, which is what makes it tractable for policy. Three axes account for most of it. The first is the life course: the form distress takes shifts as people age, from a child's fear to a young adult's sense of betrayal to an older adult's grief. The second is social position and exposure: communities differ enormously in how much environmental risk they carry and how many resources they hold to respond, and that difference is the engine of unequal distress. The third concerns a particular set of people whose work places others' distress in their hands — educators and environmental professionals — and who carry their own besides. The chapter follows these three axes in turn. Tables 5-1a through 5-1c set out the full matrix of groups, risk and protective factors, and recommended responses, allowing the prose to dwell where the stakes or the unfamiliarity are greatest rather than march through nine identical profiles.

Two cautions apply throughout. The groups discussed here are illustrative rather than exhaustive, selected for documented exposure, vulnerability, role, or policy relevance; other populations not treated at length — among them people with disabilities, newcomers and refugees, those with pre-existing mental-health conditions, linguistic minorities, residents of remote and northern communities, and groups facing gendered differences in exposure and caregiving — also warrant tailored attention. And each category named below is internally diverse. “Indigenous communities,” “low-income and racialized communities,” “older adults,” and “workers” each contain a wide range of experiences and capacities, and the generalizations that follow are starting points for locally grounded assessment, not substitutes for it.

Across the Life Course

Age changes both the content of environmental distress and the supports appropriate to it. Figure 5-1 traces the progression that the sections below develop.

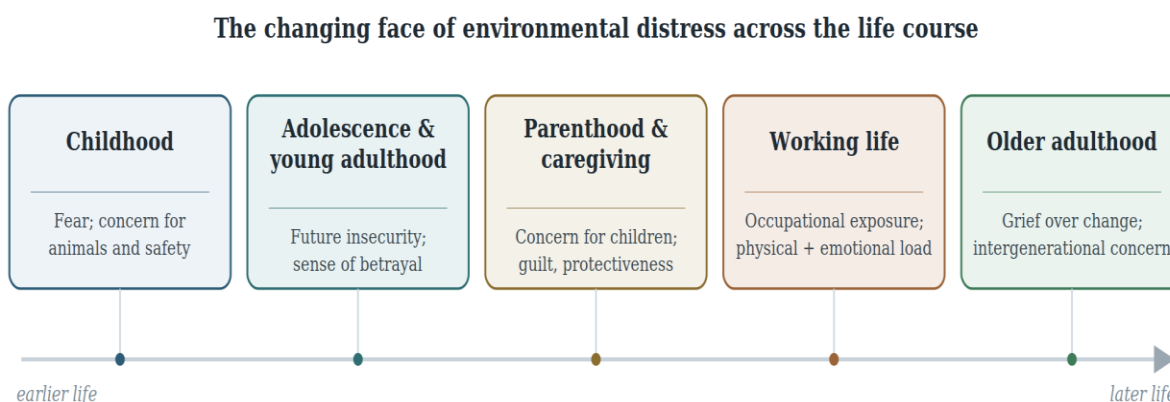


Figure 5-1. Eco-anxiety across the life course. The dominant form of distress shifts with life stage, and so must the response. Source: Author synthesis.

5.1 Children

Young children encounter environmental risk before they have the cognitive scaffolding to place it. They may interpret messages literally, struggle to distinguish a distant threat from an imminent one, and absorb adult-level alarm without adult-level context. The result can be fear out of proportion to anything they can act on — concern

for animals, for disasters, for the safety of their own families. The guiding principles are well established in the environmental-education literature: keep language age-appropriate, avoid apocalyptic framing, anchor learning in care, stewardship, and local action, and provide emotional check-ins after difficult lessons (Ojala, 2012; Clayton et al., 2017). One rule overrides the rest. Children must never be handed responsibility for solving problems that adult systems created, a burden that produces guilt without any corresponding capacity to act.

5.2 Adolescents and Young Adults

Adolescence and early adulthood are where eco-anxiety is felt most acutely, because they coincide with the formation of identity, autonomy, and a forward-looking life plan. Earlier chapters documented the scale: the highest reported distress of any age group, bound up with a sense of betrayal by adults and institutions (Hickman et al., 2021), and educational encounters that often deepened rather than relieved the feeling (Jones & Davison, 2021). The distinctive feature of this group is its sensitivity to bad faith. Young people connect climate risk to concrete decisions — what to study, where to live, whether to have children — and they reject engagement that asks for their voice without offering influence. The appropriate responses follow directly: youth advisory bodies with genuine decision-making power, civic pathways taught alongside environmental facts, and mental-health supports embedded in schools and universities. Participation presented as meaningful but carrying no decision pathway deepens distrust rather than easing it — a failure Chapter 6 examines in full.

5.3 Parents and Caregivers

Parents experience environmental distress at one remove, refracted through concern for their children, and they face a problem the other groups do not: deciding how much to say. Some avoid the subject to protect their children from fear; others transmit their own anxiety without meaning to. The eco-reproductive research discussed in Chapter 3 marks how deep the concern can run, with prospective parents weighing climate futures in the decision to have children at all (Schneider-Mayerson & Leong, 2020). The policy need is practical and often overlooked: parent-facing guidance on balancing honesty with reassurance, family preparedness resources, and support for intergenerational conversation — paired with a discipline of not loading families with responsibilities disproportionate to their actual influence.

5.4 Older Adults

Older adults are easy to miscast as peripheral to a youth-coded issue, and the casting is wrong twice over. They are among the most physically vulnerable to the hazards that drive distress: they have borne a disproportionate share of heat-related mortality in every major heatwave, and social isolation was among the strongest predictors of who died in the Chicago heat disaster that Chapter 4 examined (Klinenberg, 2002). They also carry a distinct emotional load — grief over landscapes and seasons that have visibly changed within living memory, compounded by concern for grandchildren and, often, by isolation. The protective factor is the same one Chapter 4 identified as resilience infrastructure: the residents who fared best were not the wealthiest but the most socially connected. Older adults are also a resource that resilience planning routinely overlooks, holding long memory of environmental change and anchoring intergenerational programs. Effective responses pair practical protection — heat preparedness, wellness checks, social connection — with a posture that treats them as contributors to resilience rather than only as its beneficiaries.

Table 5-1a. Across the life course: risk and protective factors and recommended supports. Source: Author synthesis.

Group	Sources of distress	Risk factors	Protective factors	Policy response	Communication notes
Children	Fear of disasters; worry for animals and family safety	Literal interpretation; limited control; adult-level messaging	Trusted adults; bounded, age-fit framing	Age-appropriate, hopeful, stewardship-focused content; emotional check-ins	Never assign responsibility for global problems
Adolescents & young adults	Future insecurity; betrayal by decision-makers	Identity formation; rejection of symbolic gestures	Real participation; honest information; peer networks	Youth bodies with genuine influence; civic pathways, not just facts	Honesty over reassurance; no tokenism
Parents & caregivers	Concern for children's future; uncertainty how to talk about it	Guilt; anxiety transfer; avoidance	Family preparedness; intergenerational dialogue	Parent-facing guides; family resilience resources	Balance honesty with reassurance; avoid unrealistic burden
Older adults	Grief over change; health vulnerability; isolation	Heat and disaster vulnerability; social isolation	Deep memory; resilience contribution; community ties	Intergenerational programs; heat preparedness; wellness checks	Recognize as resource, not only as vulnerable

Across Social Position and Exposure

The life-course axis explains how distress changes with age. It does not explain why two people of the same age, facing the same hazard, may experience it so differently. That difference is structural, and it is where the equity argument of this report becomes concrete. The groups in this section carry disproportionate exposure and hold disproportionately few resources to respond, which is precisely the combination Chapter 3 identified as the engine of harmful distress.

5.5 Indigenous Communities

For many Indigenous communities, environmental distress cannot be separated from land, culture, sovereignty, food systems, language, and the historical injuries of colonization. The ecological grief documented among Inuit communities — as sea ice thins, travel routes close, and a way of life built on the land becomes harder to sustain — is not anxiety about a distant future but mourning for relationships and practices already being lost (Cunsolo & Ellis, 2018). A recent umbrella review reaches a broader version of the same conclusion: across the evidence, climate change and biodiversity loss affect Indigenous Peoples' health and wellbeing through interwoven pathways of food security, cultural continuity, water, and ecosystem integrity, compounding harms rooted in colonization (Brubacher et al., 2024). Western clinical frameworks, built around the individual, frequently fail to capture distress that is collective, place-based, and bound to identity and continuity.

One Indigenous-led framework offers a constructive way through this gap rather than only a critique of it. Two-Eyed Seeing, or Etuaptmumk — a Mi'kmaw guiding principle introduced to academic and policy audiences by Elders Albert and Murdena Marshall and Cheryl Bartlett — describes learning to see with the strengths of Indigenous knowledges through one eye and the strengths of Western knowledges through the other, and using both together for the benefit of all (Bartlett et al., 2012). Applied to environmental distress, it reframes the task: not Western services delivered to Indigenous communities, nor Indigenous knowledge extracted into Western programs, but a deliberate weaving in which each knowledge system retains its integrity. The principle is grounded in Mi'kmaw language and culture and should be engaged on those terms rather than treated as a generic toolkit, but it names precisely the orientation that responses in this domain require.

Two commitments follow. Responses should be Indigenous-led rather than designed elsewhere and applied afterward, and engagement must not be extractive — taking knowledge and time from communities without returning authority or benefit. This points past consultation, and even past co-design, toward co-governance and self-determination: arrangements in which decision-making authority and resources are genuinely shared or transferred, not merely solicited. Supporting Indigenous land stewardship, protecting cultural practice, funding community-driven adaptation, and recognizing Indigenous governance authority in environmental decisions are not accommodations layered onto a standard program; they are the substance of an adequate response. Concrete mechanisms already exist to build on: dedicated funding streams for Indigenous Guardians and land-based stewardship programs, land-based healing initiatives resourced through health systems rather than added to them, and co-management authorities with real jurisdiction over the territories they govern. Policy is beginning to gesture in this direction — Canada's National Adaptation Strategy names respect for Indigenous rights as a guiding principle and supports the transfer of resources and authority for self-determined climate action (Government of Canada, 2023), and federal support for the community-led relocation of Alaska Native villages facing erosion and thaw points the same way. The structural baseline these gestures point toward — shared authority and funding rather than advisory input — is the test that matters, and approaches that ignore it tend to produce distress of their own.

