



Perspective

Responsibilized and powerless? Unpacking the individualization of climate mitigation

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ABSTRACT

Over recent decades, climate mitigation discourse in Western democracies has increasingly emphasized individual lifestyle choices alongside continued structural reforms. This trend is commonly described as the “individualization of responsibility.” This perspective paper offers a critical interdisciplinary synthesis examining how this discursive shift operates, whom it serves, and what it obscures. We critically examine the rise of individual-focused climate strategies, such as carbon footprint tracking, behavioral nudges, and voluntary consumption shifts, and synthesize evidence on their documented efficacy. Drawing from climate psychology, political science, sociology, and environmental justice perspectives, we analyze how neoliberal governance has recast citizens as climate-conscious consumers while diffusing accountability from state and corporate actors. We argue that “responsibilization” can activate certain forms of individual agency while constraining others. When detached from structural transformation, it risks reinforcing social inequalities and weakening collective political engagement. The article advances an integrated, justice-informed conceptual framework, the Responsibility-Power-Justice (RPJ) nexus, that repositions individual action within systems of structural accountability. We emphasize that equitable and effective climate action requires coupling behavioral insights with ambitious, justice-oriented policy reform. Aligning responsibility with power and capacity is essential to avoid responsibilization without empowerment and to achieve the scale of transformation the climate crisis demands.

1. Introduction

Climate change is a global collective-action problem, yet in many Western democracies and Global North contexts, climate discourse has increasingly emphasized individual responsibility alongside continued structural interventions. Governments and industries remain actively engaged in climate mitigation, as reflected in ongoing international climate negotiations, national emissions reduction targets, and sectoral policies such as renewable energy mandates and emissions trading schemes. At the same time, there has been a marked discursive shift toward foregrounding personal behavior change in public communication, corporate messaging, and certain policy instruments. This reflects what scholars term the “individualization of responsibility” [1,2], wherein climate change is increasingly framed in public discourse as addressable through aggregated personal decisions.

In recent decades, climate change discourse has increasingly foregrounded individual behavior and lifestyle choices as key mitigation strategies in public campaigns, media coverage, and soft governance

tools. While structural reforms, such as regulatory interventions, carbon pricing, and decarbonization of energy systems, remain essential components of climate policy, there has been a notable discursive realignment emphasizing personal responsibility through behavioral change. This trend is reflected in public campaigns, corporate messaging, and policy tools that reframe climate change as significantly influenced by the cumulative outcome of individual actions. For instance, the UK government's “Are You Doing Your Bit?” campaign encouraged citizens to reduce waste and conserve energy through voluntary actions [3]. One of the world's largest fossil fuel and energy corporations, British Petroleum (BP), launched a personal “carbon footprint” calculator in 2004. This calculator is widely cited as a strategic effort to redirect climate accountability from fossil fuel companies to consumers [4,5].

This pattern extends beyond the UK context. Contemporary examples include the European Union's emphasis on “empowering consumers” within the European Green Deal [6], the proliferation of personal carbon tracking applications in the United States and Europe during the 2020s, and the global spread of social media-driven

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individual action campaigns such as #MeatlessMonday and #Flight-Shame [7]. Corporate climate communications increasingly emphasize consumer responsibility through ESG frameworks and “sustainable choice” marketing [8]. While these developments coexist with continued policy development, such as emissions trading schemes, renewable energy targets, and the Paris Agreement's nationally determined contributions, they represent a significant reorientation of climate communication toward individual agency and consumer choice.

Scholars have identified this phenomenon as part of a broader neoliberal paradigm, whereby individuals are responsabilized through market-based appeals and soft governance instruments such as nudges [1,9]. The emphasis on individual mitigation does not negate the persistence of structural measures, but it represents a significant realignment of where climate action is expected to originate, and whose behavior is targeted as a site of change [10].

The shift toward individual-focused climate discourse can be traced through a series of discursive and institutional developments, particularly since the early 2000s. There are multiple and reinforcing mechanisms through which this individualization operates. First, corporate actors have strategically promoted individual responsibility narratives to deflect regulatory pressure. One of the most influential moments was the widespread dissemination of the “carbon footprint” concept accompanied by a large-scale marketing campaign encouraging individuals to calculate and reduce their personal emissions [11,12]. Researchers have noted that this marked a significant pivot in climate communication from systemic industrial accountability to individualized responsibility [1,13].

Second, behavioral economics has been increasingly integrated into policy design in some jurisdictions, favoring “nudge”-based interventions over regulatory approaches [14,15]. Third, neoliberal governance frameworks have favored market-based and voluntary mechanisms, positioning citizens as “consumer-citizens” rather than collective political actors [16,17]. Fourth, media coverage increasingly frames climate change through individual lifestyle narratives rather than systemic analysis [18]. These mechanisms do not eliminate structural climate policy but reshape the dominant framing of climate responsibility in public discourse.

It is important to note that this discursive individualization occurs alongside, rather than replacing, continued structural climate engagement. Governments maintain involvement through international climate negotiations (e.g., annual COP conferences), national emissions reduction targets, and sectoral policies. Recent examples include the UK Climate Change Committee's 2023 recommendations focusing primarily on government and industry action, and the EU's comprehensive regulatory approach in the Fit for 55 package [19] (European Commission). The concern this paper addresses is not the absence of structural climate policy, which continues to develop across many governance contexts, but the discursive prominence of individual responsibility in public communication, policy framing, and corporate narratives. Climate mitigation is frequently framed as a matter of personal lifestyle choices and consumer behavior, even alongside structural interventions. This framing risks displacing accountability, obscuring systemic drivers, and creating a “responsibility-power gap,” in which individuals are tasked with mitigation without corresponding influence over the systems that determine emissions.

