Organizations and Climate Action

Accelerating Climate Solutions Through Organizational Change

AMERICAN PSYCHOLOGICAL ASSOCIATION

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Methodology

This report synthesizes findings from peer-reviewed research, agency reports, and selected grey literature on organizational change and climate action, drawing on more than 300 references. Spanning psychology, organizational behavior, leadership, sustainability, climate communication, and related fields, the authors and editors applied their expertise and judgment to identify and interpret credible evidence, and to translate key findings for a broader audience. Recommendations are grounded in the weight of available evidence and informed by the expertise of the authors and reviewers. As a high-level review intended to generate actionable insights, individual studies are not discussed in detail. Ongoing research continues to expand and refine the knowledge base reflected in this report.

WHY WE OFFER THIS REPORT

Arthur C. Evans, Jr., PhD
Chief Executive Officer
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The American Psychological Association and ecoAmerica are pleased to offer this report, which highlights recent, respected research on the role of organizations in advancing climate action at scale. While much of the research reviewed in this report is based on workplace settings, its insights extend across organizational contexts, including nonprofits, associations, educational institutions, faith groups, and more. As structured collectives where people spend a significant portion of their lives, these organizations are powerful vehicles for climate solutions. They are potent social environments that shape how people think, feel, and act. With this report, we aim to elevate the behavioral and organizational science that illuminates how organizational culture, leadership, and motivation can drive climate action that cascades beyond any single organization to produce systemic change.

The urgency is real. Climate change is intensifying, and its impacts on health, livelihoods, and communities are already being felt. Public concern is high, yet a persistent gap between concern and collective action remains. Individual efforts alone cannot close that gap. With more than 170 million Americans in the workforce, change at the organizational level offers a scalable and durable path forward, one that can provide continuity amidst shifting federal climate policy.

This report is written for anyone who wants to make a difference: senior executives, HR professionals, managers, frontline employees, change agents, and community members alike. The guidance is grounded in research applicable across different roles, organizational types, and sizes. We have the science to inform this work and the shared commitment to drive it. Many organizations are already leading; the question is how to accelerate and elevate that leadership to the scale this moment demands.

We thank the authors of the report and the many researchers, practitioners, and advocates whose work informs the guidance presented here. Please join us in putting it to use within your organization, your community, and beyond, in service of a just and thriving future.

EXECUTIVE SUMMARY

The escalating impacts of climate change are already reshaping lives, livelihoods, and communities. A large majority of people recognize this reality and express concern. Yet awareness alone has not translated into the scale of action the moment demands. This report addresses that gap by examining one of the most powerful and underutilized levers for climate action: organizations. Drawing on peer-reviewed research from organizational psychology, behavioral science, and sustainability studies, this report presents an evidence-based case for why organizations — understood as structured collectives of people — are uniquely positioned to accelerate climate solutions. Although much of the research reviewed in this report is based on workplace settings, the principles it identifies are broadly applicable across diverse organizational contexts, from corporations, associations, and nonprofits to educational institutions and places of worship. At its core, any collective is shaped by universal human dynamics: culture, leadership, and motivation. The report examines the cultural and behavioral foundations of organizational change and offers practical, role-specific recommendations for advancing climate action. What follows is a high-level overview of its four core sections.

I: WHY ORGANIZATIONS MATTER FOR A HEALTHY CLIMATE

The first section makes the case that while individual action is meaningful, it is insufficient on its own to address climate change at the scale required. Structural barriers (e.g., cities that mandate gas hookups to transportation systems built around cars) make sustainable choices difficult even for highly motivated individuals. Social dynamics further compound this challenge. Research on pluralistic ignorance shows that people consistently underestimate others' attitudes and motivations about climate change. According to survey data from ecoAmerica, nearly 70% of Americans report being personally concerned about climate change, yet only about half believe others around them feel the same. This perception gap can create a spiral of silence in which concern goes unexpressed, inaction appears normal, and opportunities for collective momentum are lost.

Organizations can help break this cycle. As settings where most adults spend a significant portion of their waking hours, workplaces and other organizations are powerful social environments for shaping beliefs, norms, and behavior. When organizations make climate action visible and central to their identity, they send a clear signal: concern is widespread, action is expected, and change is possible. Organizational decisions also ripple outward through supply chains, partner networks, and communities, extending their influence far beyond any single institution. At a time when federal climate priorities can shift significantly across administrations, organizations can often provide a more durable and trusted pathway for sustained climate leadership.

II: UNDERSTANDING ORGANIZATIONAL CULTURE AND CLIMATE ACTION

The second section examines how organizational culture — the shared values, beliefs, and assumptions that shape how people think and act — can support climate action. Culture is not abstract. It is reflected in what gets rewarded, discussed, prioritized, and normalized. When organizations cultivate cultures that prioritize environmental sustainability, people are far more likely to translate climate concern into meaningful action.

Three elements of culture are particularly foundational for change. First, organizational values provide the foundation. Climate action is most likely to take root when it is connected to values an organization already holds, such as integrity, innovation, long-term responsibility, or community well-being. This alignment reduces resistance and makes sustainable behavior feel consistent with the organization's identity rather than a departure from it. Exposure to a culture that prioritizes climate action, along with the information, social reinforcement, and peer modeling conveyed through everyday interactions, can also shift individuals' values and climate-related behaviors over time. Second, social norms are among the strongest drivers of human behavior. People look to those around them to understand what is expected and acceptable. When climate-friendly behaviors are visible and positively reinforced within an organization, they become the new normal, influencing even those who might not otherwise prioritize the issue. Third, organizational symbols communicate culture in tangible ways: origin stories, mission statements, public commitments, and physical artifacts all signal what the organization stands for. Together, values, norms, and symbols form the organizational culture infrastructure that enables climate action to take hold and endure.

III: ORGANIZATIONAL CULTURE SHIFTS REQUIRE BEHAVIORAL CHANGE

Culture does not change on its own; it changes when people change what they do. The third section draws on behavioral science to outline how organizations can shift their cultures toward environmental sustainability and climate action. Successful change efforts begin with gathering data (e.g., on energy use, emissions, travel patterns, waste, and employees' knowledge and commitment) to understand where the organization currently stands and track progress toward its climate goals. Organizations also benefit from engaging diverse stakeholders across departments, seniority levels, and identities to ensure sustainability plans reflect operational realities and build broad buy-in. Clear and consistent communication from leaders helps reduce the uncertainty that often accompanies change, and messaging that connects climate action to shared values and tangible benefits sustains engagement. Enabling behavior change at scale requires reshaping the environment itself. Making climate-friendly options the default, removing barriers to sustainable choices, and designing physical spaces and workflows that support sustainable behavior are all effective strategies. Equally important is institutionalizing change by embedding sustainability into formal

policies, budgeting processes, HR practices, and performance systems so that progress outlasts any single initiative or champion.

Leadership plays a central role throughout. Both formal leaders — including boards, executives, and managers — and informal leaders can drive cultural transformation. Research on transformational leadership shows that leaders who build trust, articulate a compelling vision, encourage creative thinking, and lead with empathy are especially effective at inspiring climate action. Importantly, these leadership capacities can be developed. Anyone within an organization, regardless of title, can cultivate the skills needed to become a climate champion.

Motivation is another essential driver of sustained change. Intrinsic motivation, rooted in people's needs for competence, relatedness, and autonomy, supports durable engagement, particularly when organizational environments nurture these needs. External supports, including environmental cues, incentives, social feedback, and progress monitoring systems, can reinforce climate-friendly behavior by shaping both the conditions that enable action and the consequences that follow. Because motivation is dynamic and context-dependent, effective strategies meet people where they are, providing stage-appropriate support that builds knowledge, confidence, and commitment over time.

Organizational climate action also offers important co-benefits. Research shows that engaging in meaningful sustainability work can reduce climate-related distress, strengthen well-being, and foster organizational resilience. Organizations that align with employees' climate values are also better positioned to attract strong candidates, improve retention, and deepen engagement. Conversely, organizations that ignore climate concerns risk disengagement and turnover among values-driven employees.

IV: RECOMMENDATIONS FOR CLIMATE LEADERSHIP AT ANY LEVEL

The final section translates the preceding research into concrete, role-specific recommendations. Organizational transformation requires climate leadership at all levels. The most resilient and adaptive organizations are those that allow leadership to be shared and situational, with whoever has the most relevant knowledge and skills stepping up to lead specific efforts.