5.6 Low-Income and Racialized Communities

Environmental hazards are distributed along lines of race, income, and political power, and the communities most exposed are frequently those least resourced to respond — the pattern Chapter 3 traced to its scholarly roots (Bullard, 1990). The pattern is not merely historical. A study of 108 US urban areas found that neighbourhoods subjected to mid-century “redlining” are, on average, 2.6 degrees Celsius hotter today than the wealthier districts that were favoured — a direct line from past discrimination to present heat exposure, mediated by tree canopy, green space, and the built environment (Hoffman et al., 2020). For residents of such places, eco-anxiety is rarely an abstraction about a warming century. It is entangled with present insecurity — housing, employment, food, health — and with a well-earned distrust of institutions that have repeatedly failed them. Two consequences matter for policy. Lifestyle-based messaging, which asks people to buy and consume their way to virtue, tends to read as

irrelevant or insulting to those for whom the relevant variables are material and structural. And distress here cannot be addressed without addressing those material conditions: housing quality, cooling, flood protection, transit, green space. The credible responses are environmental-justice investment, funding for trusted community organizations, the use of community messengers rather than distant authorities, and the linking of environmental education to tangible local improvement people can see.

5.7 Climate-Exposed Workers

Outdoor and frontline workers — in agriculture, construction, waste, transportation, utilities, emergency response, and health care — occupy a category the discourse on eco-anxiety often misses, because their exposure is simultaneously physical and psychological and rarely optional. They labour through the heat, smoke, storms, and disaster conditions that others are advised to avoid. A review of occupational heat and health documents the toll directly: rising temperatures raise the incidence of heat-related illness, injury, and chronic conditions among outdoor workers, with agricultural and construction workers among the most affected (Gibb et al., 2024), while the population-level link between heat and worsening mental health noted in Chapter 3 becomes, for these workers, a daily occupational reality rather than a statistical trend. Economic necessity sharply limits their capacity to step back, and the workforce most exposed is disproportionately low-income, racialized, and migrant. The appropriate responses are first occupational and only then therapeutic, and two mechanisms deserve to be named rather than gestured at. The first is enforceable exposure standards with mandatory, paid stand-down thresholds for extreme heat and smoke — published triggers at which outdoor work pauses without loss of pay, so that stopping in dangerous conditions is a right rather than a negotiation between a worker's health and their paycheck; where such standards exist they are recent, uneven, and thinly enforced. The second is peer-support models administered through unions and sector associations rather than employers, which reach a workforce that clinical services rarely do and that may reasonably hesitate to disclose distress to the party that controls its hours. Around these sit the broader supports: strengthened safety protections, mental-health supports built into exposed sectors, and the inclusion of worker experience in climate planning. Counselling offered to a worker who cannot afford to leave the conditions producing the distress addresses the symptom while leaving the exposure in place. The psychological dimension of occupational climate exposure

remains markedly under-researched relative to the physical, a gap Chapter 10 returns to.

Table 5-1b. Across social position and exposure: risk and protective factors and recommended supports. Source: Author synthesis.

Group	Sources of distress	Risk factors	Protective factors	Policy response	Communication notes
Indigenous communities	Loss of land, culture, food systems; ecological grief	Colonial histories; extractive consultation; Western framings	Sovereignty; traditional knowledge; community-led approaches	Indigenous-led stewardship; governance authority; cultural protection	Community self-definition; never extractive
Low-income & racialized communities	Direct exposure plus material insecurity	Housing, food, health, employment insecurity; distrust	Trusted messengers; tangible local improvement	Environmental-justice investment; fund community organizations	Avoid lifestyle messaging; address material conditions
Climate-exposed workers	Physical and psychological exposure on the job	Economic necessity limits avoidance; heat, smoke, disaster	Occupational protections; peer support	Heat/smoke protocols; mental-health supports in exposed sectors	Recognize worker experience in planning

Those Who Carry Others' Distress

A final set of people sits at the junction between the groups above, because their work makes them responsible for others' environmental distress while exposing them to their own. They are intermediaries, and their burden is structurally distinct.

5.8 Educators

Teachers occupy the hardest seat in this chapter. They are asked to deliver environmental content that distresses students, to manage the emotional responses that follow, and to do both while often carrying their own climate concern and without training for any of it (Pihkala, 2020b). The difficulty is not hypothetical: in one study, teachers affirmed that schools should teach children about sustainability yet reported that their own negative emotions about climate change made it harder to communicate with students (Baker et al., 2021). Curricula heavy on problems and light on pathways compound the strain, leaving educators to absorb a distress the material generated and the system left unaddressed. The responses are practical: training on climate emotions,

the pairing of climate literacy with solution literacy, reflective discussion built into curriculum, trauma-informed teaching practices, and clear referral pathways for students whose distress exceeds what a classroom can hold. Pihkala's analysis is explicit that educators need organizational and peer support for their own emotions before they can reliably support their students' (Pihkala, 2020b). Educators are a point of leverage precisely because they sit between institutions and the young; supporting them well multiplies through every student they reach.

5.9 Environmental Professionals, Scientists, and Advocates

Expertise offers no immunity, and may heighten exposure. Scientists, advocates, and sustainability professionals work in sustained proximity to environmental loss and slow institutional change, and the result is a recognizable pattern of burnout, grief, and despair. The pattern is now documented rather than anecdotal. A 2024 scoping review of the eco-distress literature finds consistent evidence of significant emotional burden among climate scientists, alongside the coping strategies they use (Calabria & Marks, 2024); within that body of work, a survey of IPCC authors found that 61 percent reported anxiety, grief, or other distress connected to their work, with about a fifth experiencing such feelings frequently (Tollefson, 2021). Work cultures organized around urgency can normalize exhaustion, and advocates often feel pressure to project public hope while struggling privately — a gap between performed and felt emotion that is itself corrosive. The organizational responses are straightforward and too rarely adopted: normalize emotional support within environmental organizations, create space for peer reflection, build advocacy models that are sustainable rather than crisis-driven, and protect rest, boundaries, and role rotation. A movement that burns out the people sustaining it forfeits the long horizon the work requires.

Table 5-1c. Those who carry others' distress: risk and protective factors and recommended supports. Source: Author synthesis.

Group	Sources of distress	Risk factors	Protective factors	Policy response	Communication notes
Educators	Teaching distressing content; managing student emotion; own distress	Lack of training; curricula heavy on problems	Training; solution literacy; referral pathways	Teacher training on climate emotions; trauma-informed practice	Pair literacy with agency; allow reflection

Group	Sources of distress	Risk factors	Protective factors	Policy response	Communication notes
Environmental professionals & advocates	Repeated exposure to loss; slow institutional change	Burnout cultures; pressure to stay publicly hopeful	Peer reflection; sustainable advocacy models	Normalize support in organizations; rest and role rotation	Avoid crisis-only framing internally

KEY TAKEAWAY: THERE IS NO GENERIC SUFFERER

Eco-anxiety is shaped by life stage, exposure, cultural identity, and structural position, and a response calibrated to an imagined average citizen will fit almost no one. The child needs reassurance and bounded responsibility; the young adult needs honesty and a real seat at the table; the land-connected community needs its grief and sovereignty recognized; the exposed worker needs protection before counselling. Differentiation is not a refinement of good policy here. It is the precondition for it.

Chapter 5 Conclusion

The child and the elder, the newcomer and the hunter, the activist and the farmworker do not need a single program scaled up; they need responses calibrated to life stage, exposure, cultural identity, and structural vulnerability. Differentiation is not a complication to be managed after the real work of policy is done — it is the real work. The chapter that follows turns to the specific ways institutions, often without intending to, make distress worse.

How Public Policy and Communication Can Make Eco-Anxiety Worse

IN BRIEF

Institutions widen the awareness–agency gap in eight recognizable, mostly unintentional ways: fear without agency, awareness campaigns that stop at awareness, oversimplification, symbolic policy, poor transparency, individualized responsibility, tokenistic engagement, and uniform treatment of unequal communities. Each failure erodes the same two assets — trust and efficacy. The chapter closes with a seven-question design checklist to apply before any public-facing initiative launches.

The preceding chapters argued that institutions do not only respond to eco-anxiety; through their everyday practices they can amplify or ease it. Until now that claim has been mostly diagnostic. This chapter makes it specific. The practices that can intensify environmental distress are rarely exotic failures by negligent actors. They are ordinary and widespread, and they often arise from constraints rather than ill will — fragmented mandates, limited budgets, short timelines, and political trade-offs that pull institutions toward the visible gesture and away from the harder substantive change. The point is not to assign blame but to make these predictable risks visible, so that well-intentioned institutions can avoid them.

A single thread connects the failures catalogued below. Each one widens the awareness–agency gap — the distance between what people are made to know and what they are enabled to do. Institutions widen that gap in three broad ways. They overload the awareness side, delivering threat faster than it can be absorbed. They starve the agency side, acknowledging crisis without supplying credible action. And they misallocate responsibility and voice, downloading the problem onto people who cannot solve it while excluding the people most affected from the decisions that shape their exposure. The sections that follow take these three in turn. The aim is not to discourage environmental communication but to make it accountable for its emotional consequences.

Overloading the Awareness Side

6.1 Fear-Based Messaging Without Agency

Fear is an effective way to capture attention, and — the meta-analytic record is clear on this — fear appeals can motivate action when they arrive paired with efficacy (Witte & Allen, 2000; Tannenbaum et al., 2015). The failure mode is fear without the pairing. As Chapter 1 documented, fear-based environmental imagery has been found to raise the perceived importance of a problem while lowering the viewer's sense of being able to affect it (O'Neill & Nicholson-Cole, 2009), and that combination is the wrong one. An audience that feels the threat is large and its own capacity small does not mobilize; it withdraws, numbs, or looks away. Per Espen Stoknes has described the predictable result of relentless catastrophe framing as “apocalypse fatigue” — a dulling of response that sets in when doom is the dominant register and no agency accompanies it (Stoknes, 2015).

The pattern recurs because it is intuitive and, in the short term, rewarded. Catastrophic messages attract clicks, coverage, and engagement, and the institutions that deploy them often mistake that attention for impact. The Wallace-Wells episode examined in Chapter 2 is the genre's high-water mark: enormous reach, and criticism aimed at both its factual reliability and its architecture of catastrophe without agency (Mann et al., 2017). The implication is narrow and firm. Risk communication should not raise alarm faster than it supplies a credible way to respond, and messaging aimed at children should hold to this most strictly of all, since they have the least capacity to convert adult-level alarm into action.

THE DIFFERENCE BETWEEN URGENCY AND PANIC

Urgency communicates that action matters now. Panic communicates that control has been lost. The two are easily confused, and institutions reaching for the first often produce the second — because the surest way to convey that nothing can be done is to describe a catastrophe and then fall silent. Urgency points toward action and names who must take it. Panic points only at the size of the threat. Public communication should create urgency without panic, which means it should not raise alarm faster than it supplies a credible way to respond.