This paper examines the growing emphasis on individual-focused climate mitigation, critically analyzing evidence on its documented effectiveness and ideological foundations through interdisciplinary lenses including psychology, sociology, political science, and climate justice. It explores how neoliberal governance has reshaped climate discourse, shifting emphasis onto individuals while systemic drivers such as fossil fuel dependency, economic growth imperatives, infrastructural lock-ins, and global power asymmetries remain under-examined. By examining how this responsabilization can simultaneously activate certain forms of agency while constraining others, and how it may divert attention from structural drivers without necessarily

eliminating demand for systemic reform, this paper highlights the importance of integrating personal agency with institutional capacity, such that individuals are positioned as empowered political actors within, rather than as substitutes for, structural transformation.

2. Significance and contribution

This article makes a critical scholarly contribution in climate discourse by tracing the historical, ideological, and policy-driven rise of individual-focused mitigation strategies and assessing their limitations through an interdisciplinary lens. Drawing on evidence from sociology, climate psychology, political science, and environmental justice, it deconstructs assumptions about voluntary lifestyle change as a primary lever for deep decarbonization. While prior studies have examined behavioral change or neoliberal climate governance in isolation, this paper uniquely synthesizes their intersections to highlight the ideological underpinnings and governance failures of the responsabilization paradigm.

The interpretive emphasis that individual action is sufficient or primary is reflected across multiple domains of climate governance and communication. For example, climate communication efforts frequently prioritize individual behavior change campaigns over advocacy for structural reform [20]. Media coverage similarly tends to frame climate action through individual lifestyle narratives [18], while some policy documents foreground behavioral change as a mitigation lever without corresponding commitments to enabling infrastructure or regulation [21]. This does not imply that scholars or policymakers view individual action as sufficient. There is broad recognition of the need for systemic transformation. The concern is that the combined effect of public discourse, corporate messaging, and selective policy instruments creates an operational emphasis on aggregated individual choice as a primary driver of emissions reduction. It highlights how climate discourse has been reshaped by neoliberal logics that shift responsibility from structural actors to individual consumers, often without addressing the structural conditions this paper identifies as necessary for meaningful individual action. These conditions include access to enabling infrastructure, political influence over decision-making, collective forms of engagement, and equity-oriented support mechanisms [1,10,22].

Importantly, the article advances the literature by offering an integrated, justice-informed framework for climate mitigation that neither romanticizes individual agency nor reduces it to moral consumption, but instead repositions it within broader systems of accountability, capacity, and collective empowerment. This approach recognizes that individual and systemic action are not oppositional but interdependent: structural reforms require behavioral change for implementation, while individual agency requires structural support to be effective and equitable. The framework thus moves beyond binary debates to examine how governance systems can foster this integration while avoiding the pitfalls of responsabilization without empowerment.

In doing so, the paper contributes to an emerging body of work that seeks to repoliticize climate action, decenter technocratic behavioralism, by which we mean the application of behavioral science to policy in ways that treat behavior change as a technical, apolitical problem solvable through expert-designed interventions. The paper emphasizes on the questions of power, justice, and democratic participation [14], and foregrounds structural transformation as a precondition for equitable climate futures [10,23–25].

3. Theoretical foundations

3.1. Risk society and neoliberal responsabilization

Sociological analyses of neoliberal governance and risk society, particularly Beck's framework [24] and subsequent scholarship on responsabilization [22,26], help explain why individuals have become a focal point of climate mitigation discourse. However, sociological

perspectives on this phenomenon are not unified: while critical sociologists emphasize the ideological dimensions of responsabilization, other traditions within environmental sociology focus on how individual practices and social norms can be leveraged for sustainability transitions [21,27]. Our analysis draws primarily on the critical governance perspective.

Beck [24] argued that late modernity is characterized by the emergence of global, manufactured risks, such as climate change, that transcend geographic and institutional boundaries. In a “risk society,” individuals become increasingly preoccupied with anticipating and managing to diffuse these risks. Traditional institutions, governments, corporations, and scientific authorities, are seen as unreliable or insufficient due to past failures, leading to a condition Beck termed “organized irresponsibility”: a state where risks are widely shared, yet no entity is clearly accountable. Within this context, individuals are compelled to manage risk themselves through consumption and lifestyle decisions as a form of risk mitigation. Beck also introduced the idea of “subpolitics,” referring to political actions taken by individuals and informal groups outside formal institutions.

Beck's risk society thesis, while influential, requires critical qualification when applied to contemporary climate governance. One limitation of Beck's framework lies in its focus on late modernity and Western institutional contexts limits its applicability: risk perception and governance logics differ substantially across Global South contexts, where climate risks often stem from colonial legacies and ongoing structural vulnerabilities rather than reflexive modernization [28,29]. Beck's framework has been critiqued for its Eurocentrism and limited attention to how race, class, and geopolitical power shape differential vulnerability to and responsibility for manufactured risks [30,31].

A related critique concerns Beck's emphasis on individualization and “subpolitics” which has been criticized for potentially romanticizing individual agency at the expense of collective political organizing [32]. Environmental justice movements and climate activism demonstrate that structured, collective political action persists and indeed intensifies in response to the climate crisis, suggesting that the retreat to individual risk management Beck described may be one trajectory among several, rather than a universal condition [33,34].