For those working at the grassroots level, the research outlines how individuals without formal authority can influence norms, build informal networks, increase climate literacy, shape purchasing decisions, and make the case for change to institutional leaders. For managers and supervisors, recommendations focus on practical leadership tools: modeling sustainable behavior, integrating climate considerations into team communications and performance conversations, providing resources and tailored support, and designing incentive systems that reinforce meaningful progress. For senior leaders and boards, the emphasis is on systems-level action: setting strategy, allocating resources, shaping policy, and ensuring that accountability, rather than mere symbolic statements, backs climate commitments. Human Resources and administrative professionals receive dedicated guidance, as their work — shaping job descriptions, hiring decisions, training programs, and performance management systems while creating psychological safety for all — is among the most powerful tools for embedding sustainability across an organization.

The recommendations also address what anyone, inside or outside an organization, can do: communicate in ways that make climate change feel personally relevant, inoculate against misinformation, surface shared concern, and take collective action that builds visibility and momentum. Because driving change can be exhausting, the section includes evidence-based strategies to build resilience: the ability to respond adaptively to challenges. It can be cultivated through

training, social connection, time in nature, mindfulness, and communities of practice that offer ongoing support and a sense of shared purpose.

A CALL TO ACTION

The urgency of climate change requires action at a scale and pace that individual effort alone cannot achieve. Organizations can close this gap. When organizations choose to lead, they create environments where climate concern scales into climate action, where individuals feel supported and empowered, and where broader cultural change becomes possible. This report is an invitation to everyone within and connected to organizations — regardless of role, sector, or level of authority — to recognize their influence, act on it, and help build the organizational cultures this climate moment requires.

The report also features "Closer Looks" from organizations across diverse sectors that offer concrete examples of climate action in practice. These stories complement the research by illustrating how organizational values, leadership, and systems can empower individuals, strengthen communities, and translate climate commitment into sustained collective action.

I.

Why Organizations Matter for a Healthy Climate

Climate change is an escalating reality, with its worsening impacts reshaping lives and livelihoods. While many people are concerned, a central challenge is translating that concern into action at scale. This section focuses on the move toward collective action, alongside individual action, and, from an organizational science perspective, outlines the role of organizations as a key mechanism for advancing visible, sustained climate action.

CLIMATE CHANGE IS PRESENT AND ESCALATING

A majority of people today recognize that climate change is a harmful and escalating reality (Poushter et al., 2025; Speiser & Ishaq, 2026). Its worsening impacts are hitting home, reshaping lives, livelihoods, and communities. The more pressing question is not simply whether climate change is happening, but how societies translate awareness and concern into scalable climate action.

As earth scientists predicted decades ago, today's increases in global temperature, driven by human-caused greenhouse gas emissions, are intensifying heatwaves, droughts, storms, and wildfires, raising sea levels, and changing global weather patterns (IPCC, 2023; NASA, 2024). These changes harm human well-being both directly, through immediate threats to life and health, and indirectly, through longer-term threats such as degraded air quality, lower crop yields, displacement, and increased conflict. As these risks escalate, the urgency of action becomes clearer. Significant emissions cuts can still reduce the most severe impacts and help avoid catastrophic levels of warming, even as limiting warming to 1.5°C without rapid, sustained reductions becomes increasingly unlikely (International Energy Agency, 2025).

Beyond its physical impacts, climate change raises ethical and intergenerational concerns and is increasingly understood as a question of justice (Rockström et al., 2023). Its effects are unevenly distributed across populations, with disproportionate impacts on those who have contributed least to the problem (Hickel et al., 2022). High-emissions economies, largely in the Global North, have contributed more to greenhouse gas emissions, while communities in the Global South often face disproportionate exposure to climate impacts and limited resources

to respond. In addition, today's high-emissions lifestyles may deprive future generations everywhere of the ability to live healthy and fulfilling lives. Survey data from ecoAmerica indicates that 88% of Americans believe we have a moral responsibility to create a safe and healthy climate for ourselves and our children. Additionally, 85% agree that solutions to climate change should be fair, ensuring all communities benefit and no one is left behind (Speiser & Ishaq, 2025b).

Despite broad consensus, a persistent gap remains between concern and action. This is not a failure of knowledge. Rather, it reflects powerful social and organizational dynamics — how people take cues from the groups they belong to (or identify with), and how often they underestimate others' willingness to act. Understanding these dynamics is essential to unlocking collective action and accelerating climate solutions.

FROM INDIVIDUAL ACTION TOWARD COLLECTIVE ACTION

Considerable research has focused on empowering individual, private-sphere pro-environmental behavior (Steg, 2023). While the cumulative effect of individual actions matters, individual change alone is too slow, limited in scope, and insufficient in scale to address the whole-systems crisis of climate change on its own (Amel et al., 2017; IPCC, 2023; Nielsen et al., 2021; Ones & Dilchert, 2026).

Moreover, large-scale systems often restrict personal action. Changing individual behavior can be difficult and costly, especially when massive energy, transportation, and agricultural systems constrain sustainable choices (Chater & Loewenstein, 2022). For example, many cities require home builders to include gas hookups, making homeowners pay to replace gas appliances with electric alternatives. Such situations make it cumbersome to adopt climate-friendly choices, even for otherwise motivated individuals.

In addition to structural barriers, social-psychological dynamics can further limit individual action. People are influenced by the groups they belong to, such as workplaces, faith communities, professional networks, and institutions, and often take cues from these groups to determine what behaviors are normal, expected, or supported. When climate action is not visibly prioritized within these groups, individuals may hesitate to act, even if they personally care. **Social identity theory** (Tajfel & Turner, 1979) helps explain this pattern by showing that people tend to align their attitudes and behaviors with the norms of the groups they identify with to maintain a sense of belonging and social cohesion. In this way, group signals, such as leadership priorities, shared messaging, or peer behavior, shape what individuals perceive as acceptable or expected behavior.

Many people also underestimate others' concern about and willingness to support solutions to climate change. Individuals perceive themselves as in the minority, even when majorities agree, a social psychological phenomenon known as **pluralistic ignorance** (Miller, 2023). Consistent with this pattern, survey data from ecoAmerica indicate that 68% of Americans report being personally concerned about climate change, including 36% who report being "very concerned." However, only about half report believing that others around them are concerned, including just 13% who report thinking others are "very concerned."

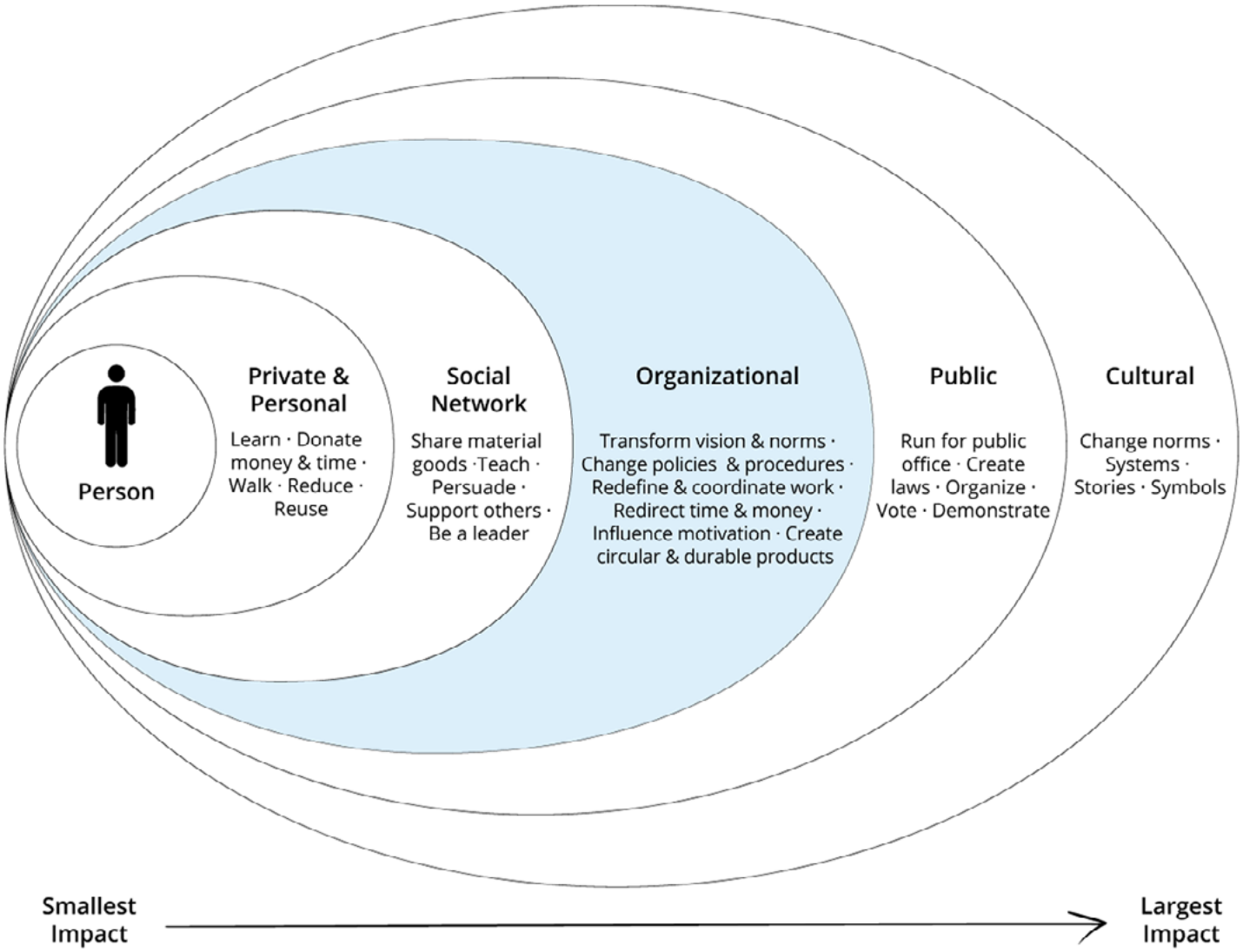
This reveals an 18-point perception gap in overall concern and a 23-point gap among those who are "very concerned."(Speiser & Ishaq, 2026). Social identity theory helps explain this gap, as individuals often infer group norms from what is visibly expressed within their social groups; when concern is not openly communicated, it is easily underestimated. Such misperceptions can hamper collective action, create silence, reinforce inaction, and allow unsustainable systems to persist.