6.2 Awareness Campaigns That Stop at Awareness

A close relative of fear messaging is the campaign that succeeds at its stated goal and fails at its actual purpose. Much environmental communication sets out to “raise awareness,” and a great deal of it does exactly that and nothing more. In many environmental-policy contexts, awareness is no longer the principal constraint. The more consequential question is whether people can see who is acting, what is changing, and where their own participation has a meaningful effect. The behavioural evidence is long-standing: knowledge and awareness alone are weak predictors of action, because the path from knowing to doing is blocked less by ignorance than by the absence of efficacy, infrastructure, and opportunity (Kollmuss & Agyeman, 2002). A campaign that ends at the slogan adds knowledge and emotional weight to that unresolved tension, and the weight has nowhere to go.

The remedy is structural rather than cosmetic. Public education that means to build capacity rather than anxiety should carry more than the problem: it should convey what is being done, who is responsible for doing it, what individuals can realistically contribute, what communities can organize, and how members of the public can actually participate. An awareness campaign and a capacity-building one differ in whether the audience finishes knowing what to do next, or merely knowing more about what they cannot change.

6.3 Oversimplification and the Cost to Credibility

The instinct to compress a complex problem into a clean moral message is understandable and frequently counterproductive. Slogans such as “all plastic is bad,” “recycling will solve it,” “technology will fix everything,” or “it is too late” are persuasive precisely because they are simple, and fragile for the same reason. Each tends to collapse on contact with the trade-offs, life-cycle realities, and genuine uncertainties that define environmental systems. When the collapse comes — when the diligent recycler learns that recycling is not a solvent for overconsumption, or that the substitution she was urged toward carries burdens of its own — the casualty is not only the slogan but the credibility of whoever issued it.

This is not an argument for minimizing plastic pollution, excusing weak recovery systems, or treating environmental trade-offs as a reason for inaction. It is an argument for communication that distinguishes between justified concern, system performance,

and the material-specific choices that different environmental outcomes require. The credibility cost is what feeds distress, by the mechanism Chapters 3 and 4 traced: people who conclude that institutions have oversold a simple story trust those institutions less, and lower trust both intensifies eco-anxiety and weakens support for the policies that might address its causes (Cologna & Siegrist, 2020). Oversimplified binaries carry a further hazard, inviting guilt by assigning blame along clean lines that the underlying systems do not respect. Credible communication does the harder thing: it acknowledges complexity, names trade-offs, and is honest about uncertainty, while still pointing in a clear direction. People tend to forgive complexity more readily than they forgive having been misled.

Starving the Agency Side

6.4 Symbolic Policy: The Commitment–Implementation Gap

If overloaded awareness is a failure of what institutions say, symbolic policy is a failure of what they do, and it may be the most corrosive item on this list. Eco-anxiety intensifies sharply when institutions visibly acknowledge a crisis and then respond with action disproportionate to their own stated alarm. Targets announced without implementation plans, campaigns launched without the infrastructure to make the requested behaviour possible, sustainability language unmatched by measurable outcomes, consultations whose conclusions were settled in advance — each performs concern while withholding action. Even well-intentioned policies become performative when commitments are not paired with visible implementation, transparent progress reporting, and meaningful participation, and the gap between word and deed is noticed.

The damage is specifically a damage to trust, and through trust to distress. When recognition of a problem is not followed by proportionate action, the public reasonably infers either that the institution does not mean what it says or cannot do what it promises; both inferences corrode legitimacy, and that corrosion was central to the sense of betrayal the youth survey placed at the heart of climate distress (Hickman et al., 2021; Cologna & Siegrist, 2020). The remedy is not louder commitment but visible, measurable, accountable action: fewer declarations, and more that can be checked.

6.5 Poor Transparency

Closely related is the failure to be candid about what is uncertain, what is difficult, and what has not yet been solved. Institutions often treat transparency about limits as a liability, fearing that admitting uncertainty or trade-offs will undercut authority. The risk-communication literature reached the opposite conclusion decades ago (Fischhoff, 1995; Slovic, 1987), and the climate evidence agrees: acknowledging uncertainty, when paired with a clear account of what is being done, tends to support credibility rather than erode it, whereas concealment discovered does lasting damage to trust (Cologna & Siegrist, 2020). Transparent communication explains what is known and what is not, what is being done and what remains beyond current reach, what trade-offs are involved, and how progress will be measured. Honesty about limits is the precondition for being believed when one reports progress.

Misallocating Responsibility and Voice

6.6 Overemphasis on Individual Responsibility

Chapters 1 and 3 established the individualization of responsibility as a driver of distress; the institutional version deserves its own naming here, because the problem is not only how institutions talk but how they design. When a system places the burden of a structural problem on individual choices — asking households to recycle their way out of a packaging system they did not design, or to consume their way to a smaller footprint the surrounding infrastructure makes unavoidable — it creates the conditions for guilt and then for cynicism (Maniates, 2001). The waste sector remains the clearest case. Recycling performance turns far more on system design, infrastructure, and material markets than on household diligence (Lakhan, 2014), yet much public messaging still directs the bulk of responsibility toward the household. The result is the recycler of Chapter 2: an obligation handed over without the capacity to meet it, and guilt with nowhere legitimate to go. The corrective is a discipline of attribution: communication and policy should state plainly which duties belong to individuals, which to producers, and which to government, and resist the convenience of collapsing all three onto the citizen.

6.7 Tokenistic Engagement

Inviting people to speak without giving them influence is not a smaller version of participation; it is a distinct harm. More than half a century ago Sherry Arnstein mapped

this terrain in her ladder of citizen participation, distinguishing genuine power-sharing from the middle rungs she called degrees of tokenism — informing, consulting, and placating, in which citizens are engaged enough to supply legitimacy but never enough to affect the outcome (Arnstein, 1969). In her summary, what citizens achieve in such processes is that they have participated in participation, while institutions achieve the evidence of having involved them. The application to youth climate engagement is direct, and the children's-participation literature built explicitly on Arnstein's frame to make it (Hart, 1992). Youth panels with no decision-making power, advisory bodies consulted after the decisions are made, engagement events that reassure adults without changing adult behaviour — these do not merely fail to relieve distress. They risk deepening the specific injury of betrayal, because they can confirm that a young person's voice was wanted while their influence was not. Engagement that cannot affect a decision should not be presented as if it can; participation worth the name includes feedback, resources, influence, and accountability.

6.8 Ignoring Environmental Justice

The final failure is procedural before it is substantive: treating unequal communities as though they were equally exposed and equally able to respond. Chapters 3 and 5 documented the underlying inequity — hazards concentrated by race, income, and history, from the formerly redlined neighbourhoods that now run measurably hotter than the districts once favoured (Bullard, 1990; Hoffman et al., 2020) to the polluting infrastructure sited beside Indigenous and Black communities from Nova Scotia to the Gulf Coast (Waldron, 2018). Policy and communication compound that inequity whenever they apply a uniform template across it: identical messaging to communities with vastly different exposure, lifestyle prescriptions aimed at people whose constraints are material rather than attitudinal, consultation that asks under-resourced communities to participate without compensation or support. Each treats a structural difference as if it were a matter of individual will, and each lands as one more institution failing to see the people it is ostensibly serving. Equity cannot be added to a policy after it is designed; it has to be built into the design, or the policy will reproduce the disparities it claims to address.

Table 6-1. A practical audit for public communication and policy design: practices that can intensify eco-anxiety, and the better alternative in each case. Source: Author synthesis.

Harmful practice	Why it worsens distress	Example	Better alternative
Fear-based messaging without agency	Raises threat salience while lowering the audience's sense of efficacy; produces avoidance and numbing	Apocalyptic campaigns and collapse imagery with no practical next step	Pair every statement of risk with a credible, achievable action
Awareness that stops at awareness	Adds knowledge and emotional burden without a route to act on either	“Raise awareness” drives that end at the slogan	State what is being done, by whom, and how the public can join
Overemphasis on individual responsibility	Downloads systemic problems onto households; breeds guilt and then cynicism	“Reduce your footprint” while the systems that set the footprint stay unchanged	Distinguish individual, corporate, and government duties explicitly
Symbolic or performative policy	Acknowledges crisis without proportionate action; is often experienced as betrayal	Targets without implementation plans; consultation without consequence	Visible, measurable, accountable action against stated goals
Poor transparency	Hides uncertainty, trade-offs, and limits; reads as evasion	Undisclosed timelines; unacknowledged constraints	Explain what is known, uncertain, being done, and not yet solved
Tokenistic engagement	Invites voice without influence; deepens the betrayal it was meant to ease	Youth panels and consultations with no decision-making power	Participation with real influence, feedback loops, and accountability
Ignoring environmental justice	Treats unequal communities as equally exposed and equally able to act	Uniform messaging across communities with unequal risk and resources	Build equity into design; resource and compensate participation
Oversimplification and moral binaries	Persuades briefly, then collapses on contact with complexity, costing credibility	“All plastic is bad,” “recycling will solve it,” “it is too late”	Acknowledge complexity and trade-offs while still giving clear direction

Chapter 6 Conclusion

The practices catalogued here are not the work of bad actors; they are the default settings of institutions that have learned to communicate risk faster than they have learned to share agency, credibility, and voice. The checklist below distills the chapter into a practical test to apply before any public-facing initiative launches.

POLICY DESIGN CHECKLIST

Before launching a communication, campaign, curriculum, or consultation, ask:

- ☐ Does it pair every statement of risk with a credible, achievable action?
 - ☐ Does it distinguish individual, corporate, and government responsibilities rather than collapsing them onto the citizen?
 - ☐ Is the institution's own action visible, measurable, and proportionate to the alarm it raises?
 - ☐ Is it honest about uncertainty, trade-offs, and what has not yet been solved?
 - ☐ Where it invites participation, does that participation carry real influence, feedback, and accountability?
 - ☐ Is it calibrated to the exposure and resources of the specific community, rather than applied as a uniform template?
 - ☐ Does it create urgency without panic — conveying that action matters now without implying that control is lost?
-

Strategies for Moving From Eco-Anxiety to Agency

IN BRIEF

The response is organized into six pillars — validate, inform, connect, prepare, participate, and transform — that work by standing together. The first five help people meet distress; the sixth changes the structural conditions that produce it, and is the foundation the others rest on. The pillars invert the failures of Chapter 6: the same institutional levers, used deliberately, convert concern into capacity.

Having shown how institutions can widen the awareness–agency gap, the report now turns to how they can help close it — and a central observation is that the levers are largely the same. Communication that overwhelmed can validate and inform; policy that performed concern can deliver visible action; engagement that was symbolic can become real. The failures of Chapter 6 were not evidence that institutions are powerless over eco-anxiety. They were evidence of how much power institutions have, exercised carelessly. Used deliberately, that same power converts concern into capacity.