Beck's concept of “organized irresponsibility” nevertheless remains valuable for understanding how climate accountability is diffused across actors, yet it offers limited prescriptive guidance for how to reconstruct accountability systems [35]. His framework identifies the problem but provides insufficient theoretical resources for imagining transformative governance alternatives. Despite these limitations, Beck's insights remain relevant for understanding how climate responsibility is discursively constructed in contexts where neoliberal governance predominates and where institutional failure creates conditions for responsabilization.

This privatization of risk aligns closely with the rise of neoliberal governance, which has been informed by foundational work on governmentality and advanced liberalism [36,37]. Neoliberalism, dominant in many Western states since the 1980s, promotes market-based solutions, deregulation, and the retreat of the welfare state [38,39]. Under this logic, societal problems like climate change are reframed as individual matters of consumption and personal responsibility. Citizens are increasingly positioned not as collective political actors, but as autonomous, rational consumers tasked with resolving systemic issues through ethical choices [22].

This process, known as responsabilization, reconfigures subjectivity. Individuals are “called upon” to solve climate problems by making the right market choices, e.g., driving less, recycling more, buying “green” products, rather than demanding systemic reform [2]. Giesler and Veresiu [26] describe how policy and marketing discourses actively shape people into “responsible consumers,” using what they term marketplace governance. In this model, morality is embedded in consumer behavior; ethical action becomes synonymous with purchasing decisions.

Importantly, this moral framing occurs without corresponding

empowerment. Individuals are tasked with climate responsibility but lack access to the systems, such as energy grids, transportation networks, and housing infrastructure, that determine the bulk of emissions. As Mustalahti and Agrawal [40] note in the context of natural resource governance, responsibility is often delegated “without the powers and resources necessary” to fulfill it. This disconnect creates what we term a “responsibility-power gap”: individuals are held accountable for emissions reduction yet lack influence over the infrastructural, economic, and political systems that shape emissions outcomes.

This gap is particularly pronounced for marginalized populations. Access to low-carbon systems requires not only physical infrastructure availability but also affordability, reliability, and agency to make changes. Many low-income households face energy poverty, unable to afford consistent energy use despite electrification, or unable to invest in efficiency improvements due to cost barriers or rental housing constraints [41,42]. When climate strategies emphasize individual responsibility without addressing these structural constraints, they effectively responsabilize those with the least capacity to respond while those with the greatest emissions and resources escape scrutiny. This disconnect fosters psychological strain: individuals experience guilt or eco-anxiety [43] over their carbon footprint while being structurally unable to influence larger-scale change. The result is responsabilization without empowerment, a governance condition where individuals bear moral and psychological burdens for climate change without commensurate power to drive systemic transformation.

4. The role of individual behavior in climate mitigation

4.1. Individual behavior: potentials and benefits

Individual behavior plays an essential role in climate mitigation through multiple pathways. First, household consumption and lifestyle choices account for a substantial proportion of global emissions, studies estimate that household-level decisions related to mobility, diet, housing, and consumption patterns contribute approximately 60–72% of global greenhouse gas emissions across their full supply chains [44,45]. While the majority of these emissions are embedded in production systems and infrastructure, individual choices influence demand patterns and create market signals that shape these systems over time.

Second, individual engagement serves as a foundation for broader political support for climate policy. Research demonstrates that personal experience with pro-environmental behavior can increase support for climate policies and willingness to accept regulatory measures [46,47]. Citizens who have adopted sustainable practices often develop stronger environmental identity and greater climate concern, which can translate into voting behavior, civic participation, and advocacy for systemic change [48]. This relationship is particularly important given that public acceptance remains a key constraint on ambitious climate policy in democratic contexts [49].

Third, certain individual behaviors can model social norms and catalyze wider adoption through peer effects and social contagion. Visible actions such as installing solar panels, adopting plant-based diets, or choosing active transportation can signal changing social norms and reduce perceived barriers for others [50,51]. Research on dynamic social norms shows that communicating trend information about increasing adoption of sustainable behaviors can motivate further behavior change [52].

Fourth, psychological frameworks suggest that individual action can foster perceived self-efficacy, climate agency, and internal locus of control, psychological states associated with continued engagement rather than helplessness or disengagement [53,54]. For some individuals, personal action serves as an entry point into deeper climate engagement.

Finally, structural reforms frequently require complementary behavioral change to achieve their intended outcomes. Infrastructure alone does not guarantee behavior change: the provision of public

transportation requires individuals to use it, the installation of renewable energy systems requires integration into daily practices. Instances where systemic interventions have failed due to lack of public compliance illustrate this interdependence, for example, Low Traffic Neighborhoods (LTNs) in the UK have faced public resistance, vandalism of traffic control measures, and eventual removal in some cases despite their environmental rationale [55]. This highlights that environmental psychology's focus on values, norms, and behavioral determinants addresses a genuine practical challenge: how to align individual actions with the opportunities created by structural change [56].

Environmental psychology has developed robust theoretical frameworks for understanding individual climate action precisely because behavioral change is both necessary and challenging. The Theory of Planned Behavior [57], building on Bandura's [58] social cognitive theory and self-efficacy research, and the Value-Belief-Norm theory [59] emphasize that pro-environmental behavior emerges from value-based motivations and moral obligations. These frameworks indicate that individuals with stronger biospheric values and personal norms are more likely to support ambitious climate policies, even when such policies impose personal costs [56,60]. Understanding these psychological foundations is essential for designing policies that garner public legitimacy and sustained support. When approached through participatory, community-based methods, behavioral interventions can foster collective efficacy, social capital, and democratic engagement with climate governance [61,62].