Overall, these dynamics show why individual action alone is not enough to address climate change. Climate action requires coordinated, collective action that reshapes norms, systems, and incentives (Staub, 2025). From a behavioral science perspective, organizations are well-positioned to fulfill this role because they shape what people see, expect, and do. In complex organizations, sustained change is more likely when individual efforts are aligned through clear roles, structures, and decision-making, rather than relying on uncoordinated or informal influence. By aligning policies, practices, and signals with shared values and public concern, organizations can turn individual motivation into **visible, sustained, and scalable action** (see Figure 1).

THE ROLE OF ORGANIZATIONS IN THE PROBLEM — AND THE SOLUTIONS

Organizations are structured collectives of people that take many forms and sizes, including businesses, governments, nonprofits, associations, clubs, colleges and universities, places of worship, and neighborhoods.

Figure 1. Impact is amplified as it ripples outward through spheres of influence (Amel et al., 2017).



These organizations can build and sustain collective action by channeling individual efforts toward shared purposes, such as manufacturing, education, worship, or service delivery. As organizations influence how people work, consume, and live, they offer critical leverage points for systemic climate action.

Most adults spend much of their waking time at work, making workplaces powerful environments for socialization that influence people's beliefs, knowledge, and norms (Ones et al., 2026). Workplaces are well-positioned to align changes with employees' values, enhancing their sense of choice and reducing the likelihood of resistance to new, climate-friendly policies (Schmelz & Bowles, 2025). While there are nuances (such as power relationships that differ for employees versus volunteers), the principles derived from research on workplaces are broadly applicable across organizational contexts. Culture, leadership, and motivation are universal human issues in any collective.

Organizational decisions at workplaces (and beyond) affect not only internal practices but also broader networks of suppliers, partners, customers, and communities, extending their impact far beyond any single institution and creating opportunities for coordination and learning across interconnected actors (Staub, 2025). When one organization commits to climate-friendly supply chains, transportation, energy, or packaging, others may need to adapt their practices to remain competitive and to maintain business relationships.

A majority of Americans believe that organizations, including corporations, are not doing enough to address climate change (Kennedy & Tyson, 2024). Nearly half (49%) want corporations and businesses to take more responsibility for ensuring Americans have a safe and healthy environment (Speiser & Ishaq, 2025c). These findings reflect public support for organizational action and leadership on climate.

Indeed, due to their scale and reach, organizational actions have a substantial influence on how society responds to climate-related challenges (Eckardt & Mazutis, 2023). Historically, organizational decision-making across sectors has contributed to the development and persistence of systems associated with high levels of greenhouse gas emissions (Kühner & Amel, 2026). Public, private, and nonprofit organizations have played roles in shaping the infrastructure, incentives, and information environments that affect environmental sustainability. For instance, many organizations in the fossil fuel industry have, for decades, supported efforts that have contributed to public uncertainty about climate science, while continuing to invest in and profit from oil and gas production (Cook et al., 2019).

However, the same scale and influence also position organizations as potentially powerful drivers of solutions. Many organizations recognize that long-term economic success depends on a healthy society and a functioning environment (Folke et al., 2016) and are engaging in the hard work of climate action. For example, some organizations have continued and even expanded their climate efforts in recent years, despite shifting political and policy conditions, including solar panel and equipment manufacturers, food service companies, banks, and other private-sector actors (McCarthy, 2025). Similarly, many private-sector companies, non-profit organizations, and even entire nations, such as the Vatican, have achieved significant reductions in greenhouse gas emissions (Mauro, 2023).

Through their ideas, products, and services, these organizations influence millions of people worldwide, creating ripples across sectors and communities. Bold leadership helps counter the misperception (i.e., pluralistic ignorance) that support for climate action is rare or risky. More than just reducing emissions, visible organizational leadership can shape social norms by making climate action credible, expected, and achievable. In this way, **shifting organizational behavior offers an important, scalable, and robust path toward climate solutions** (Amel et al., 2017). It can also help broaden conceptions of organizational

success beyond financial performance to include longer-term outcomes for people and the environment.

Organizational change is not automatic or guaranteed. Individuals within organizations often fail to recognize the opportunities they have to influence change (Duncan et al., 2024). Even organizational leaders who have embraced climate action sometimes lapse under various external pressures (Wright & Nyberg, 2017). However, these barriers are not necessarily reasons for retreat. Instead, they underscore the importance of building resilience, effective leadership, and managing motivation. This report concludes with evidence-based recommendations to foster resilience even under pressure (see p.53).

Change ultimately begins with people inside organizations. Organizations are complex systems shaped by individual, social, and contextual factors (Composto et al., 2023). While shifts in culture, policies, and practices are required, these shifts are initiated (and reinforced) by *individuals*. As these changes take hold, they influence others' behavior and organizational norms, sparking the innovation and action needed for climate protection (Zacher et al., 2023). **When leaders and individuals across the organization make climate action visible and connect it to a shared identity, they reduce uncertainty, normalize engagement, and activate collective momentum**. Understanding organizational behavior and empowering effective change agents throughout organizations are, therefore, critical for transforming organizations (Jones, 2023; Kühner et al., 2025).

WHY ORGANIZATIONAL ACTION MATTERS IN THE U.S. TODAY

In the United States, more than 62% of civilian working-age adults are part of the active labor force, representing approximately 170–171 million people (U.S. Bureau of Labor Statistics, 2025). It makes workplace action a robust and scalable force for climate solutions.

National climate approaches can shift across administrations, including withdrawal from and re-engagement with international climate agreements, underscoring their vulnerability to election cycles (Harvard Law School Environmental & Energy Law Program, 2026). However, public concern about climate change remains consistently high, with over half of Americans opposing certain federal climate-related rollbacks (Speiser & Ishaq, 2025a). These dynamics highlight the importance of organizations of all kinds — public, private, nonprofit, academic, or volunteer — as sources of sustained and durable climate leadership. During periods of federal policy shifts, organizations from corporations and nonprofits to local government entities can and have stepped forward with independent climate commitments.

While climate solutions are technical, political, and social, to date, most efforts have focused on the first two, leaving a significant gap in social approaches. Organizations can complement existing policy and technical efforts by creating powerful social pathways for climate action through the deliberate shaping of organizational culture and leadership behavior, discussed in the following sections. By incorporating climate protection into their culture and practices, organizations can spur momentum, making technical and policy efforts more durable and grounded in shared values.

KEY TAKEAWAYS

+ **Escalating impacts of climate change are reshaping lives and livelihoods.**

  With a majority of people concerned, the challenge is not simply awareness but turning that concern into scalable climate action.

+ **Individual action alone is not enough.**

  Structural barriers and social-psychological dynamics — including *pluralistic ignorance*, where people underestimate how many others share their concern — limit personal action, requiring coordinated collective action to address climate change.