This chapter organizes the response into six pillars: validate, inform, connect, prepare, participate, and transform. They are not a sequence to be completed in order, nor a menu from which to choose one. They are complementary supports, and like the pillars of any structure they work by standing together. Figure 7-1 presents them. Each rests on the same foundation — the environmental concern that is, in itself, a healthy and rational response — and each helps carry that concern toward agency rather than letting it collapse into distress.

The Six Pillars: From Eco-Anxiety to Agency

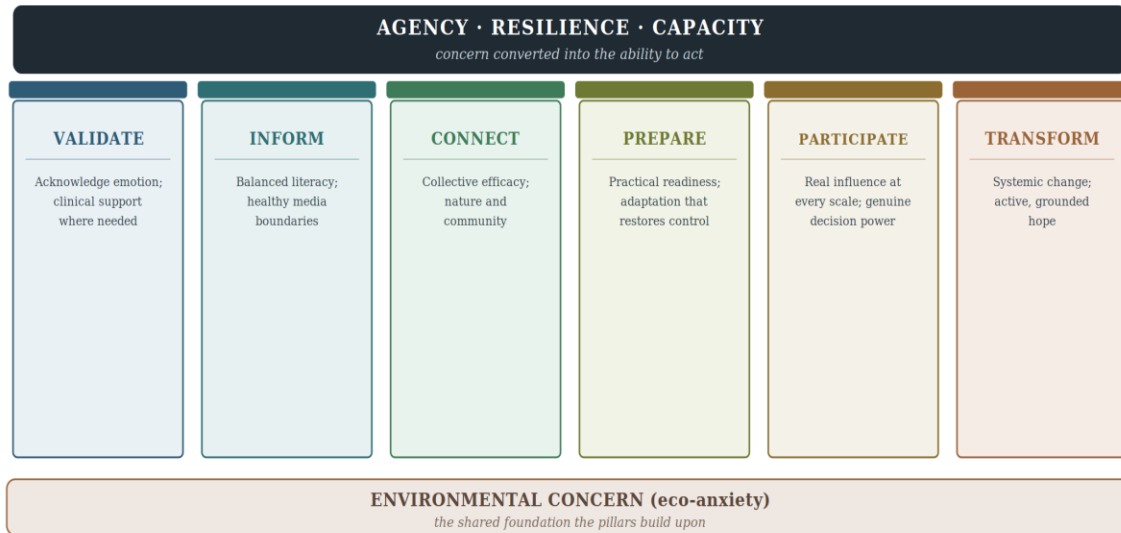


Figure 7-1. The six-pillar response framework. Each pillar converts a different aspect of environmental concern into agency. Transform, though drawn level with the others, functions as the structural foundation beneath them (see Pillar 6). Source: Author synthesis.

THE SIX PILLARS AT A GLANCE

Validate — acknowledge emotion as legitimate, and provide climate-aware clinical support where distress becomes impairing.

Inform — build balanced environmental literacy paired with agency, and support healthy boundaries on information exposure.

Connect — foster collective efficacy and social connection, including restorative contact with nature.

Prepare — turn anxiety into practical readiness through preparedness and adaptation that restore a sense of control.

Participate — create genuine influence at every scale, from household to institution, so action feels consequential.

Transform — pursue the systemic change that makes lower-impact choices practical, sustained by active, grounded hope.

The pillars map onto the diagnosis that preceded them. Validate and inform address the awareness side of the gap, ensuring that what people are made to feel and know does not overwhelm them. Connect, prepare, and participate build the agency side,

supplying the credible, visible, shared pathways whose absence produces distress. Transform addresses the deepest layer, the structural conditions that determine whether any of the others can succeed. What follows treats each in turn, with depth proportioned to how often the pillar is neglected rather than to any claim of equal weight. Chapters 8 and 9 grade each recommendation's evidence strength and disposition individually. One orientation prevents the report's frameworks from competing for attention: they nest. The five conditions of Chapter 1 diagnose what is missing; the pillars name the response; Chapter 8 assigns it to sectors; and the Institutional Agency Audit (Appendix A) operationalizes the diagnosis, with a crosswalk table (Table A-2) connecting all four.

Pillar 1 • Validate

The first task is also the most often skipped: to treat environmental distress as legitimate. Validation is not reassurance, and it is certainly not agreement that the future is hopeless. It is the acknowledgment that concern about environmental degradation is a reasonable response to real conditions rather than a defect to be corrected. The distinction matters because the instinct of institutions under pressure is to minimize — to tell the worried that things are not so bad — and minimization, however well meant, communicates that the person's perception cannot be trusted. That is the opposite of what the evidence recommends. Naming and accepting difficult environmental emotions, rather than suppressing them, is associated with better coping and sustained engagement (Pihkala, 2020a).

Validation operates at two tiers. The first is ordinary and universal: educators, communicators, and leaders who acknowledge emotion before pivoting to action, who make space for worry without dwelling in it. The second is clinical, for the minority whose distress crosses into impairment. Here the need is for mental-health support that takes the environmental content of the distress seriously rather than treating it as a symptom to be argued away, and the health system should be equipped to provide it (Clayton et al., 2017). The two tiers are continuous, not separate: a culture that validates ordinary concern makes it likelier that those who need clinical help will recognize the need and seek it without shame.

Pillar 2 • Inform

If Chapter 6 showed how information can harm — through fear, oversimplification, and awareness that stops at awareness — this pillar describes the information that helps. The principle is balance: literacy that conveys the seriousness of environmental problems while equipping people to act on them. Knowledge alone does not produce action, because the path from knowing to doing runs through efficacy and opportunity rather than information (Kollmuss & Agyeman, 2002). Effective environmental education therefore pairs every problem with a pathway, teaches systems rather than slogans, and builds the sense of agency that turns understanding into participation. Hope grounded in action, not denial, is the documented ingredient that lets young people stay engaged rather than retreating (Ojala, 2012).

Informing is primarily an institutional design task, not personal homework. The continuous feed of crisis that drives much vicarious distress is shaped by how institutions and media communicate — the cadence, framing, and sheer volume of their messaging. The institutional move is to communicate in registers that inform without flooding, to pair alarming information with credible response, and to treat public attention as a resource to be respected rather than captured. Individuals can of course set their own boundaries on a relentless news cycle, and institutions can support that; but the burden of managing exposure should not be quietly transferred to the worried, as though distress were a failure of personal discipline rather than a feature of an information environment that institutions themselves help build.

Pillar 3 • Connect

Eco-anxiety is isolating. It convinces people that they alone see the danger and that nothing they do will matter, and both halves of that conviction dissolve in company. The antidote is connection, and its mechanism has a name in psychology: collective efficacy, the shared belief of a group that together it can accomplish what no member could alone (Bandura, 2000) — and in the environmental domain specifically, collective-action research finds group efficacy and social identity among the stronger predictors of engagement (van Zomeren et al., 2008; Fritzsche et al., 2018). Collective efficacy is the precise counterpart to the helplessness that defines harmful eco-anxiety. People who act alongside others toward a visible goal experience their own agency differently, and the experience is protective even when the goal is distant.

Isolation tells people their effort is pointless. Connection is the experience that disproves it.

Connection takes practical, fundable forms: community climate groups, neighbourhood projects, school and workplace initiatives, and the civic infrastructure that lets people find one another. It also includes a quieter strand the policy conversation tends to overlook — connection to the natural world itself. A broad scientific consensus now links contact with nature to measurable benefits for emotional well-being and cognitive function (Bratman et al., 2019). For distress that is, at root, about the loss of the living world, restorative contact with that world is not a sentimental add-on. Green space, restoration projects, and nature-based programs do psychological work alongside their ecological work, and planning that treats parks and ravines as amenities rather than infrastructure undercounts their value.

Pillar 4 • Prepare

Anxiety and preparedness are close cousins; the difference is direction. The same forward-looking attention that becomes dread when it has nowhere to go becomes readiness when it does. Preparedness converts the energy of worry into concrete capability — a household that knows its heat and smoke plan, a neighbourhood that knows who checks on whom, a community with a resilience hub it helped design. The gain is psychological as much as practical: preparation restores the sense of control whose absence, as Chapter 3 argued, is what turns threat into distress.

The implication for adaptation planning is that its psychosocial dividend should be counted, not treated as a side effect. Engaging residents in preparedness is itself an intervention against eco-anxiety, and participatory adaptation — where communities help shape the plans that will protect them — delivers readiness and agency at once. Plans drawn up for communities and delivered to them miss this entirely; plans drawn up with them capture it.

Pillar 5 • Participate

Of all the correctives, participation speaks most directly to the betrayal that sits at the centre of climate distress. The injury Chapter 6 described — voice invited, influence withheld — is most directly addressed through its opposite: participation that genuinely

shapes outcomes, measured against Arnstein's distinction between real power-sharing and the tokenism that mimics it. Agency must be available at every scale. At the household level, this means actions that are real rather than symbolic. At the community level, it means participatory budgeting, co-designed programs, and local decisions that residents actually decide. At the institutional level, it means a genuine seat at the table for those affected, youth included, with the power to change a decision and not merely to comment on it.

The design test is simple and demanding: can this participation change the result? Where the answer is yes, participation builds the efficacy and trust that convert concern into engagement. Where the answer is no, the exercise is better not run at all, since false participation deepens the distrust it pretends to address. Building the real version is harder than staging the symbolic one, which is precisely why it is the work.

Pillar 6 • Transform: The Foundation Beneath the Other Five

Transform is listed last, but it is better understood as the foundation on which the other five rest than as a sixth parallel pillar. Validation, literacy, connection, preparedness, and participation all help individuals and communities meet environmental distress; none removes its structural source, and each is undermined when the surrounding systems pull the other way. Transformation means changing those conditions: shifting responsibility from households to producers where appropriate, building infrastructure that makes the sustainable choice the easy one, and aligning policy with the scale of the problem. Without it, the first five pillars ask people to summon agency the system continues to deny them; with it, they become credible.

This is also where agency and honesty meet in the form the report has been building toward. The concept of active hope — hope understood not as optimism about outcomes but as a practice of acting on behalf of what one values regardless of the odds — offers a useful framing for the disposition that sustains engagement across a long and uncertain horizon (Macy & Johnstone, 2012). Active hope is neither denial nor complacency, and it is available mainly to people who can see their action joining something larger. Transformation is what makes that visible. When people can see the system itself beginning to move, their own participation stops feeling like a gesture and starts feeling like a contribution — which is where concern most reliably becomes agency.