5. Limitations and constraints

However, while individual behavior is necessary and valuable, empirical evidence reveals significant limitations in the efficacy of individual-focused interventions when pursued in isolation from structural reforms. A growing body of research questions the sufficiency of individual behavioral interventions for achieving deep decarbonization. Meta-analyses indicate that most household-level interventions yield reductions in the low single-digit percentage range, with the strongest effects observed in one-time behaviors like recycling, and far weaker outcomes in high-impact domains such as air travel, meat consumption, or private car use [63].

Nudge theory [15], which aims to shift behavior through subtle changes in choice architecture, has been widely applied in climate contexts. However, critics argue that nudges often fall short of enabling transformative change and may distract from necessary systemic reforms. Maier et al. [64] found evidence of moderate publication bias in nudge research, suggesting that their real-world effectiveness may be overestimated. Moreover, nudges may contribute to negative behavioral spillover, where individuals who perform a small pro-environmental act feel less obligated to support broader climate policies or structural interventions [47].

The notion that small actions catalyze broader behavioral change, often termed positive spillover, has limited empirical support. Instead, a moral licensing effect may occur, where individuals reminded of their pro-climate behavior perceive they have "done enough," reducing willingness to support collective action [47].

Further complicating the picture are structural constraints that limit individual agency. Social, economic, and infrastructural barriers, such as inadequate public transport, lack of access to renewable energy, or rented housing, often render sustainable choices difficult or impossible [25]. Importantly, behavioral interventions tend to yield more durable results when paired with supportive policies, infrastructure, and institutional reforms [25,65].

Psychological frameworks help explain both the promise and limitations of individual action. Environmental and social psychology research has identified multiple psychological barriers to pro-environmental action, including cognitive biases such as temporal and spatial discounting [66], optimism bias [67], and finite pool of worry effects [68]. While cognitive-behavioral approaches emphasize

individual-level barriers and interventions, critical and community psychology traditions critique the individualization of environmental problems and emphasize collective efficacy, systemic constraints, and the need for structural change [69,70].

Social practice theory [21,71] offers a distinct analytical perspective that moves beyond individualistic models of behavior change. Shove's [21] influential critique argued that mainstream behavioral interventions over-emphasize individual attitudes and choices while neglecting the materiality, competencies, and meanings embedded in everyday practices. From this perspective, pro-environmental behavior change requires not just individual motivation but transformation of the infrastructural, social, and cultural contexts that structure practices. However, Shove's framework has been subject to substantial debate. Critics argue that it risks downplaying individual agency, moral responsibility, and the role that values and intentions do play in motivating behavioral shifts [72,73]. We draw on practice theory's insights regarding the embeddedness of behavior in material and social contexts, while maintaining that psychological factors, values, norms, efficacy beliefs, remain important within those contexts [74,75].

Hence, behavior change is most effective when integrated with systemic interventions, such as pricing, regulation, and infrastructure investment, that reshape the context in which choices are made.

5.1. Governance, power, and justice

Political science perspectives reveal how climate governance has increasingly emphasized individual behavior through soft policy instruments shaped by neoliberal paradigms. Rather than mandating systemic transformation, many governments have favored informational tools, voluntarism, and public-private partnerships, often assuming that informed individuals will make rational, low-carbon choices [9,76].

Several scholars argue that governments increasingly favor subtle behavioral tools over regulatory mechanisms, not only for their perceived political feasibility but also as a means of minimizing opposition [14,77]. This claim is supported by observable trends: the rise of behavioral insights teams ("nudge units") in government from the UK's Behavioral Insights Team (2010) to similar units across OECD countries; policy white papers that emphasize "choice architecture" and voluntary behavior change over mandates; and documented industry preference for soft governance that preserves consumer sovereignty over regulation that constrains corporate practices [78,79].

However, this characterization requires qualification. One important consideration is that the adoption of behavioral tools does not necessarily represent the displacement of regulation so much as augmentation of policy toolkit [80]. Context also matters, as the extent to which nudges are favored "over" regulation varies substantially by political context. For instance, the European Union has simultaneously expanded behavioral interventions and strengthened regulatory frameworks (e.g., Fit for 55 package), suggesting these approaches can coexist rather than compete [6]. Finally the political feasibility argument may be overstated: controversial behavioral interventions such as congestion charges or flight levies often generate substantial public resistance despite their "soft" framing [80].

Nonetheless, the core concern holds merit: there is a documented preference in many Western governance contexts for behavioral interventions that preserve market structures and individual consumer choice over transformative regulatory approaches that would fundamentally restructure production systems or constrain corporate activity [21,81]. Reliance on behavioral interventions may suppress political engagement through negative spillover effects [82].

5.2. Power dynamics in climate and energy transitions

Understanding responsabilization requires explicit analysis of how power operates within climate governance systems. Sovacool and Brisbois [83] provide a comprehensive framework identifying multiple

dimensions of elite power in low-carbon transitions: instrumental power (direct influence through lobbying, funding, and policy networks), structural power (shaping institutional rules and market structures), and discursive power (defining problems, solutions, and what counts as legitimate knowledge).