+ **Organizations can be potent drivers of climate solutions at scale.**

  Unlike individual action, organizational action multiplies impact, cascading through supply chains, partner networks, and communities, extending reach far beyond any single institution.

+ **Organizations are uniquely powerful social environments.**

  Most people spend a significant part of their lives at work, making workplaces prime settings for socialization, education, and shifting behavior from the inside out — reshaping values, norms, and symbols and translating individual climate concern into visible collective action.

+ **Organizational climate leadership can play a pivotal role in the United States.**

  Because federal climate priorities can shift significantly across administrations, organizations can often provide durable, trusted pathways for climate action.

A Closer Look

Instilling Social and Environmental Responsibility

By Lauren Belmonte, Executive Director
Change is Simple

The vision for Change is Simple (CiS) is rooted in a simple but powerful belief: when children are given the knowledge, tools, and agency to understand their impact on the world, they grow into adults who act with intention, responsibility, and hope.

CiS programs reach 8,000 students a year and are designed as a multi-year academic journey that builds confidence, shapes behavior, and embeds social and environmental responsibility into everyday decision-making. Students take on real-world roles as scientists and engineers, learning to mitigate coastal erosion, design sustainable cities, and analyze weather data. Through our immersive curriculum, we ensure that every child, regardless of background, feels empowered to build a healthier and more sustainable future for themselves and their community.

From 2023 to 2025, an Alumni Study was conducted by The Evaluation Institute, led by Northeastern professors Drs. Sarah and William Ewell, to assess the long-term impact of CiS education. Data was collected from alumni ages 18+ (7-10 years removed from our program). The findings affirm what we have seen anecdotally for years: our impact extends far beyond elementary school, influencing academic choices, career pathways, and lifelong habits. This education builds fluency, confidence, and a sense of ownership in students that stays with them.

Academically and professionally, our alumni stand out. They enter STEM fields at twice the national average and environmental majors at nearly ten times the national rate. These are not coincidences; they are the result of early, **sustained engagement** that helps students see themselves as problem-solvers and leaders.

Our alumni also understand climate science and personal responsibility. CiS alumni universally understand anthropogenic (human-caused) climate change. Many alumni shared that our program was the only consistent source of climate education they received. Because they learned through action, the science became personal and undeniable.

Most meaningful to us is the **persistence of behavior change and its multiplier effect**. Over 90% of alumni credit CiS with shaping their environmental values and daily choices well into adulthood. More than three-quarters of alumni communicate those values to their families, friends, and communities, nearly doubling the national average for climate conversations. That **ripple effect is how lasting change happens**. Our vision is not just to educate students, but to cultivate generations of informed, engaged citizens who lead with responsibility and inspire others to do the same.

II.

Understanding Organizational Culture and Climate Action

Organizational response to climate change is directly linked to organizational culture, which influences how individuals within an organization think and act. Culture determines what feels normal, supported, and worthwhile. This section explores how core components of organizational culture can support organizational action on climate change.

Organizational culture refers to a group's shared sense of core values, beliefs, and assumptions that guide people's thoughts and behaviors (Norton, 2026; Schein, 1985). When people perceive an environmental sustainability culture, one that prioritizes long-term ecological, social, and economic flourishing, they are far more likely to translate their sustainability intentions into actual sustainable behavior (Composto, 2025; Norton et al., 2017; Tian & Robertson, 2019; Zacher et al., 2023). When underlying assumptions change, as they must to adequately address the current climate crisis, organizational culture must also be realigned to support those changes (Adams et al., 2018; Ketprapakorn & Kantabutra, 2022).

Culture change is challenging and exhausting due to the resistance, cynicism, and backlash that often accompany it. However, when culture is left unattended, attempts to adapt to new realities are likely to fail, particularly in tradition-based organizations that neglect the need to innovate (Niedlich et al., 2020; Sylvestre et al., 2013). Within any organization, small-group subcultures also exist, such as different departments, people with specific skillsets, or groups with shared interests. These vary in strength, with stronger subcultures having a greater impact on the likelihood of change (Taras et al., 2010). Understanding these dynamics helps identify core components of organizational culture that can also serve as levers for organizational action on climate.

ORGANIZATIONAL VALUES

Organizational values are a **set of core principles that guide the behavior of the people in the organization, shaping how they think, act, and make decisions** (Schein, 1985). Shared values create predictability, which people need to navigate daily decisions and build trusting relationships

A Closer Look

Building Credibility for Climate Action in High-Emitting Sectors

By Saman Baghestani (Co-Founder and CEO), Peter Pham (Growth Lead)
S3 Markets

The mission of S3 Markets is to help decarbonize some of the highest-emitting sectors of the global economy by making low-carbon industrial materials easier to finance, procure, and scale. We believe climate action will only scale when companies, auditors, producers, and markets can trust it. Through Environmental Attribute Certificates[1] for steel, cement, concrete, copper, and ammonia, we support emissions reductions and help create market conditions to accelerate the transition to a net-zero economy.

But climate leadership is not only reflected in what we build. It is also reflected in how we build it. From the beginning, S3 Markets has worked to create an organizational culture where urgency and discipline reinforce one another. Climate change demands speed, yet climate action requires rigor. That tension has shaped one of our core operating principles: credibility first. We do not treat growth, partnerships, or volume as more important than integrity and accountability. Instead, we align with recognized standards and emerging guidance, **recognizing that trust is the foundation of lasting climate progress**.

These values are embedded throughout our organization. We have built systems around transparency, auditability, verification, and clear governance, and strive to make these practices part of our culture. Reliable audit trails, well-supported environmental claims, and well-documented decisions are not merely administrative requirements; they build the trust needed for companies and buyers to make credible low-carbon purchasing decisions at scale.

As a globally distributed, remote company, fostering our climate values has required intentional leadership. We rely on clear communication, shared documentation, and accountability to keep teams aligned across time zones. Much of our work requires collaboration across diverse teams, including legal, governance, technology, product, and commercial. We encourage **people at all levels to lead initiatives, challenge assumptions, and help shape the systems they are building**.

One of our greatest lessons has been that meaningful climate action requires balancing innovation with integrity. In emerging markets, leadership sometimes means moving quickly. Other times, it means slowing down. Restraint can be a form of climate leadership.

By building trusted climate infrastructure, we help companies, producers, and buyers make informed low-carbon choices. In doing so, we hope to demonstrate how organizational culture and leadership, grounded in trust, accountability, and shared purpose, can create ripple effects that accelerate climate action across entire industries.

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[1] To learn more about Environmental Attribute Certificates, visit: https://www.epa.gov/green-power-markets/energy-attribute-certificates-eacs

(Guadagno & Cialdini, 2010). Culture represents the status quo that feels familiar and comfortable. Therefore, to alleviate the confusion and discomfort that change can elicit, it is ideal for organizations to connect new climate-related goals to their already accepted cultural values (Sylvestre et al., 2013).

Climate action can be easily linked to diverse, established organizational values like innovation, responsibility, transparency, integrity, and long-term financial prudence (Adams et al., 2018; Leiserowitz et al., 2006; Schönborn et al., 2019). Once this connection between established organizational values and climate action has taken root, people's behavior is likely to shift, as employees' climate-friendly actions at work are linked to their perceptions of their organization's pro-environmental values (Wagner et al., 2025). Further, exposure to a culture that prioritizes climate action, as when people regularly carry out climate-friendly behaviors, can shift individuals' values and subsequent climate-related behaviors (Schilling et al., 2026; van der Werff et al., 2026).

There are cases in which climate action contradicts one or more of an organization's cultural values, such as when long-term investments in climate solutions clash with short-term profitability, in which case culture change may be necessary (Niedlich et al., 2020). While challenging, it is possible to shift an organization's values to align with a new climate focus by changing the norms people experience every day. Organizational norms, which are manifestations and indicators of culture, communicate organizational values by defining and enforcing what is expected, supported, and rewarded. Because they guide behavior, norms serve as mechanisms that can reorient people toward desired behaviors (Norton et al., 2014; Raineri & Paille, 2016).

ORGANIZATIONAL NORMS

Human beings are social creatures. Therefore, an important source of information for guiding behavior is the actions of others. Social norms, central to social and organizational psychology, are **people's perceptions of others' behaviors and opinions, and they provide unwritten but powerful cues about what is expected in a given context** (Cialdini et al., 1990; Constantino et al., 2022).

- ***Descriptive norms*** refer to the observed ways that people behave (Cialdini et al., 1990).
- ***Injunctive norms*** are shared ideas about the "right" or "wrong" way to do things, typically communicated through signs of approval or disapproval from others (Cialdini et al., 1990; Norton et al., 2014).
- ***Dynamic norms*** reflect how norms change over time as the frequency of a behavior, or approval/disapproval of a behavior, shifts (Sparkman & Walton, 2017).