Table 7-1. The six pillars: goal, example interventions, who they best serve, and an indicative lead. Source: Author synthesis. This table is a high-level orientation, not a full implementation plan; Chapter 9 specifies ownership, cost, evidence strength, and success indicators. Most pillars require coordinated action across several levels of government, and the “indicative lead” column names where primary accountability most naturally sits, not the only actor involved.

Pillar	Goal	Example interventions	Best suited for	Indicative lead
Validate	Make distress legitimate and supported, not pathologized or dismissed	Climate-aware counselling; emotional check-ins in schools; peer support	Anyone in distress; youth; frontline and exposed groups	Health systems; schools; employers
Inform	Build literacy that empowers rather than overwhelms	Solution-focused curricula; balanced public communication; media-literacy support	Students; the general public; media audiences	Education ministries; public communicators
Connect	Convert isolated worry into collective capacity and belonging	Community climate groups; nature-based programs; collective projects	Disconnected or fatalistic individuals; whole communities	Municipalities; community organizations
Prepare	Restore a sense of control through practical readiness	Household and neighbourhood preparedness; resilience hubs; adaptation planning	Hazard-exposed communities; older adults; workers	Emergency management; municipalities
Participate	Make action feel consequential through real influence	Empowered youth bodies; participatory budgeting; co-designed policy	Young people; affected communities; the disengaged	All levels of government
Transform	Change the systems that constrain individual choice	Producer responsibility; infrastructure that makes low-impact choices easy	Everyone, structurally; over-burdened households	Senior government; regulators; industry

Chapter 7 Conclusion

The pillars' power is cumulative: validation without agency offers little, agency without validation is fragile, and both depend on the structural transformation that makes them credible. The chapters that follow assign the framework by sector and give it an implementation and measurement path.

Sector-Specific Recommendations

IN BRIEF

The framework is assigned to sectors in proportion to their leverage. Education and local government act first and most, because they sit closest to where distress forms and agency is built; public health, emergency management, and communicators do specialized work; environmental organizations and employers protect the people who carry the work; senior government supplies the structural foundation. Every recommendation carries an explicit evidence grade.

The six pillars describe what a response to eco-anxiety requires. They do not, on their own, tell a school-board trustee, a public-health director, or a city manager what to do on Monday. This chapter assigns the framework. It translates the pillars into concrete guidance for the sectors that shape environmental distress, with one organizing principle: sectors differ in leverage, and the recommendations are weighted to match. A chapter that gave every sector equal space would misrepresent how unevenly the capacity to help is distributed.

Two cautions frame what follows. First, almost nothing here belongs to a single sector. Most of these actions require coordination across mandates and levels of government, and the worst failures tend to occur in the seams between institutions rather than inside any one of them. Second, the recommendations are design principles rather than an implementation plan; the detailed ownership, sequencing, cost, and measurement belong to Chapter 9. Each sector section follows the same applied format — primary responsibility, what to begin now, supporting partners, equity considerations, how to measure success, and the strength of the evidence behind the recommendations — so the chapter reads as an implementation guide rather than a restatement of the framework. Table 8-1 maps the sectors to where their leverage concentrates; the sections that follow develop the highest-leverage cases at greater length.

READING THIS CHAPTER: LEVERAGE, NOT SYMMETRY

Sectors do not hold equal leverage over eco-anxiety, and this chapter does not treat them as if they did. Education systems and municipal governments sit closest to where distress forms and where agency is built, and they receive the most attention here. Public health, emergency management, and communicators hold real but more specialized leverage. Senior government and regulators hold the structural levers — the Transform foundation — that determine whether the rest can succeed. The weighting reflects the authors' reasoned judgment across several criteria — proximity to affected populations, mandate and legal authority, resource control, capacity to change structural conditions, implementation speed, and institutional trust — rather than a scored assessment. On different criteria the ordering shifts: senior governments hold the greatest fiscal and regulatory power, public health the greatest clinical capability, community organizations often the greatest trust. That is why no sector's work is optional, and no sector should read the brevity of its section as a measure of its importance to its own constituents.

A NOTE ON EVIDENCE GRADES

Each action in the sector sections below carries a two-part grade, because a single label conflates two different judgments — how strong the evidence is, and what an institution should therefore do.

Evidence strength and directness: strong direct · moderate direct · strong adjacent · limited or inferential · insufficient. “Direct” means the institutional lever has been tested in relation to environmental distress itself; “adjacent” means the supporting research comes from related literatures — collective efficacy, trust, preparedness, risk communication — whose application here is the report's inference.

Recommended disposition: implement · adapt and implement · pilot and evaluate · research before scaling.

Grades attach to individual actions, not to whole sectors: a single section may contain a well-established occupational protection and a speculative psychosocial intervention, and a section-level grade would obscure the difference. The method for assigning grades is described in Appendix B.

Table 8-1. Sectors mapped to where their leverage concentrates, their highest-priority actions, and the pillars they most engage. Source: Author synthesis.

Sector	Where its leverage concentrates	Highest-priority actions	Pillars most engaged
Education systems	Closest to youth, where distress concentrates and trajectories form	Pair every problem with a pathway; train and support teachers; give students genuine voice	Inform, Validate, Participate

Sector	Where its leverage concentrates	Highest-priority actions	Pillars most engaged
Municipal & local government	Closest to the lived environment, adaptation, and everyday participation	Participatory adaptation; resilience hubs as social infrastructure; visible local action	Prepare, Participate, Connect
Public health	Holds the clinical tier and the prevention mandate	Climate-aware mental-health capacity; referral pathways; prevention orientation	Validate, Prepare, Inform
Emergency management	Owens preparedness, where anxiety can become readiness or avoidance	Advisories with achievable steps; psychosocial dimension in plans; neighbourhood networks	Prepare, Inform, Connect
Public communicators & media	Shape the awareness side of the gap	Efficacy-based messaging; urgency without panic; transparency; avoid fear without agency	Inform, Validate
Environmental organizations & employers	Sustain the people who carry the work and the exposed	Support staff and advocate wellbeing; protect climate-exposed workers	Connect, Validate, Transform
Senior government & regulators	Hold the structural levers the other sectors depend on	Producer responsibility; enabling infrastructure; transparency standards; funding and equity	Transform (the foundation)

8.1 Education Systems

Education holds the highest leverage of any sector: it sits closest to young people, among whom distress is most concentrated, at the stage when habits of efficacy or helplessness form. It is also the sector most able to cause harm while intending help.

Primary responsibility: Deliver climate education that builds capability rather than helplessness.

Begin now: Pair every problem taught with a concrete pathway to act; make room for emotion in the classroom without dwelling in it; give student bodies genuine influence over decisions boards actually control — project budgets, grounds, program design — rather than promising influence statute does not permit.

Supporting partners: Public health (referral routes), municipalities (local projects students can join), youth organizations.

Equity considerations: Reach students in under-resourced schools; provide materials in multiple languages; avoid assuming families have the capacity for at-home action.

Measuring success: Curricula that pair problems with pathways; student efficacy and trust measures; whether youth participation has changed a decision.

Evidence base: Hope-through-action: moderate direct evidence (Ojala, 2012) — implement. Climate-emotion pedagogy: limited direct evidence (Baker et al., 2021) — pilot and evaluate. Genuine youth influence over decisions: inferential, from the participation literature — pilot and evaluate.

8.2 Municipal and Local Government

Local government holds the second-highest leverage, operating where environmental risk is lived and agency is most tangible — the heat in an apartment, the flood at a corner, whether the city is visibly doing anything. It is also where a specific emotion from Chapter 2 becomes operational: solastalgia, the distress of watching a familiar place change. Major redevelopment, tree-canopy loss, or shoreline hardening can produce it directly, which means the municipal response is not only technical but emotional — retaining valued landscape features where possible, marking what is lost, and giving residents real influence over what replaces it rather than presenting change as fait accompli.

Primary responsibility: Convert concern into visible, local capacity.

Begin now: Make adaptation planning participatory rather than delivered; treat resilience hubs and neighbourhood check-in systems as social infrastructure; ensure local action is visible and verifiable; fund community connection.

Supporting partners: Emergency management, public health, schools, community organizations.

Equity considerations: Prioritize the most-exposed, least-resourced neighbourhoods; compensate participation; ensure access for residents without cars or flexible time.

Measuring success: Reach of community programs; preparedness rates; whether residents can point to visible local action.

Evidence base: Social infrastructure and collective efficacy: strong adjacent evidence (Klinenberg, 2002; Bandura, 2000) — adapt and implement. Participatory adaptation: limited or inferential — pilot and evaluate.

8.3 Public Health

Public health holds specialized leverage: the clinical tier, for the minority whose distress becomes impairing, and the prevention mandate the rest of this report keeps returning to.

Primary responsibility: Build climate-aware mental-health capacity while keeping a prevention orientation.

Begin now: Equip practitioners to take the environmental content of distress seriously; establish referral pathways; partner with education and municipal services on preventive public conditions.

Supporting partners: Schools, municipalities, emergency management.

Equity considerations: Extend support to under-served and culturally diverse communities; ensure care is culturally safe.

Measuring success: Availability of climate-aware support; help-seeking without stigma; reduced unmet need.

Evidence base: Climate-aware clinical capacity: moderate direct evidence (Clayton et al., 2017) — implement. Prevention-over-treatment orientation: inferential, from the systems literature (Berry et al., 2018) — adapt and implement.

8.4 Emergency Management

Emergency management owns preparedness, where the relationship between distress and behaviour is most concrete and anxiety becomes either readiness or avoidance.

Primary responsibility: Design preparedness that converts anxiety into readiness.

Begin now: Pair every advisory with a specific, achievable next step; build neighbourhood check-in networks; engage residents in preparedness rather than planning only for them.

Supporting partners: Municipalities, public health, community organizations.

Equity considerations: Prioritize the most-exposed; ensure advisories reach and serve people with disabilities, older adults, and those without transport.

Measuring success: Preparedness behaviours; resilience-hub access; outcomes during heat and flood events.

Evidence base: Preparedness–control link and social infrastructure: strong adjacent evidence — implement. Participatory preparedness: limited or inferential — pilot and evaluate.

8.5 Public Communicators and the Media

Communicators shape the awareness side of the gap; Chapter 6 catalogued how easily that power misfires, and the recommendations are those failures inverted.

Primary responsibility: Communicate risk in ways that build rather than erode capacity.

Begin now: Pair risk with agency; aim for urgency without panic; be transparent about uncertainty and trade-offs; resist the oversimplified moral binary.

Supporting partners: Scientists, civil society, and the institutions making the underlying decisions.

Equity considerations: Provide language access; avoid lifestyle messaging aimed at people whose constraints are material rather than attitudinal.