In the context of individual responsabilization, we can observe power operating across these dimensions. Instrumentally, fossil fuel corporations and industry groups have actively promoted individual responsibility narratives, such as BP's carbon footprint calculator, as a strategy to deflect regulatory pressure and maintain policy influence [5,84]. Structurally, neoliberal governance frameworks privilege market-based, voluntary mechanisms over regulatory intervention, embedding certain actors' preferences into institutional design [85,86]. Discursively, the framing of climate change as an individual behavioral problem rather than a political-economic structural challenge shapes what solutions appear feasible, legitimate, and worthy of public investment [81,87].

Brisbois's [88] "powershifts" framework further illuminates how decentralization and distributed ownership in energy systems can, but do not automatically, shift power relations. While community energy projects and distributed generation may empower some actors, these changes occur within existing power structures that can contain, co-opt, or marginalize transformative potential. For instance, rooftop solar may reduce individual dependence on centralized utilities, yet access remains stratified by income, homeownership, and credit availability, often reinforcing rather than challenging broader inequalities [89].

Importantly, Avelino and Rotmans [90] distinguish between power over (the capacity to control or constrain others) and power to (the capacity to act and transform). Current climate governance often emphasizes "empowering" individuals with power to make consumer choices, while leaving intact the structural power over held by fossil fuel industries, financial institutions, and state actors who determine infrastructure investment, regulatory frameworks, and subsidy regimes. Responsibilization can thus be understood as a form of apparent empowerment that provides limited "power to" act within consumer markets, while obscuring and maintaining the "power over" exercised by corporate and state elites.

Meadowcroft [91] argues that effective climate governance requires not just behavioral change but political contestation that challenges existing power configurations. Without such contestation, voluntary individual actions may produce symbolic change while leaving fundamental power structures intact. This analysis suggests that reconnecting individual agency with systemic transformation requires more than policy integration, it requires confronting and redistributing power itself, ensuring that climate governance is democratized and that marginalized communities gain influence over decisions that shape their lives [92,93].

5.3. Environmental and climate justice

To properly ground this paper's normative argument, it is essential to engage with foundational theories in environmental and climate justice. Schlosberg's [94] influential work identifies three core dimensions of environmental justice: distribution (the fair allocation of environmental benefits and burdens), recognition (respect for diverse identities, experiences, and knowledges), and participation (inclusion in environmental decision-making processes). These dimensions are interdependent: addressing distributional injustices requires recognizing who bears disproportionate burdens and why, while meaningful participation enables marginalized communities to contest unjust distributions.

Applied to climate governance, this framework reveals how the individualization of responsibility fails across all three dimensions. Distributionally, it obscures the concentrated emissions of wealthy elites while placing behavioral expectations on those with minimal carbon footprints [95,96]. In terms of recognition, it universalizes climate responsibility without acknowledging differential historical

accountability, colonial legacies, or the distinct experiences of frontline communities [23,97]. Participatorily, it positions individuals as consumers making isolated market choices rather than as political actors engaged in collective deliberation about systemic transformation [98].

Building on this, Walker [99] emphasizes that environmental justice is fundamentally about power, who has the capacity to shape environmental conditions, make decisions, and hold others accountable. Climate justice extends these concerns to temporal and intergenerational dimensions, recognizing responsibilities to future generations and to those in the Global South who are disproportionately affected by climate impacts they did not cause [100,101]. Mohai et al. [102] demonstrate through extensive evidence that environmental injustices are not accidental but result from systematic patterns of political and economic marginalization.

Furthermore, Bullard's [103] foundational work on environmental racism reveals how environmental burdens are deliberately and disproportionately placed on communities of color through discriminatory land use, zoning, and enforcement practices. This pattern persists in climate governance: low-income communities and communities of color face greater climate impacts, have less access to adaptation resources, and are more constrained in their capacity for low-carbon transitions [104,105].

One foundational concern is the extreme disparity in carbon emissions: in 2019, the richest 1% of the world's population were responsible for approximately 16% of global CO₂ emissions, a carbon footprint equivalent to that of the poorest two-thirds of humanity combined [106]. High-emitting elites, who account for disproportionate emissions through activities such as private aviation and luxury consumption, are rarely the targets of behavioral campaigns that instead focus on everyday consumption choices accessible to middle- and lower-income populations [95,107]. Research demonstrates that climate policies framed as individual responsibility often fail to address luxury emissions while disproportionately burdening those with least capacity to respond [96].

Moreover, conservation incentives such as higher energy prices, while potentially absorbable by affluent households, function regressively for low-income populations, exacerbating energy poverty unless mitigated through redistributive mechanisms such as rebates or progressive tiered tariffs [108–110]. Empirical studies show that carbon pricing and consumption-based interventions can increase inequality if not designed with equity safeguards [111].

Systemic environmental injustices further constrain individual action. Low-income communities and communities of color often lack access to clean energy infrastructure, energy-efficient housing, or adequate public transportation, rendering "green choices" structurally unavailable rather than simply undesirable [41,103,112,113]. These structural barriers mean that exhortations for individual responsibility become effectively inaccessible for marginalized populations [114].

From a climate justice perspective, meaningful mitigation requires addressing these structural inequalities through targeted infrastructure investment, progressive regulation of high emitters, and corporate accountability measures, not primarily through individualized moral appeals [98,115]. Recent research documents growing public frustration with being "responsibilized" for climate action while corporations and governments maintain business-as-usual practices [2,116].