All three forms of social norms have a profound influence on behavior, whether they are stated outright or merely observed (Constantino et al., 2022; Norton et al., 2014), making them central to climate action. This is because human beings are wired to conform to social expectations and to try to "fit in" with what others are doing (Toelch & Dolan, 2015). Norms are most effective when visible, explicit, and clear (Li et al., 2019), much like formal rules that guide people's actions.

Any individual or small group can shape new norms by demonstrating commitment to change and, through their actions and words, contribute to emerging norms through visible behavior within organizational contexts (Constantino et al., 2022). Through influence, individuals who prioritize environmental sustainability can help build an organizational culture that prioritizes care for the climate (Ones & Dilchert, 2012). As new

norms around sustainability and climate protection begin to form, those already on board can accelerate the transition through social interactions such as giving assistance and providing encouraging, positive feedback to others (Delmas & Pekovic, 2018; Paillé et al., 2016). Once climate-friendly norms are established, they are likely to influence even those who do not necessarily care about the issue (Schultz, 2022).

In the workplace, researchers find that social norms not only shape *in-role work behavior* (Parker et al., 2003) but also motivate climate-friendly *extra-role actions* that go beyond one's job description, such as persuading co-workers to engage in climate-friendly behavior (Guenthner et al., 2025; Steg, 2023). Norms are especially influential and can be helpful for those navigating a novel job situation, such as new hires or those moving to a new role or team within an organization. For those who are new and want to belong quickly, social norm cues are essential information (Gelfand & Harrington, 2015).

ORGANIZATIONAL SYMBOLS THAT SIGNAL CLIMATE ACTION

For organizations seeking to introduce or accelerate values of environmental sustainability and climate protection, a helpful starting point is to draw greater attention to sustainability-relevant **stories, traditions, and physical symbols** (Bertels et al., 2010; Schein, 1985). Although an organization's culture may seem opaque to outsiders, it is in fact visible through the stories it tells about itself, such as its origin narratives, and through traditions such as awards that celebrate innovation and achievement. Organizational culture is also reflected in physical symbols, including the buildings an organization occupies, commitment badges displayed on its website, plaques lining office entrances, and other material artifacts. All such manifestations of culture influence the individual and collective actions of people within the organization (Adams et al., 2018). In addition, aligning these outward signs of culture with fairness in how climate-related impacts are experienced across groups can help support a culture shift. Because visible signals influence how people in an organization think and behave (Adams et al., 2018), changes in symbols and narratives can, in turn, encourage shifts in beliefs and actions, contributing to a culture shift that supports climate stewardship.

One way organizations may demonstrate a culture of and commitment to environmental sustainability and fairness in how climate-related impacts are distributed is to **formally commit** to reducing their greenhouse gas emissions, or take other visible actions to address climate change. Global research shows that when organizations commit to recognized frameworks such as the UN Sustainable Development Goals, they are pushed to pursue meaningful changes in policies, plans, and practices (Lozano et al., 2015). Participating in well-regarded initiatives such as the Science-Based Targets Initiative (SBTi), Climate Group RE100, the We Mean Business Coalition, WEF's First Movers Coalition, etc., can signal an organization's orientation towards more climate-friendly behavior. When these commitments are made public, prominently displayed, and paired with regular progress assessments, they serve as a continuous reminder and symbol of the organization's values.

Other visible signals that publicly communicate an organization's cultural values are **mission and vision statements** (Galpin et al., 2015; Schönborn et al., 2019). Mission statements express an organization's purpose and aspirations, while vision statements bridge aspirations and reality by describing broad, long-term goals (Lopez & Martin, 2018; Unsworth et al., 2013). When organizations connect environmental sustainability to their mission and vision, sustainable behavior increases (Bertels et al., 2010), likely because such statements can signal a commitment to climate action, stoke motivation toward climate action, and provide guidance for daily decision-making (Davis &

Coan, 2015). Ultimately, an organization's vision should lay the foundation for concrete plans. Participating in a robust, collaborative planning process (e.g., creating a task force) to embed climate action into an organization's mission or vision can reduce conflict, increase acceptance and innovation, and elevate the significance of taking action (Davis & Coan, 2015; McNamara, 2010).

Organizations occasionally revisit and update their mission and vision statements; doing so through task forces can create important opportunities for climate champions to advance climate solutions by weighing in on these discussions. Similarly, when organizations lack formal mission or vision statements, collaboratively developing them can foster shared understanding about environmental sustainability, enhance perceptions of its importance, and stimulate the development of new climate-friendly norms (Rieg et al., 2021).

Durable cultures that legitimize and support climate action are built by people (MacKie, 2023; Stahl et al., 2020). **Therefore, culture shifts require changes in human behavior** (Unsworth et al., 2021; Zacher et al., 2023). Key factors that can drive culture change include strategic practices guided by effective leadership, leveraging human motivation, and fostering resilience. The next section examines these practices in detail, exploring how organizations can shift their cultures by changing behaviors.

KEY TAKEAWAYS

+ **Organizational culture guides how individuals think, act, and shift their behavior over time.**

  What feels normal, supported, and rewarded within an organization determines individuals' actions and whether climate concern scales into organizational action.

+ **Values, norms, and symbols form the foundation of organizational culture.**

  Climate action is more likely to endure when it aligns with shared values, is reinforced through norms, and is made visible through practices.

+ **Visibility matters.**

  Visible cues, stories, and symbols, such as material artifacts, formal commitments, and mission and vision statements, publicly communicate the organization's environmental sustainability culture. Visibility helps counter pluralistic ignorance by normalizing climate-protective behavior.

A Closer Look

Modeling a Hopeful, Climate Positive Future for the Next Generation

By Frances Kwong, Leddy Maytum, Stacy Architects & Nasif Iskander
San Francisco University High School

San Francisco University High School's (UHS) dedication to its mission of fostering an inclusive, forward-thinking educational environment rooted in excellence, access, and sustainability is demonstrated by its newly opened California Street Campus. Designed to achieve net-zero energy and LEED Platinum certification*, this transformational expansion provides a hub for creativity, wellness, and belonging — weaving together a student commons, warming kitchen, STEM classrooms, rooftop garden terraces irrigated by captured rainwater, and a gymnasium/assembly space.

The California Street Campus significantly reduces water use and carbon emissions compared to a typical school building by nearly 50%. Achieving these milestones required evaluating HVAC and hot water systems, innovating strategies to reduce electrical lighting demands, installing rooftop solar panels, and also pilot-testing a new cement-free concrete. An interactive LED display in the lobby tracks energy consumption, solar energy contribution, and water use in real time, allowing students and staff to monitor how daily use patterns affect the consumption of these precious resources.

From the earliest stages of developing this new campus, **UHS's vision was for a climate-positive learning environment in which the building serves as a teaching tool for concepts such as energy conservation, sustainable design, and renewable energy**. Working with Leddy Maytum Stacy Architects (LMSa), Truebeck Construction, and Equity Community Builders, UHS's design team held faculty visioning workshops, presented for input and buy-in at a board retreat and an all-school meeting, and hosted sustainability workshops with student groups. Together, this bold vision was brought to life, resulting in a campus that is both a site of academic innovation and a living laboratory for environmental science.

The lessons from UHS's California Street Campus are universally applicable. In approaching any site or program, it is worth testing the simplicity of a goal of "zero." With the team's focused dedication to meeting urgent and necessary climate goals, the resulting building will permeate the experience of UHS's students, who are inspired to realize a climate-positive future beyond 2030.

*LEED (Leadership in Energy and Environmental Design) is the most widely used green building rating system in the world. LEED provides a framework for healthy, efficient, and cost-saving green buildings. LEED Platinum is the highest level of certification of the LEED program.

III.

Organizational Culture Shifts Require Behavioral Change

Shifting organizational culture towards environmental sustainability and climate action requires changes in human behavior. This section outlines high-impact climate actions, best practices for managing culture change, and the role of effective leadership and motivation in sustaining change over time. Of note: anyone can become a change agent, and although the role of a climate champion can be demanding, it offers psychological benefits.

SHIFTING CULTURE

People across an organization are key to catalyzing change, which is true in general and especially for environmental sustainability and climate action. To be effective, however, individuals' efforts to shift culture need to be aligned across organizational groups and systems (Beer, 2023; Rieg et al., 2021). Change is messy and often requires revisiting strategies over time (Stouten et al., 2018). Therefore, it is crucial that organizations support changemakers through challenges by providing dedicated time, resources, and psychological safety to take risks (Davis & Coan, 2015; Unsworth et al., 2021).