Measuring success: Audience efficacy and trust; the absence of fear-without-agency in published outputs.

Evidence base: Fear without agency disengages: moderate direct evidence (O'Neill & Nicholson-Cole, 2009) — implement. Trust is consistently associated with climate-policy support: strong adjacent evidence (Cologna & Siegrist, 2020) — implement. Transparency about uncertainty: limited or inferential — adapt and implement.

8.6 Environmental Organizations and Employers

Two sectors share responsibility for the people who carry environmental work and the workers exposed to environmental hazards on the job.

Primary responsibility: Sustain the wellbeing of those doing environmental work and those exposed to environmental risk at work.

Begin now: In environmental organizations, normalize emotional support, peer reflection, and protected rest. For employers of exposed workers, occupational protections come first: mandatory paid stand-down thresholds for extreme heat and smoke, tied to published triggers rather than supervisor discretion, and union- or sector-administered peer-support programs — followed by psychosocial supports built into the sector.

Supporting partners: Public health, unions, professional bodies.

Equity considerations: Protect the low-wage, migrant, and racialized workers who are disproportionately exposed.

Measuring success: Burnout and retention in the sector; uptake of worker protections and supports.

Evidence base: Occupational heat protections against physical harm: strong direct evidence in occupational health (Gibb et al., 2024) — implement. Professional eco-distress as a documented burden: moderate direct evidence (Calabria & Marks, 2024). Psychosocial supports for exposed workers: insufficient evidence on distress outcomes — pilot and evaluate, with the psychological dimension of worker protection a priority for research before scaling.

8.7 Senior Government and Regulators: The Structural Foundation

The remaining sector is the one the others depend on. Senior governments and regulators hold the structural levers — the Transform foundation of Chapter 7 — that determine whether the rest can succeed. The decisive move is to replace abstract appeals with economic levers that change what is easy and visible. The contrast in the waste sector is instructive: a taxpayer-funded awareness campaign urging residents to recycle better leaves the determinants of success untouched, while a producer-

responsibility program that prices packaging by its recyclability and funds collection infrastructure changes producer design upstream and funds the visible system performance the resident actually experiences. The first asks for more household effort; the second alters the structure that determines whether the effort is honoured. The instruments named in this section are illustrative structural levers, not universally required components of a response to environmental distress: the general principle is to align responsibility, infrastructure, and institutional capacity with the scale of the problem, and which instrument fits — producer responsibility, building standards, worker protections, public adaptation infrastructure — varies by jurisdiction and sector. Disagreement with any particular instrument is not disagreement with the principle.

Primary responsibility: Build the structural conditions that let the other sectors' efforts matter.

Begin now: Shift responsibility from households to producers through mechanisms with teeth — producer-responsibility programs, deposit-return and recycled-content standards, building and energy codes — rather than awareness campaigns; direct the revenue to visible infrastructure; set transparency and progress-reporting standards; fund the municipal and educational work above.

Supporting partners: Industry, municipalities, and every sector above.

Equity considerations: Ensure structural transitions do not burden low-income households; design fee and rebate structures so that costs fall on producers rather than being passed through regressively; pursue a just transition.

Measuring success: Producer-responsibility coverage; availability and affordability of low-impact options; equity outcomes alongside emissions.

Evidence base: System design and infrastructure, not household effort alone, drive material outcomes: strong adjacent evidence (Maniates, 2001; Lakhan, 2014) — implement on its own merits. Effect of structural reform on distress specifically: insufficient — research before scaling. Canada's National Adaptation Strategy illustrates the kind of commitment available at this level (Government of Canada, 2023).

8.8 The Tensions Every Sector Shares

Beneath the sector-specific guidance run a few dilemmas common to all of them, and naming them is more useful than pretending they resolve cleanly. There is the tension between honesty and reassurance — the obligation to tell the truth about environmental risk without inducing the paralysis that catastrophe-without-agency produces. There is the related tension between urgency and panic. There is the coordination problem: because almost no recommendation here belongs to one sector, the hardest work is often institutional cooperation across mandates that were not built to align. And there is the standing temptation of the symbolic gesture, which is always cheaper than substantive action and always, eventually, noticed. No framework dissolves these tensions. What the six pillars offer is a way to hold them in view while acting anyway.

The hardest of these tensions — urgency without panic — is best illustrated rather than described. The box below stress-tests a single public advisory, showing the difference between a draft that raises alarm and one that raises alarm and supplies agency.

COMMUNICATION STRESS-TEST: ONE HEAT ADVISORY, TWO DRAFTS

Draft A — alarm without agency. “DANGEROUS extreme heat this week. Temperatures will hit record highs. Heat can be deadly, and vulnerable residents are at serious risk. Stay safe.” The facts are accurate and the tone is urgent, but the reader is handed fear with nothing to do and no sign the institution is acting — the structure that turns concern into helplessness.

Draft B — alarm with agency. “Extreme heat is expected Tuesday to Thursday, near record highs. Free air-conditioned cooling centres are open at [locations], 9am–9pm. Check on elderly neighbours and anyone living alone once a day. If you feel dizzy or stop sweating, call [number]. The city has extended cooling-centre hours and is contacting at-risk residents directly.” Same facts, same urgency — now paired with specific actions the reader can take and visible evidence the institution is doing its part.

The test: for every sentence that raises alarm, is there a sentence that supplies a credible response and shows the institution acting? If not, the message risks manufacturing the distress it meant to prevent.

One commitment cuts across every sector and belongs here rather than in any single section: engagement with Indigenous communities should follow the co-governance and Two-Eyed Seeing principles set out in Chapter 5 (Bartlett et al., 2012), in which Indigenous and Western knowledge are woven together with authority genuinely shared. This is a baseline for the education, municipal, health, and senior-government work above, not an add-on to any one of them.

8.9 Contested Contexts: Political Feasibility

The recommendations above assume institutions free to act on them, and in much of North America that assumption fails for the highest-leverage sector. Climate curricula — and anything labelled climate-emotions training — are actively contested in many US states and some Canadian districts. A school-board trustee who adopts Section 8.1 as written will face the objection, at the podium, that the district is practising politics or therapy without a mandate for either, and a report addressed to that trustee is incomplete if it does not arm them for the moment.

Three principles travel across contested terrain. First, anchor the work in goals with durable cross-partisan support: student wellbeing, hazard preparedness, local air and water, cost. A heat-preparedness module, a wildfire-smoke protocol, or a flood-readiness exercise builds the same efficacy and agency as an explicitly climate-framed unit, and is far harder to contest. Second, practise the transparency the report preaches: publish materials in advance, engage parents before adoption rather than after objection, and distinguish clearly between supporting emotions students already report and prescribing what students should feel. Third, sequence by feasibility — begin where mandates are secure (emergency preparedness, occupational safety, infrastructure) and let visible results, rather than argument, carry the case into more contested ground. Polarization is a condition of the terrain, not a reason to abandon it; sectors and framings differ in how much of it they attract, and implementation should use that variation deliberately.

Chapter 8 Conclusion

Each sector is asked to use the leverage it actually holds, in concert with the others, rather than to act as though the problem were its alone or someone else's entirely. What remains is to specify how these recommendations are sequenced, owned, resourced, and measured — the work of Chapter 9 — and to be candid about what the evidence cannot yet tell us, the work of Chapter 10.

Implementation: Sequencing, Ownership, and Measurement

IN BRIEF

Implementation runs on five disciplines: phased sequencing across three horizons, ownership assigned as lead-plus-partners with a named coordinating function for the seams, triage by cost against evidence strength, an equity screen applied to every action, and measurement built for learning — leading indicators of whether agency-building conditions exist, lagging indicators of whether outcomes follow. A twelve-month roadmap shows where to start.

Frameworks are easy to admire and hard to install. The six pillars and the sector assignments of the previous two chapters describe a credible response to eco-anxiety, but a description is not a plan, and the distance between the two is where most good policy frameworks quietly fail. This chapter closes that distance as far as a primer can. It specifies how the recommendations should be sequenced, who should own them, what they cost, how strong the evidence behind them is, whom they might burden, and how anyone would know whether they are working.

The implementation detail here is structured guidance, not a validated program, built to be used under the uncertainty the Scope section describes: it foregrounds the actions that are cheapest, best-evidenced, and soonest, and treats measurement as a way to learn rather than a way to declare success.

9.1 Sequencing: A Phased Approach

Not everything can or should happen at once, and the report's recommendations sort naturally into three horizons. Immediate actions, achievable within a year, are mostly matters of practice rather than budget: auditing communications for risk without agency, adding progress reporting to existing commitments, making space for emotion in classrooms, convening community connection. Near-term actions, over one to three years, require redesign and modest investment: curricula rebuilt to pair problems with pathways, participatory adaptation planning, climate-aware training for health and education staff. Structural actions, over three years and beyond, are the transformation that the other pillars depend on: producer responsibility, enabling infrastructure, and

the alignment of policy with the scale of the problem. Table 9-1 assigns each pillar a horizon alongside its cost and the strength of evidence behind it.

The sequencing logic is not strictly chronological, since work on every horizon should begin now; the structural reforms take longest and so must start earliest. What the phasing offers is a way to act immediately without waiting for the structural pieces, while not mistaking the immediate moves for sufficiency. The no-regrets actions in the box below are where an institution under uncertainty should start.

Table 9-1. Each pillar by time horizon, cost, and evidence strength. “Evidence strength” refers to the link between the action and reduced harmful distress, which is often indirect; these pillar-level summaries compress the per-action strength-and-directness grades of Chapter 8. Source: Author synthesis.

Pillar	Time horizon	Cost	Evidence strength
Validate	Immediate (0–12 months)	Low–moderate	Promising: clinical capacity established; validation-specific effects interpretive
Inform	Near-term (1–3 years)	Moderate	Established: the knowledge–action gap and hope-through-action are well documented
Connect	Immediate–near-term	Low	Promising: collective efficacy is established; climate-specific applications are emerging
Prepare	Near-term (1–3 years)	Moderate–high	Established: preparedness–control and social-infrastructure evidence are solid
Participate	Near-term–structural	Low–moderate	Promising: participation–efficacy link supported; rests partly on foundational scholarship
Transform	Structural (3+ years)	High	Mixed: infrastructure shaping behaviour is established; distress effects are emerging

START HERE: THE NO-REGRETS FIRST MOVES

The actions that combine low cost, established or promising evidence, and an immediate horizon are where any institution should begin, because they are defensible even under uncertainty:

- Audit existing communications, campaigns, and curricula for “risk without agency,” and revise the highest-risk materials.
 - Add visible progress reporting to commitments already made, so the public can verify action.
 - Fund and convene community connection — local groups, school and workplace initiatives — which is inexpensive relative to its effect.
 - Pair every public warning and lesson with a specific, achievable next step.
-

9.2 Ownership: Leads, Partners, and the Seams Between Them

The hardest problem in implementation is not effort but coordination. Almost none of the recommendations in this report belongs to a single institution, and the characteristic failure is not that any one actor does its part badly but that the parts are never joined. Responsibility therefore has to be assigned in two layers: a lead owner accountable for each action, and the supporting partners whose collaboration the lead cannot do without. Table 9-2 sets out an indicative division. The leads are where primary accountability most naturally sits; the partners are named because the lead will fail without them.