Decolonial frameworks offer some of the most incisive critiques of individual-focused climate mitigation, interrogating how climate governance reproduces colonial power relations and epistemologies [23,97,117]. Unlike postcolonial analyses that focus on cultural representation and discourse, decolonial approaches, rooted in Latin American and Indigenous scholarship, emphasize ongoing coloniality as a structural condition that persists beyond formal decolonization, manifesting in knowledge systems, resource extraction, and political-economic relations [118].

Sultana [23] articulates the concept of "climate coloniality," demonstrating how climate governance perpetuates imperial power

dynamics through: (1) the Global North's disproportionate historical responsibility for emissions yet disproportionate influence over climate policy; (2) market-based mechanisms such as carbon offsets that allow Northern emissions to continue while imposing conservation restrictions on Global South lands; (3) the extraction of climate knowledge, data, and even “climate solutions” from Indigenous and local communities without equitable participation or benefit-sharing; and (4) the universalization of Western, market-oriented climate solutions while marginalizing alternative epistemologies and governance systems.

This decolonial lens reveals that individualizing climate responsibility functions not merely as neoliberal governance but also as colonial erasure: it obscures climate debt, diffuses historical accountability, and frames climate action in ways that are abstract from the specific geopolitical and racial structures through which climate change is produced and experienced [117].

The individualization discourse itself reflects deeper epistemic inequalities in climate knowledge production. Recent bibliometric analyses reveal that climate psychology research, including studies on individual behavior change, eco-anxiety, and pro-environmental action, remains overwhelmingly concentrated in Global North institutions, with stark underrepresentation from climate-vulnerable regions in the Global South [119,120]. This geographic concentration is not merely a matter of research infrastructure; it shapes whose experiences inform dominant frameworks and whose forms of climate engagement are rendered (in) visible [121].

6. An integrated conceptual framework: the RPJ nexus

The perspectives from climate psychology, sociology, political science, and climate justice do not converge on a singular critique of individualization; each discipline brings distinct analytical commitments, methodologies, and normative orientations. However, when brought into dialogue, these diverse frameworks illuminate complementary dimensions of how individual climate responsibility is constructed and constrained.

Climate psychology offers micro-level insight into cognitive and motivational processes, revealing both the potential for individual agency and the psychological barriers that limit it [57,59,67]. Yet psychological research increasingly recognizes that efficacy and agency are shaped by structural contexts [62,69]. Sociology and political science situate these psychological dynamics within broader governance systems, demonstrating how neoliberal responsabilization reconfigures citizens as self-managing consumers within conditions of institutional failure [22,24,26]. Political science scholarship further reveals that policy instruments such as nudges function not merely as neutral tools but as political choices that favor depoliticized, market-compatible responses over structural regulation [9,77]. Climate justice perspectives add critical attention to how these dynamics are inflected by power, inequality, and colonial legacies, showing that individualization discourses often obscure differential responsibility and perpetuate systemic injustices [23,97].

What emerges from this interdisciplinary synthesis is not disciplinary consensus but rather a shared analytical orientation, one that emphasizes: (1) the necessity of situating individual behavior within systems of power and material constraint; (2) the importance of critically examining how governance interventions are politically designed and whose interests they serve; and (3) the recognition that genuine individual agency requires both structural capacity and accountability mechanisms that extend beyond the individual scale.

This paper's conceptual contribution lies in synthesizing these insights into an integrated analytical framework, what we term the Responsibility-Power-Justice (RPJ) nexus, for examining climate governance. This framework positions responsabilization not as a behavioral or policy phenomenon but as a governance condition characterized by three interrelated dimensions:

- (1) Responsibility displacement: The discursive and institutional processes through which climate accountability is redistributed from collective/structural actors (states, corporations) to atomized individuals, without corresponding transfer of capacity, infrastructure, or decision-making power. This is distinct from simply “emphasizing individual action”, it involves active deflection and obfuscation of systemic responsibility.
- (2) Power asymmetries: The unequal distribution of both “power over” (capacity to shape systems, rules, and outcomes) and “power to” (capacity to act and transform), wherein individuals are granted limited consumer choice power while structural power remains concentrated among corporate and state elites. Responsibilization thus functions as a form of governance that activates certain dimensions of agency while constraining others.
- (3) Justice failures: The systematic reproduction of distributional, recognition, and participatory injustices through individualized climate governance, including misdirected accountability toward low emitters, erasure of differential vulnerability and historical responsibility, and the substitution of market participation for political participation.

The RPJ framework reveals responsabilization as operating simultaneously across psychological, social, political, and economic scales. Psychologically, it shapes subjectivity and produces affects such as guilt, anxiety, and moral licensing. Socially, it reconfigures norms and expectations around climate action. Politically, it depoliticizes climate governance by reframing systemic problems as aggregated individual failures. Economically, it commodifies environmental concern and expands green markets. These dimensions are not separate but mutually reinforcing, psychological responsabilization legitimates political depoliticization, which enables corporate deflection, which produces justice failures that constrain individual capacity.

This integrated framework enables us to ask not whether individual action matters (it does), but rather: Who benefits from responsibility being framed this way? What forms of agency are activated versus constrained? How do power relations shape who can act and who bears burdens? What alternative configurations might align responsibility with capacity, accountability with power, and individual agency with systemic transformation?