Establishing a climate and sustainability roadmap and plan can help reduce the fear of what is to come (Oreg et al., 2011). Plans are more likely to be effective when they incorporate the **highest impact actions** (see Table A) and **best practices for managing change**, including collecting data to identify gaps and assess progress, engaging diverse stakeholders, communicating a vision, enabling behavior change, and institutionalizing the changes so they stick, all of which require effective leadership (Stouten et al., 2018).

Gathering Data to Identify Gaps and Assess Progress

Creating a roadmap for change requires understanding an organization's current state relative to where it wants to be, as well as assigning clear reporting responsibilities and structures (Stouten et al., 2018). Data about water usage, amount and type of transportation, energy efficiency, and waste production, as well as levels of individuals' knowledge and commitment to climate action, are just a few examples. Collecting data before implementation and on an ongoing basis is key. Rather

Table A. Examples of effective climate change mitigation actions that reduce emissions, referred to as high-impact actions (Hampton & Whitmarsh, 2023; Ivanova et al., 2020).

Domain	Illustrative examples of high-impact actions to reduce one's greenhouse gas emissions
Transport	• Reducing air travel by video conferencing, taking fewer work trips, or choosing alternative means of travel, such as rail. • Reducing car travel to work by choosing public transportation, walking, biking, or carpooling. • Shifting ethically and sustainably to battery electric vehicle fleets (Earthworks, 2024), such as cars or bikes.
Food	• Minimizing food waste in cafeterias. • Opting for locally sourced, seasonal, and fresh food when available. • Catering events with more plant-based foods or entirely vegan.
Consumption	• Repairing and reusing materials. • Purchasing secondhand office furniture.
Energy in the Workplace	• Producing and/or using renewable energy (e.g., solar) to power buildings. • Upgrading energy systems and equipment to support renewable heating and efficiency (e.g., heat pumps and smart meters). • Conserving and improving energy efficiency through actions such as weatherization, use of energy-efficient equipment (e.g., lighting, computers, and office machines), and energy-saving behaviors like turning off lights and lowering thermostat set points.
Citizenship & Influence	• Talking with coworkers about the high-impact actions one is taking. • Sharing opportunities to engage in civic activities, such as speaking with representatives, participating in local elections, and joining collective actions.

A Closer Look

Uplifting Creation Care and Climate Action

By Rev. Dr. Heather W. McColl & Sandy Gruzesky
Midway Christian Church

Midway Christian Church is dedicated to uplifting creation care and climate action in all aspects of worship. Our community fosters a culture of centering conversations, readings, and an understanding that our faith calls us to care for God's creation. From the creation stories, to the Psalms, to the Gospels, our faith story is interwoven with our responsibility to be in relationship with, to care for, and to be good stewards of Creation. In 2010, we formalized this commitment to creation care by **becoming one of the first Green Chalice congregations within the Christian Church.**

As part of this work, we switched to LED lighting, installed programmable thermostats and automatic lights for restrooms, and installed solar panels. We found widespread support for these projects not only because of the environmental benefits, but also because of the financial co-benefits. Additionally, we designed a worship series on creation care and incorporated creation care into prayers, communion meditations, sermons, and hymns almost every week. At our monthly Free Community Dinners, we prioritize serving locally sourced food and using compostable materials. Each year, we hold an Earth Sunday to re-commit ourselves as a community of faith to the care of creation. We have also expanded our efforts to engage the community. For example, in 2025, we partnered with Midway Presbyterian Church and community organizations to host the Midway Community Nature Camp, an intergenerational nature education event.

The strides we have made in climate action as a congregation were made possible by the **leadership of individuals and our commitment to collective action**. A small group of our members met to begin conversations about integrating their faith with the environment in a more concrete way. The coordination of these champions helped name this process of prioritizing creation care, which was already bubbling up throughout our congregation.

Integrating creation care throughout our life together as a community of faith did not happen overnight. **It took planning and conversation. It took dreaming and visioning**. It is also not yet finished. We continue to look for ways to care for God's creation, such as working with an environmentalist landscaper to support creation through the stewardship of our property. This movement has also been made exponentially more successful through the support of our congregation. For example, when presented with the opportunity to work with Kentucky Interfaith Power and Light to install solar panels, our members stepped up to raise the funds in a matter of days.

Midway Christian Church's commitment and progress in caring for God's creation as a faith organization is made possible by the unwavering dedication of our members.

than treating this as a one-time effort, regular data collection helps identify which initiatives are working and which need adjustment (Levy & Marans, 2012). Regular progress reports create accountability, highlight new opportunities to drive goals, and prompt course correction when necessary (Ceulemans et al., 2015). They also increase efficacy beliefs and motivation by highlighting successes and achievements (Fritsche et al., 2018). Moreover, collecting data has positive spillovers. For instance, the act of gathering data encourages people to reflect on the role of climate action in their work, and sharing data organization-wide strengthens networks among the people involved (Rieg et al., 2021).

Engaging Diverse Stakeholders

Identifying gaps through data can help pinpoint where engagement is needed and which groups should be involved in the climate and sustainability plan. For example, workforce surveys, operational emissions data, or internal audits may reveal departments with lower buy-in or the capacity to implement change. Change efforts are most likely to succeed when individuals with diverse and representative perspectives from across the organization, including operations, finance, personnel, and research & development, are involved (Etzion, 2018; Lewis et al., 2021). Some of these individuals may be ready to roll up their sleeves, while others may be less prepared to engage. Factors such as past experiences, identity, position, and relative power influence how they perceive the prospect of change. For instance, long-time employees who have observed failed initiatives over the years may approach change with skepticism. Organizations that begin by raising awareness and building excitement around climate and sustainability initiatives tend to have an easier time engaging those who are initially reticent (reviewed in Amel et al., 2024).

Once key people are poised to engage, the question becomes how to organize them. Groups facilitate sharing ideas and concerns, planning, collaboration, and the development of new norms (e.g., Avissar et al., 2018). While informal groups can be effective, formal groups with decision-making power are usually more successful in raising the profile of change (Stouten et al., 2018). Any pre-existing mechanism for engaging diverse stakeholders and building coalitions among them, such as strategic planning task forces, advisory groups, or search committees, could be tasked with addressing climate action.

Communicating

Effectively communicating the organization's vision for climate action is important for driving change (McNamara, 2010). Consistent, frequent, factual communication, especially from formal leaders, can reduce the uncertainty that tends to accompany change and stimulate more positive emotions and attitudes (Davis & Coan, 2015; Oreg & Berson, 2019). It also signals the organization's commitment to action and keeps the vision for climate and sustainability solutions salient in people's minds (Unsworth et al., 2021).

Counterintuitively, communicating the urgency of the climate "crisis" can sometimes paralyze action by evoking too much fear and stress, especially in the absence of concrete solutions to address it (Kok et al., 2018; Moser, 2007). Therefore, it is also important to communicate how organizations can contribute to long-term environmental sustainability, for example, by setting goals like committing to 100% renewable energy for their operations or revamping supply chains to reduce waste and conserve resources.

Enabling Behavior Change

Once a plan is in place, climate-related actions need to be implemented across organizational positions. Relevant actions include conserving resources, transforming processes, avoiding harmful and counterproductive activities, initiating new discussions and programs, and influencing others (Ones & Dilchert, 2012; Zacher et al., 2024; see Table B for illustrative

examples). To facilitate widespread uptake, the organization must host planning sessions, meetings, and activities that empower people to learn more, voice concerns, share information, set goals, make plans, apply what they know, innovate, and make environmentally sustainable decisions (Davis & Coan, 2015; Oreg & Berson, 2019).

To maintain progress, organizations benefit from supporting those who implement and participate in climate-friendly actions (Stouten et al., 2018). Organizations can provide this support by enhancing individual capacity (Renwick et al., 2013). Capacity can be built through events where people see others modeling environmentally sustainable behavior and where they can offer and receive support, such as large-scale exhibits and workshops (Stouten et al., 2018). Organizations can also allocate targeted resources, including training programs, to help people acquire environmental knowledge and build profession-specific sustainability skills, as well as funding and dedicated time for climate-related projects (e.g., piloting energy-efficiency upgrades, developing vegan catering initiatives, transitioning every job to be a climate-positive job; Fawehinmi et al., 2020; Steg & Vlek, 2009).