Two warnings attach to any such table. It can suggest a tidiness that real governance lacks, and it can invite each named partner to assume the lead has matters in hand. The remedy is a coordinating function with a name, a mandate, and a budget rather than a vague expectation of cooperation — housed, wherever possible, in an existing body with convening power (a mayor's office, an existing resilience or emergency-management committee) rather than in a new standing council, which this report is elsewhere too wary of symbolic structures to recommend lightly. Its specific job is the seams: ensuring that the health system, the schools, the municipality, and the emergency planners are building one response rather than four adjacent ones, and that no pillar falls through the gaps between mandates. Where eco-anxiety work fails in practice, the gap is usually here, and an unnamed coordinating function is one nobody owns.

Table 9-2. Indicative lead owner, supporting partners, and example success indicators for each pillar. Source: Author synthesis.

Pillar	Lead owner	Supporting partners	Example success indicators
Validate	Public health	Schools; employers; community organizations	Climate-aware support available; help-seeking without stigma; reduced unmet need
Inform	Education ministries; public communicators	Media; scientists; civil society	Curricula pair problems with pathways; audience efficacy and trust measures rise
Connect	Municipalities; community organizations	Schools; employers; health	Reach of community groups; self-reported connection; participation rates
Prepare	Emergency management; municipalities	Health; community organizations	Household and neighbourhood preparedness; resilience-hub access; heat/flood outcomes
Participate	All levels of government	Youth bodies; affected communities	Documented influence (decisions changed); diversity of participants; trust
Transform	Senior government; regulators	Industry; municipalities; all sectors	Producer-responsibility coverage; availability and affordability of low-impact options

9.3 Prioritization: Cost Against Evidence

With limited budgets and uneven evidence, institutions need a way to triage. The two variables that matter most are cost and the strength of the evidence behind an action, and setting them against each other yields a usable order of operations. Actions that are low in cost and supported by established or promising evidence — most of the Validate, Inform, and Connect work — should proceed first, because they are defensible even if the effect proves smaller than hoped. Actions that are expensive but well-evidenced, such as much of Prepare, warrant deliberate investment and longer timelines. Actions that are expensive and rest on emerging evidence call for pilots with evaluation built in, rather than either full commitment or dismissal. The point of the triage is not to avoid the costly or uncertain work, some of which is the most important, but to sequence it honestly rather than spending the first and easiest budget on the least certain returns.

9.4 Equity as an Implementation Discipline

Equity cannot be a column added to a table; it has to be a discipline applied to every action, because each carries its own risk of reaching the already-served while missing

those who most need it. The communities Chapter 5 identified — exposed, under-resourced, and frequently distrustful for good reason — are the ones a uniform rollout will leave behind. Each pillar has a characteristic equity hazard. Validation support tends to reach those already connected to services unless it is deliberately extended and made culturally safe. Information campaigns can misfire when lifestyle messaging is aimed at people whose constraints are material rather than attitudinal. Connection and participation programs can become amenities of the affluent unless they are funded where capacity is thin and unless participation is compensated rather than assumed. Preparedness investment can track existing advantage, leaving the most exposed least protected. And structural transitions can burden low-income households if the costs of change are not deliberately shifted away from them. An equity screen — asking, for every action, who may be excluded or burdened, and adjusting before launch — is the practical expression of the report's repeated insistence that distress is unequally distributed and that responses which ignore this reproduce the disparity.

9.5 Measurement: Knowing Whether It Works

Measurement is where candour matters most, because eco-anxiety is genuinely hard to measure. Instruments vary, validated scales are still maturing, and the relationship between distress and the outcomes institutions care about is not uniform (Clayton & Karazsia, 2020; Cosh et al., 2024). A measurement regime that waited for clean proof of reduced anxiety would never start. The workable alternative pairs two kinds of indicator. Leading indicators track whether the conditions for agency are being built — whether curricula pair problems with pathways, whether commitments carry visible progress reporting, whether participation demonstrably changed a decision, whether community groups are reaching the under-served. These are largely process measures, available quickly, and mostly within institutional control. Lagging indicators track the outcomes the process is meant to produce — trust in institutions, participation rates, preparedness behaviours, help-seeking without stigma, and, measured carefully and longitudinally, levels of distress and its interference with daily life. Table 9-2 names example indicators for each pillar.

The discipline that makes measurement honest is to treat it as learning rather than vindication. Some actions will underperform; an evaluation framework worth having is one that can detect this and redirect resources, rather than one designed to confirm that

the chosen course was right. Building evaluation in from the start — especially for the expensive, emerging-evidence actions flagged above — is what separates a program that improves from one that merely persists. Rigour here has a concrete shape, not just an aspiration: stagger rollouts across schools or neighbourhoods so that later sites serve as comparisons for earlier ones; pre-register the indicators and thresholds before launch rather than selecting them after results arrive; pair every pilot with a comparison cohort, even an imperfect one; and reserve a fixed share of any program budget for evaluation, so that measurement is not the first casualty of cost pressure.

9.6 A Twelve-Month Roadmap

The framework above is deliberately general, because institutions differ. But generality can be an excuse for inaction, so this section offers one concrete starting sequence — a twelve-month roadmap that a city manager, a school-board superintendent, or a public-health director could begin on Monday. It is illustrative rather than prescriptive, and it front-loads the no-regrets moves identified earlier.

Table 9-3. An illustrative twelve-month implementation roadmap for an institution beginning this work. Source: Author synthesis.

Horizon	Priority actions
First 90 days	Audit major communications, campaigns, and curricula for risk without agency. Map existing participation channels and ask which can actually change a decision. Identify the highest-exposure, least-resourced communities. Establish baseline indicators so progress can later be measured.
Months 3–6	Revise and pilot the highest-risk communications. Add visible progress reporting to commitments already made. Train front-line staff (teachers, health and emergency workers) on climate emotions and referral. Launch one community connection or preparedness initiative in a high-exposure area.
Months 6–12	Evaluate the pilots honestly and redirect what underperforms. Expand what works. Formalize cross-sector ownership and a coordinating function for the seams. Publish public accountability results, closing the loop that builds trust.

Chapter 9 Conclusion

What this report supplies are design principles, sequencing logic, and diagnostic tools — not turnkey protocols. An adopting institution still owns the local design work of fitting actions to its statutes, budgets, and communities; the framework's job is to make

that work faster, better-aimed, and honestly measured. What it cannot do is settle the questions the evidence has not yet answered — the subject of the final chapter.

Research Gaps, Future Directions, and Conclusion

IN BRIEF

The evidence base has six mapped gaps: measurement and definition, causation and mechanism, intervention effectiveness, under-studied populations, Indigenous-led research, and jurisdiction-specific evidence. The report's claims are bounded accordingly — it offers a research-informed framework and an analytical lens, not a proven causal law or validated interventions. The conclusion restates what the report does and does not claim.

A report that has been candid about the limits of its evidence owes a final accounting of where those limits lie. This chapter does two things. It sets out what the evidence cannot yet tell us, and what research would be needed to find out — so that the framework this report has built can be tested rather than merely believed. Then it closes, restating with care what the report does and does not claim. The two tasks belong together, because the honest response to an uneven evidence base is not to overstate what is known but to map the gaps precisely enough that they can be filled.

10.1 Measurement and Definition

The most basic gap is measurement. Eco-anxiety is assessed inconsistently across studies, validated scales are still maturing — the leading instruments now include multidimensional as well as unidimensional measures (Clayton & Karazsia, 2020; Hogg et al., 2021) — and researchers do not yet agree on where ordinary concern ends and impairing distress begins (Cosh et al., 2024). Without comparable instruments, prevalence figures cannot be reconciled, trends cannot be tracked, and interventions cannot be evaluated against a common yardstick. A particular priority follows from this report's own framework: the five conditions for meaningful agency need operationalization, so that the claim at the centre of the argument — that distress intensifies when one or more is absent — can be measured rather than asserted.

10.2 Causation and Mechanism

The report's central proposition is that institutional conditions shape whether concern becomes capacity or harmful withdrawal. Much of the evidence behind that proposition is correlational, qualitative, or interpretive, as the Scope section acknowledged. The gap here is causal: longitudinal studies that follow people as conditions change, and quasi-experimental designs that compare communities or cohorts exposed to different institutional responses, would test whether closing the awareness–agency gap actually reduces harmful distress, or whether the association reflects something the framework has not captured. Until that work is done, the model should be held as a useful lens rather than a demonstrated mechanism.

10.3 Intervention Effectiveness

The six pillars are plausible, and each rests on some evidence, but as a set of interventions they are under-tested. It is one thing to show that collective efficacy buffers helplessness in general, and another to show that a particular community-connection program reduces eco-distress at a cost a municipality can bear. Testing need not start from zero: a small intervention literature already exists — structured peer-support formats such as climate cafés and the Good Grief Network's ten-step program have begun to be evaluated — and the agenda should build on it rather than beside it [citations to be added at audit]. The priority is evaluation: trials and well-designed pilots of pillar-based interventions, attention to cost-effectiveness, and honest measurement of which actions actually convert concern into capacity. The expensive, emerging-evidence actions that Chapter 9 flagged — much of the structural work in particular — are exactly where evaluation should be built in from the start rather than added after commitment.

10.4 Under-Studied Populations and Contexts

The evidence base is uneven in whom it covers. Much of the strongest research concentrates on young people and on a handful of high-income countries, leaving the experience of others comparatively thin. Older adults, climate-exposed workers, people with disabilities, newcomers and refugees, and residents of rural, remote, and northern communities are all under-represented relative to their exposure. The Global South, which bears disproportionate climate impact, is under-studied relative to the North. And one gap this report has flagged twice deserves naming again: the psychological

dimension of occupational climate exposure remains markedly under-researched relative to its physical toll (Gibb et al., 2024).