Unlike socio-technical transitions frameworks that focus primarily on system innovation and pathway dynamics [122], or behavioral frameworks that focus on psychological determinants of action [59], or justice frameworks that focus on equity outcomes [94], the RPJ nexus specifically theorizes the relationship between responsibility discourse, power structures, and justice outcomes within climate governance. It explains how neoliberal responsabilization simultaneously activates individuals as consumers, constrains them as political actors, and obscures systemic drivers, producing a governance condition where movement appears without transformation.

Previous scholarship has certainly addressed the relationship between individual agency and systemic reform, for example, through socio-technical transitions theory [123], practice-based approaches that situate behavior within material infrastructures [124], and climate justice frameworks that link personal consumption to structural inequalities [125,126]. What distinguishes our contribution is threefold: First, the integration of empirical insights from psychology, sociology, and political science with normative concerns from climate justice within a single analytical frame. Second, the specific focus on responsabilization as a governance problem, examining not whether individual action matters (it does), but how responsibility is discursively constructed, politically deployed, and inequitably distributed under neoliberal conditions. Third, the articulation of the RPJ nexus as a distinct analytical framework that theorizes the relationship between responsibility discourse, power structures, and justice outcomes, moving beyond questions of “balance” to examine the structural conditions under which responsibility is displaced, power concentrated, and justice

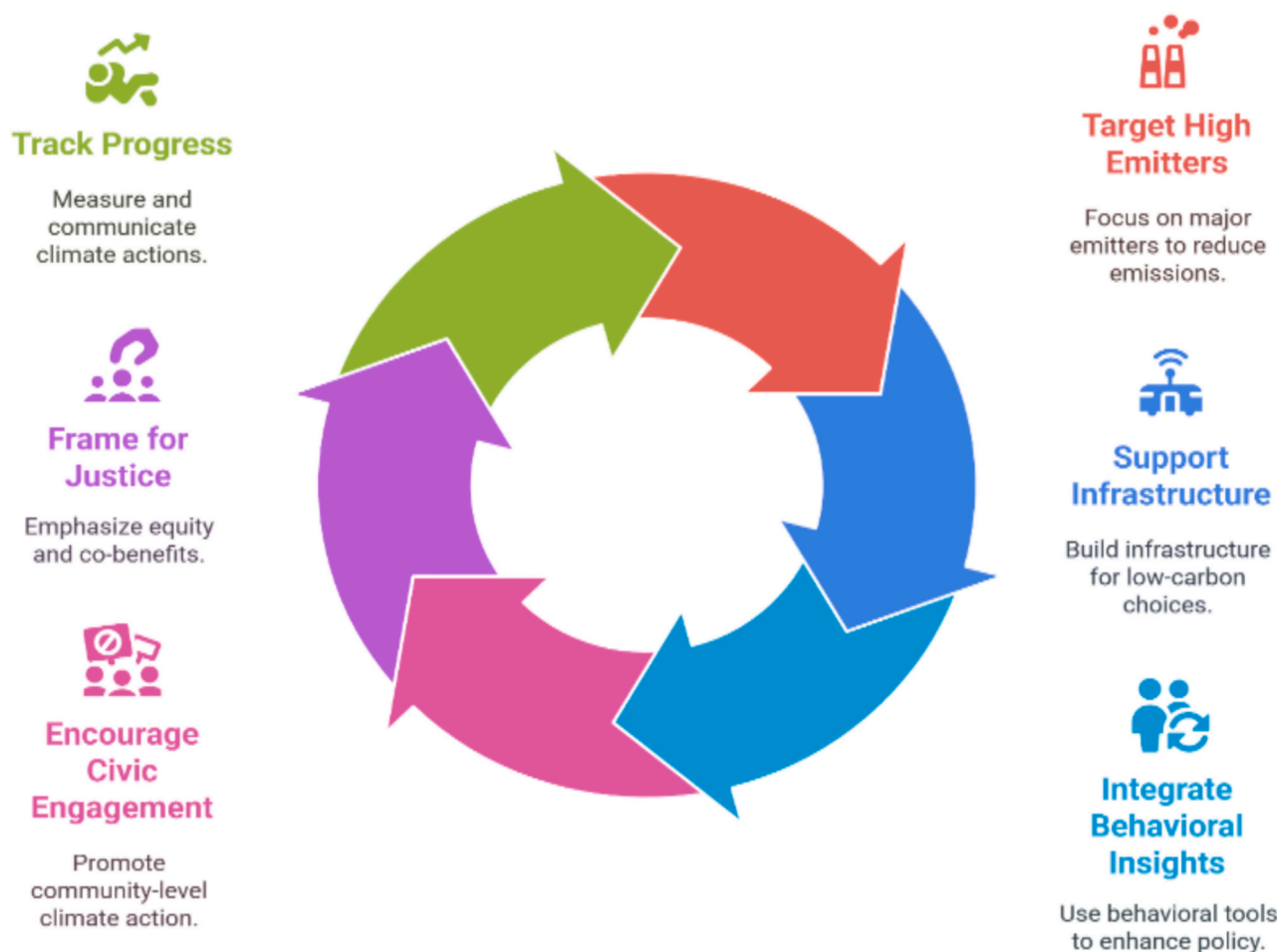


Fig. 1. Integrated climate mitigation strategies.

Note: The figure illustrates how individual action and structural interventions can be aligned rather than treated as alternatives. Targeting high emitters, enabling infrastructure, behavioral insights, civic engagement, justice framing, and progress tracking operate together to support equitable and effective mitigation.

undermined.