Even when people have the required skills, they cannot make a change unless they are allowed to do so (Renwick et al., 2013). When an organization nurtures experimentation, adaptation, and learning from failure, people feel more empowered to act (Etzion, 2018). Starting with small, low-stakes projects, such as pilot initiatives, can help build psychological safety around larger-scale change (Stouten et al., 2018). Furthermore, many small, diverse efforts increase the likelihood of identifying effective and practical climate solutions that can then be adapted throughout the organization (Etzion, 2018).

Table B. Examples of climate-related behaviors across organizational positions (Ones & Dilchert, 2012; Zacher et al., 2024).[1]

Climate-related behaviors	Illustrative examples of how they may appear in practice
Conserving resources	• Using technology wisely (e.g., streamlining information searches or generative AI activities to focus on high-priority questions) and reducing digital footprints (e.g., seeking environmentally friendly cloud services; using energy at off-peak hours) • Minimizing unnecessary energy, water, and material use in daily operations (e.g., using gray water for irrigation and toilet flushing)
Transforming processes	• Creating circular systems that encourage material reuse to reduce virgin material usage and eliminate waste (e.g., shifting from sales to leasing models to recover used materials, extend product lifecycles, and reduce waste)

Table B Continued. Examples of climate-related behaviors across organizational positions (Ones & Dilchert, 2012; Zacher et al., 2024).[1]

Climate-related behaviors	Illustrative examples of how they may appear in practice
Avoiding harmful or counterproductive activities	• Minimizing or eliminating harmful waste (e.g., substituting hazardous materials with safer alternatives; implementing closed-loop manufacturing processes) • Developing solutions for discarding harmful waste without compromising environmental integrity (e.g., bioremediation using microorganisms to break down pollutants)
Initiating discussions and programs	• Incorporating climate considerations into decision-making criteria (e.g., evaluating lifecycle data before choosing among options) • Recognizing contributions through internal programs or credentials (e.g., a climate action badge)
Shaping norms and expectations by influencing others	• Modeling climate-conscious decision-making by making processes visible to teams (e.g., explaining how sustainability factors into choices) • Encouraging teams to explore climate-friendly solutions to everyday challenges at work (e.g., seeking climate-friendly vendors and purchasing options) • Including sustainability-related topics in internal and external communications (e.g., climate themes in conferences, public statements)

Examples are illustrative and may vary based on organizational context and priorities.

[1] For a practical guide to the breadth of climate actions available across organizational roles and functions, see Project Drawdown's *Climate Solutions at Work* (2025): https://drawdown.org/publications/climate-solutions-at-work

Institutionalizing Change

Individuals' efforts to affect change in climate and environmental sustainability are often inefficient and short-lived (Rieg et al., 2021). Identifying and eliminating unsustainable policies and programs while embedding new ones into organizational systems, including budgets, governance, and Human Resource Management (HRM) policies, can substantially improve their longevity (Leone et al., 2021). Organizations that embed environmental sustainability into their policies tend to perform more sustainably (Filho et al., 2019).

Organizational policies, procedures, and codes of conduct guide daily decision-making and action, from finance and purchasing to travel and training, by providing clear mandates for behavior and consequences for actions that conflict with these policies (Norton et al., 2014; Quintana et al., 2022). This means that policies endorsing climate action signal organization-level support for climate-friendly behavior (Paillé & Raineri, 2015). If an organization adopts a policy, such as prioritizing climate-friendly vendors in purchasing, all employees, regardless of their commitment to climate action, are compelled to adjust their purchasing practices (Stouten et al., 2018).

Individuals who believe their organization's policies and practices support environmentally sustainable action are more likely to engage in sustainability, for example, by speaking up and contributing ideas for improvement (Norton et al., 2014; Zhang et al., 2024). While people with strong pro-climate beliefs tend to be committed to action regardless of policy (Raineri & Paille, 2016), having a clear policy guides workers with weaker sustainability values who would not otherwise act sustainably (Ruepert et al., 2017; Steg, 2023).

New policies sometimes emerge from bottom-up changes, such as when an individual or team within an organization adopts more climate-friendly practices, like shifting to energy-efficient equipment. Codifying such informal practices into formal policies helps ensure that others adopt and continue these climate-protective actions. New policies can also be intentionally created to introduce new behaviors, for example, minimizing business travel by air or prioritizing sustainable purchasing for lab, cleaning, landscaping, construction, and food products (Bertels et al., 2010). Although formal leaders have the greatest authority to influence or implement policy change, individuals within organizations, at any level, can contribute to policy development (Lülfs & Hahn, 2014).

For policies to be effective, they must be clearly communicated so people understand what is expected of them (Leung & Rosenthal, 2019; Smith & O'Sullivan, 2012; Yang et al., 2023). When policies are clear, people feel greater behavioral control and tend to develop creative solutions — precisely the kind of solutions needed to address climate change (Composto et al., 2023; Leung & Rosenthal, 2019).

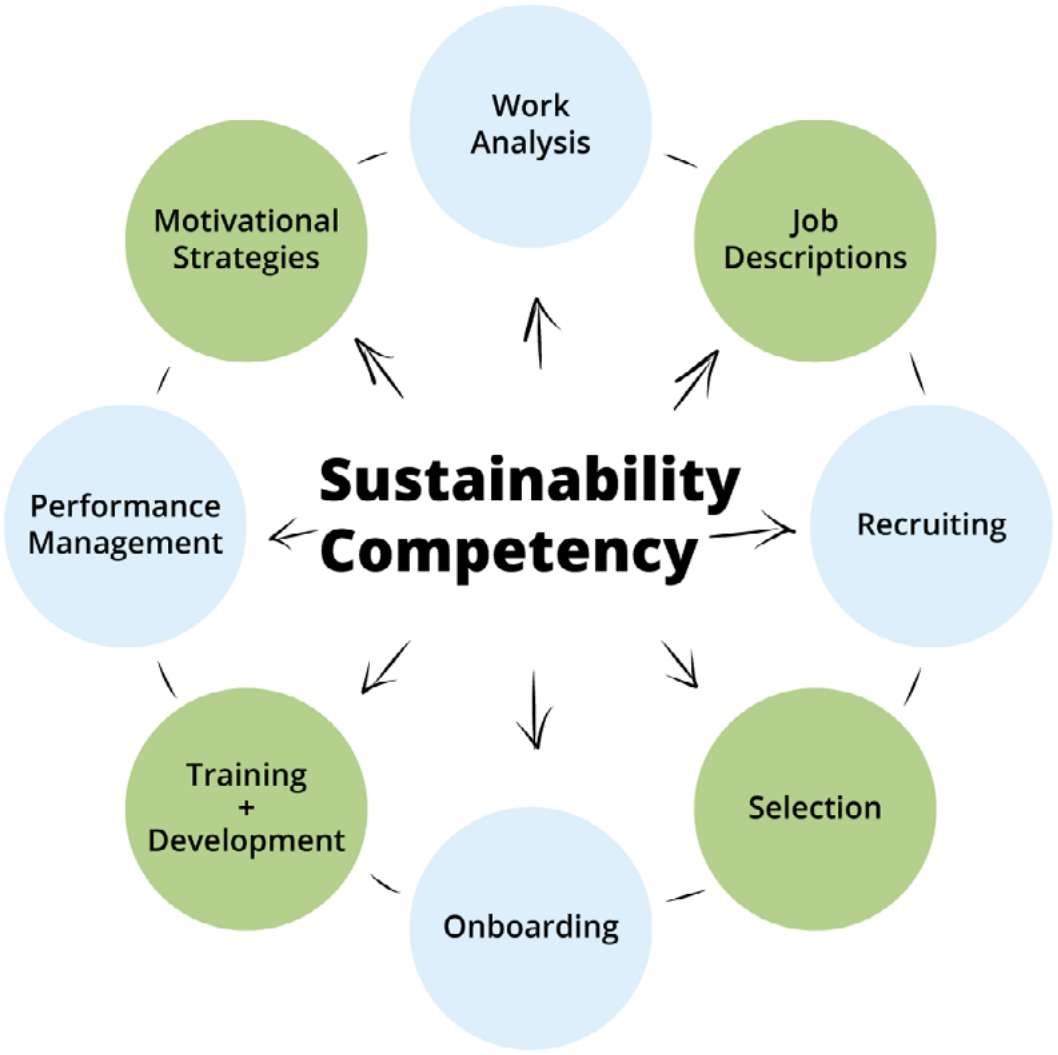
Importantly, policies alone are not enough. People in organizations also need to perceive that others accept and adhere to them (Lülfs & Hahn, 2014; Norton et al., 2014). When adherence is visible, it helps counter misperceptions (pluralistic ignorance) about what other people believe or support. In other words, what people are *actually doing* in practice needs to align with what policies prescribe (Imran et al., 2024).