10.5 Indigenous-Led Research

Chapter 5 made policy claims about Indigenous environmental distress — about sovereignty, collective grief, governance authority, and land-based relationships — that currently rest on a narrower evidence base than their weight requires. The gap is not only one of quantity but of method and authorship. What is needed is research that is Indigenous-led, grounded in Indigenous methodologies and knowledge systems, and non-extractive in its conduct, on land-based wellbeing and self-determined adaptation (Brubacher et al., 2024). This is a priority both for the integrity of the evidence base and for the communities such research concerns.

10.6 Jurisdiction-Specific Evidence

The framework draws on an international evidence base, which is defensible for foundational concepts but leaves a practical gap for the decision-makers any given jurisdiction is trying to serve. Studies of how eco-anxiety is distributed across specific populations and regions, and of which interventions work within particular municipal, state, provincial, and national institutional contexts, would let the framework be applied with more confidence and less inference than the current evidence allows.

Table 10-1. A research agenda: the principal gaps, why each matters, and the priority direction for addressing it. Source: Author synthesis.

Gap area	Why it matters	Priority research direction
Measurement & definition	Inconsistent instruments make distress hard to compare across studies or track over time	Validated, cross-culturally comparable scales; operationalization of the five agency conditions; clearer lines between adaptive and maladaptive distress
Causation & mechanism	The report's central claim rests largely on correlational and interpretive evidence	Longitudinal and quasi-experimental designs testing whether institutional conditions measurably shape distress
Intervention effectiveness	The six pillars are plausible but, as interventions, under-tested	Trials and evaluated pilots of pillar-based interventions; cost-effectiveness; what actually converts concern into capacity

Gap area	Why it matters	Priority research direction
Under-studied populations	Evidence concentrates in particular countries and in younger people	Older adults, workers, disabled people, newcomers, and rural and remote communities; the Global South; the psychology of occupational climate exposure
Indigenous-led research	Policy prescriptions currently outrun the Indigenous-grounded evidence base	Indigenous-led, methodologically grounded research on land-based wellbeing and self-determined adaptation
Jurisdiction-specific evidence	The evidence base is international and uneven across local contexts	Prevalence, distribution, and effectiveness studies within specific regional and institutional contexts

10.7 Conclusion

This report began with a school board, a heat advisory, a recycling campaign, and a youth council — ordinary institutional encounters that left people more distressed, not less. The argument built from those scenes is that the distress was not simply a reaction to environmental facts. It was shaped by how institutions communicated, whether they acted credibly, how they distributed responsibility, and whether the people affected had any real influence over the outcome.

That argument, stated carefully, is the report's contribution. Environmental distress is shaped by genuine environmental risk; it is also shaped by institutional conditions that can amplify it, attenuate it, or redirect it. The awareness–agency gap — the distance between what people are made to know and what they are enabled to do — is a lens for seeing where institutions hold leverage over that distress. Within that boundary, the report has offered a structured response: a vocabulary for the emotions involved, an account of how distress is produced and unequally distributed, a diagnosis of the institutional practices that worsen it, a six-pillar framework for the response, sector-specific assignments, and an implementation path with measurement built in.

The disposition the report argues for is narrow and, by now, familiar. The goal is not to make people less concerned about environmental harm; concern is a reasonable response to real conditions. The goal is to ensure that concern is met — by knowledge, by agency, by social connection, and by visible institutional action — so that it strengthens the public systems that environmental challenges will test rather than quietly eroding them. Whether the specific levers identified here perform as the framework predicts is, properly, a question for the research agenda above to answer.

What the report has tried to establish is that the question is worth asking, and that institutions are not bystanders to environmental distress but among the conditions that shape it.

WHAT THIS REPORT DOES AND DOES NOT CLAIM

It does claim that environmental distress is shaped both by genuine environmental risk and by the institutional conditions surrounding it, and that institutions can amplify, attenuate, or redirect that distress through communication, credibility, participation, and infrastructure.

It does not claim that institutions are the principal source of all environmental distress, that the awareness–agency gap is a proven causal law, or that the six pillars are validated interventions. It is a research-informed policy framework, offered to be tested and refined — not a final account.

The Institutional Agency Audit

This is a one-page tool for any institution about to launch a communication, campaign, curriculum, consultation, or public advisory. It operationalizes the five conditions for meaningful agency from Chapter 1 and the design checklist from Chapter 6 into a quick score, so that a city manager, superintendent, communications lead, or public-health official can audit an initiative before it reaches the public rather than after.

Score the proposed initiative on each dimension: 0 if the condition is absent, 1 if partial, 2 if clearly present. Sum the five for a total out of ten. The point is not the number itself but the diagnosis it forces — a low score on any single dimension names exactly what to fix. The audit is a practical author-developed decision aid, not a validated psychometric or program-evaluation instrument; it is offered as a structured prompt for judgment, to be adapted to local context and refined through use.

Table A-1. The Institutional Agency Audit. Source: Author synthesis, building on the five dimensions of agency (Chapter 1) and the policy design checklist (Chapter 6).

Dimension of agency	Diagnostic question	Score
1. Personal efficacy	Does it show people their own actions can make a difference, or imply the problem is beyond them?	0 · 1 · 2 · n/a
2. Practical capacity	Does it supply the concrete means to act — resources, infrastructure, knowledge, time — or assume capacity people may not have?	0 · 1 · 2 · n/a
3. Collective support	Does it connect people to others and to collective action, or leave them to act alone?	0 · 1 · 2 · n/a
4. Meaningful participation	Can the people affected actually influence the decision, or is their input solicited after it is made?	0 · 1 · 2 · n/a
5. Institutional responsiveness	Does it pair its message with visible, credible institutional action, or transfer responsibility while the institution does little?	0 · 1 · 2 · n/a

INTERPRETING THE RESULT

Any zero triggers revision before launch, regardless of the total. A high score on other dimensions cannot compensate for a wholly absent condition.

8–10 — Strong. The initiative builds agency alongside awareness. Proceed, and protect the dimensions that scored well.

5–7 — Mixed. Identify the lowest-scoring dimensions and strengthen them before launch.

0–4 — High risk. The initiative is likely to raise concern without supplying capacity. Redesign before proceeding.

These bands are descriptive conventions from the authors' own use of the tool, not a validated risk classification; institutions adopting the audit should pilot it and adjust the thresholds against their own experience. A dimension may be scored not-applicable only with a written justification — some initiatives legitimately should not rely on personal action, for instance — and n/a scores reduce the denominator rather than counting as zero.

A completed audit should be a record, not only a score. For each dimension, note the evidence or rationale behind the rating; where the rating is low, the corrective action, its accountable owner, and a due date; whether the affected community has validated the judgment; and a re-audit date once revisions are made. These fields turn the audit from a one-time gate into a working document that travels with the initiative.

A worked example shows the tool in use. The first heat advisory in the Chapter 8 stress-test — alarm without agency — scores near zero: it offers no efficacy, no practical means, no connection, no participation, and no sign of institutional action. The revised advisory scores high on practical capacity (named cooling centres, a number to call), collective support (check on neighbours), and institutional responsiveness (extended hours, direct outreach), turning a distress-producing message into a capacity-building one. Same facts, a very different score — and a very different effect on the people who receive it.

The audit also serves as the connective tissue between the report's frameworks, which nest rather than compete: the five conditions diagnose, the six pillars respond, the sectors assign, and the audit operationalizes. Table A-2 crosswalks them — from the problem an institution observes, through the missing condition it indicates, to the response, the natural lead, and an indicator that would show progress.

Table A-2. Crosswalk from observed problem to missing agency condition, response pillar, lead actor, and indicator.
Source: Author synthesis.

Observed problem	Missing condition	Response (pillar)	Natural lead	Example indicator
A warning or lesson names the threat but no practical action	Practical capacity	Inform / Prepare	Emergency management; educators	Share of advisories and lessons carrying an accessible action pathway
Messaging implies the problem is beyond individual influence	Personal efficacy	Inform / Connect	Public communicators	Audience efficacy measures alongside reach metrics
People are asked to act alone	Collective support	Connect	Municipalities; community organizations	Reach and uptake of collective programs
Consultation cannot alter the decision	Meaningful participation	Participate	Municipality; school board	Decisions demonstrably altered through participant input
Institution asks individuals to act but does not report its own actions	Institutional responsiveness	Transform / Inform	The responsible agency	Public progress reporting against stated commitments

Methods Note

This report is a targeted narrative synthesis. Its purpose is to generate practical, transferable policy-design principles; it does not quantify causal effects, establish prevalence, or follow a registered systematic-review protocol. This note describes how sources were identified, selected, and graded.

B.1 Search Strategy

Sources were identified through iterative searches of Google Scholar and publisher databases conducted across the drafting period, with final searches in June 2026, supplemented by citation chaining from foundational works in environmental psychology, environmental justice, risk communication, and participation scholarship. Searches were organized around four term families. Construct terms: eco-anxiety, climate anxiety, ecological grief, solastalgia, climate emotions, eco-guilt, eco-anger, environmental distress. Mechanism terms: fear appeals, extended parallel process model, risk communication, efficacy, collective efficacy, hope and climate engagement, trust and climate policy. Population terms: youth climate distress, Indigenous climate and mental health, occupational heat exposure, climate-exposed workers, older adults and heat. Policy terms: climate adaptation planning, public participation, environmental justice, producer responsibility, preparedness and resilience. Government and agency repositories were consulted for policy instruments and event documentation.

B.2 Inclusion, Exclusion, and Source Quality

Inclusion favoured English-language, peer-reviewed studies and reviews bearing on environmental distress, its drivers, and institutional practice. Systematic reviews and meta-analyses were preferred over single studies where both existed, and findings resting on a single study are cited as such in the text. Foundational scholarship — on participation, individualization of responsibility, and environmental justice — was included for conceptual grounding and paired with more recent work where available. The clinical treatment literature was excluded as outside the report's scope, as were sources bearing only on mitigation policy without a distress or communication

dimension. Grey literature — government strategies, agency reporting, and public-event documentation — was used to describe policy instruments and document events, not as a source of effect estimates.

B.3 Evidence Grading and Verification

Evidence grades in Chapter 8 were assigned against the two scales defined there — evidence strength and directness, and recommended disposition — with directness judged by whether the institutional lever has been tested in relation to environmental distress itself or in an adjacent literature. Grades were assigned by the primary author and reviewed by the contributing authors. The citation audit noted on the title page remains outstanding: the event figures in Section 4.6 are drawn from public agency reporting pending formal citation, as are the intervention-literature references noted in Section 10.3.

B.4 Limitations

As with any narrative synthesis, the search was not exhaustive, and source selection and evidence grading reflect the authors' judgment rather than a registered protocol. The synthesis should accordingly be read as a structured account of the literatures cited rather than a comprehensive survey of them. The evidentiary boundaries that follow from this design are set out in the Scope section.

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