7. Pathways to integrate systemic and individual climate action

Climate mitigation requires action across multiple scales and modes simultaneously. While infrastructure, policy, and institutional reforms provide the enabling conditions and primary leverage points for deep decarbonization, their effectiveness depends fundamentally on behavioral uptake, public legitimacy, and sustained civic engagement. Neither dimension is sufficient alone; both are necessary and mutually reinforcing. Six strategies integrate systemic and individual dimensions:

First, prioritize high-leverage emitters and policies. Climate mitigation must begin by targeting the sectors and actors with greatest impact. Governments should implement robust regulatory measures, such as emission caps, fossil fuel phaseouts, and carbon pricing, while holding high emitters accountable through progressive policies like luxury carbon taxes and energy tariffs. Simultaneously, individuals should be supported in making impactful changes, especially in domains such as mobility, diet, and energy use. Public trust increases when responsibility is distributed fairly [127].

Second, create enabling conditions for sustainable choices. Individual behavior change is contingent on supportive infrastructure. Public transit expansion, affordable clean energy access, sustainable food systems, and circular economy infrastructure must be prioritized. These systemic investments make low-carbon lifestyles viable for all social groups, aligning with evidence that structural changes are necessary to unlock the potential of behavioral shifts [25].

Third, embed behavioral insights in policy design. Integrating psychology with policy increases efficacy. Behavioral interventions, such as default green options, comparative energy feedback, or targeting moments of personal transition, can significantly enhance uptake. However, these should not replace systemic reforms; instead, they should complement them, ensuring that climate policies are not only effective but also publicly acceptable [63].

Fourth, promote civic and community engagement. Beyond personal habits, climate action should be normalized as civic participation. Institutionalizing public involvement in climate decision-making (e.g., citizens' assemblies, participatory forums) strengthens policy legitimacy and fosters a sense of agency. Supporting community-based initiatives (e.g., neighborhood retrofits, local energy cooperatives) builds social capital and bridges the gap between individual action and structural transformation.

Fifth, center justice and co-benefits in climate framing. Equity must guide climate policy. Design mechanisms (e.g., revenue recycling, targeted subsidies) to protect vulnerable populations from regressive impacts. Highlight immediate co-benefits, such as improved health, cleaner air, and job creation, to broaden support and build inclusive coalitions. Emphasizing fairness and shared responsibility ensures that individuals see themselves as part of a just and effective transition [23].

Sixth, track and communicate integrated progress. Establish metrics that capture the interaction between structural and behavioral change, for example, not only renewable energy capacity (structural) and household adoption rates (behavioral) in isolation, but also the enabling relationship between subsidies, infrastructure access, and uptake

patterns. Report progress transparently in ways that highlight how structural investments enable behavior change and how behavior change creates legitimacy for further structural investment. Communicate this integrated story to avoid either placing additional burden on individuals or rendering them passive in technocratic transitions.

While this article critiques the limitations of individualized approaches to climate mitigation, it is imperative to extend the discussion by placing empowerment, particularly of individuals and communities, at the center of transformative pathways. Empowerment involves more than encouraging sustainable behaviors; it enables individuals and collectives to recognize, question, and resist dominant power structures that perpetuate ecological harm and social inequities [128]. Integrating empowerment into climate policy design would thus mean supporting grassroots innovations, participatory decision-making, and creating institutional space for marginalized voices to shape mitigation and adaptation agendas. This reframes individuals from being passive consumers or “behavioral subjects,” to political agents capable of structural critique and collective action.

A summary of these mitigation strategies is presented in Fig. 1.

8. Conclusion

This paper has interrogated the ascendancy of individualized climate mitigation discourse through a multi-disciplinary synthesis, arguing that responsabilization has become a dominant lens through which climate action is framed. By tracing the historical emergence of individual-focused mitigation strategies and integrating insights from climate psychology, sociology, political science, and environmental justice, we have offered a comprehensive critique of how mitigation discourse has become increasingly individualized in many Western governance contexts.

This contribution is significant for several reasons. First, it advances a reconceptualization of mitigation discourse by clarifying the mechanisms through which responsibility is reframed, distributed, and internalized. Second, it offers an original synthesis across disciplines to build the RPJ nexus, an integrative framework that avoids disciplinary silos and provides analytical tools for examining how responsibility discourse, power structures, and justice outcomes interact. Finally, this paper insists on the normative imperative to embed justice and equity into climate governance, pushing back against depoliticized and technocratic framings of individual responsibility.

By understanding individual agency and institutional capacity as mutually constitutive, where personal action requires structural enablement and structural reforms require behavioral legitimacy, we argue for an integrated model of climate governance. This model rejects reductive binaries between individual and systemic action, recognizing instead that effective and equitable climate mitigation emerges from their strategic alignment. Individual action is neither a substitute for structural transformation nor irrelevant to it; rather, it is a necessary dimension of how structural change is adopted, sustained, and democratically legitimated. Future work must explore how policy design, socio-technical systems, and collective mobilization can support this alignment. In this way, the paper contributes both to scholarly debates and practical pathways toward equitable climate futures.

CRediT authorship contribution statement

Gulnaz Anjum: Writing – review & editing, Writing – original draft, Visualization, Validation, Resources, Project administration, Investigation, Funding acquisition, Conceptualization, Methodology, Software.
Mudassar Aziz: Writing – review & editing, Writing – original draft, Visualization, Validation, Software, Resources, Project administration, Methodology, Investigation, Conceptualization.

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Declaration of competing interest

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Data availability

No data was used for the research described in the article.

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