Institutionalizing change depends on the work of people across a variety of administrative systems within an organization (Stouten et al., 2018). **HRM professionals** play a significant role in culture building and organizational change because their core activities reflect institutional priorities (Bratton et al., 2026; Podgorodnichenko et al., 2021; Westerman et al., 2020). In fact, a large part of their job is to translate mission, vision, and goals into personnel policies, practices, and structures that guide behavior within organizations (Pinzone et al., 2016; Westerman et al., 2020; Zacher et al., 2023). HRM professionals manage the entire employment lifecycle, from the early stages of job design to ongoing performance management (see Figure 2). All

components of this system need to convey a consistent message about expected behavior, and therefore, need to be adjusted to reflect core competencies.

Core competencies are combinations of knowledge, skills, attitudes, values, and behaviors that are strategically aligned with an organization's goals and objectives and are therefore expected of all individuals within the organization, regardless of position (Cabral & Dhar, 2019; Wesselink et al., 2015). People responsible for cultivating core competencies and designing personnel processes, whether individuals or entire HR departments, can adapt them to foster climate action (Zibarras & Coan, 2015).

Figure 2. HR systems that can be aligned with climate action (Amel et al., 2024).



CLIMATE LEADERSHIP

Leadership is the *process* of developing relationships, influencing and motivating groups toward a shared goal, and making sound decisions in the face of uncertainty (Northouse, 2022). *Formal leaders* play an important role in institutionalizing change, as they are in a position to codify climate action through official policy, setting a tone that ripples throughout the group or organization. When people in the C-suite take on the mantle of climate action, it tends to flow to middle management and then proliferate throughout an organization, creating a tipping point for mass adoption of climate-friendly behavior change (Andersson & Bateman, 2000; Robertson & Carleton, 2018). This top-down momentum is complemented by *informal leaders*, who are also needed to catalyze change throughout an organization. In fact, many organizational transformations have begun with just one person or a small group of determined change agents (Adams et al., 2018; Brinkhurst et al., 2011; Constantino et al., 2022).

Leadership can be understood as social influence that steers and coordinates a group's direction, alignment, and commitment (Hull et al., 2021), which means that *any* organizational member can become a climate champion (Heucher et al., 2024). While each leader, formal or informal, uses their own unique approach, leadership that influences others to engage in climate action involves a predictable set of behaviors (Hallinger & Suriyankietkaew, 2018). These behaviors range from *task-oriented* (i.e., clarifying roles, monitoring operations, and short-term planning), which directly drive group action, to *relationship-oriented* (i.e., developing, supporting, consulting, recognizing, and empowering others), which build and maintain trust and cooperation within a group, to *change-oriented* (i.e., envisioning change, encouraging innovative thinking, taking personal risks, and external monitoring), which inspire innovation and adaptation (see review in Schölmerich & Rietze, 2026).

Building trust is a key leadership behavior. Each person has their own style of interacting with others; however, building trusting relationships is at the core of the leadership process (Boeske & Murray, 2022). Trust underlies feelings of empowerment (Schermuly et al., 2022), can increase positive emotions, and is essential for reducing the negative emotions that often accompany change (Oreg & Berson, 2019). This is particularly important for climate progress, given both the challenge of addressing it and the severity of its projected impacts. In addition, research identifies integrity-based and values-consistent leadership as a common thread among climate-focused leaders (Aycan et al., 2025). People who put others first — by listening closely, expressing empathy, and supporting others' personal well-being — are more likely to influence others to integrate environmental sustainability into their work and increase sustainability-relevant actions (Aycan et al., 2025; Katz et al., 2022; Northouse, 2022).

Researchers have studied many leadership styles in the context of sustainability (see reviews in Amel et al., 2024; Schölmerich & Rietze, 2026). Perhaps the most studied is **transformational leadership**, which refers to a specific combination of behaviors, some noted above, that is especially influential during crises, making it particularly relevant for influencing climate action (Bass & Riggio, 2006; Katz et al., 2022; Karamally & Robertson, 2023; Tu et al., 2023). Transformational leaders 1) build trust through their expertise and respected reputations (Gallagher et al., 2019; Palomo-Velez & Van Vugt, 2023; Staub, 2025); 2) passionately promote a vision (Afsar et al., 2020; Akins et al., 2019); 3) encourage others to think critically and creatively, empowering them to overcome challenges and innovate (Abourokbah et al., 2024; Yi et al., 2019); and 4) lead with empathy and encouragement, strengthening others' self-efficacy (Barling et al., 2011). This mix of behaviors emboldens others to take risks, offer suggestions, and implement initiatives. Clearly articulating the problem at hand and a guiding vision, while also providing resources, helps others develop

Climate Leader Spotlight

Why Relief Wins Corporate Support for Sustainability

By Parker White, Co-Founder and CEO, Unety;
Sloan Fellow, Stanford University

The best social impact still gets a no if you don't know what motivates your audience.

Every organization, whether it admits it or not, sets a financial bar that any decision must clear, from acquiring a headquarters to making a new hire to checking the renewable box on the utility bill. Most never run the formal math, the kind that weighs a return against the cost of capital, but they always know whether there's room in the budget. That sense is the bar. I learned to recognize it early in my career, and it has helped me put sustainability initiatives on the agenda of hundreds of key decision-maker meetings across organizations of every size and sector.

But clearing the bar only gets you in the room. Winning a yes depends on a story, and a story with no emotional register is just a sequence of empty words that leads to boredom, distraction, and no.

So the real question is which emotion to evoke from your audience. For the last 20 years, the sustainability movement has mostly leaned on two, and both can become traps.

Fear came first, dressed up as compliance, regulation, and loss avoidance, turning sustainability into an obligation rather than an opportunity. Financial upside followed with the promise of doing well by doing good, but that story stalled as political and economic conditions shifted.

The emotion that actually convinces people is relief. **If you can offer relief and clear the financial bar, you can advance any sustainability initiative, no matter the political winds**. But that means finding what keeps your audience up at night, then offering a solution that takes that stress away.

In China, office developers couldn't stand out amid a flood of new towers all claiming to be modern, so LEED became a trusted signal that buyers valued. To earn it, developers built far greener than they otherwise would have. In the U.S., developers chasing cheaper capital qualified for better financing only by including green components, so they too built greener — not out of virtue, but to secure a better deal.

In both cases, sustainability asked for no sacrifice. It delivered relief. This is how I helped cut over 5 million metric tons of CO_2. Rather than trying to convert corporate leaders to an ideology, I suggest leading with practical relevance. And after 20 years advancing sustainability initiatives around the world, I know that **climate solutions are most persuasive when they bring relief to the everyday pressures organizations already face**. Leaders do not always need another existential warning. Often, they need a credible path through a problem already on their desk.

So find the stress. Offer the relief. That is how we push progress.

novel solutions (Afridi et al., 2023). Transformational leadership is not without its potential downsides (e.g., unethical manipulation of others). Yet when done well, transformational leadership empowers others to feel capable and valued enough to make independent decisions, enabling others to become leaders in their own right (Afsar, Shahjehan et al., 2018; Li et al., 2019; Rietze et al., 2025). Creating a robust set of climate-oriented leaders enhances continuity by creating a pipeline of candidates for promotion, making succession planning easier.

To accelerate a culture of climate action within organizations, increasing the number of climate-aware transformational leaders is likely to be critical (Suieubayeva et al., 2025). However, for many, this kind of leadership will require acquiring **new knowledge, skills, and abilities (KSAs)** (Katz & Stuhlmacher, 2026). Important skills include consistently applying one's values; strategic thinking; change-leadership skills, such as interpersonal competence (e.g., valuing others), intrapersonal competence (e.g., self-regulation, persistence, learning mindset); and implementation strategies (e.g., translating environmental sustainability goals into actionable plans; Ayers et al., 2023; Wiek et al., 2015). Leaders also need to analyze the current organizational culture to assess its alignment with a new vision — one that supports climate protection — and identify and shift the shared assumptions and norms that maintain a status quo unsupportive of climate action (Smith & O'Sullivan, 2012; van Velsor & Quinn, 2012).

To build and maintain trust with others, leaders must develop a specific, robust set of KSAs grounded in the science and operational realities of climate change. Climate change is a *wicked problem*: a unique, complex, and dynamic challenge for which there are neither obvious solutions nor a clear endpoint (Bendell et al., 2017; Haney et al., 2020). Addressing wicked problems requires an integrated strategy and holistic solutions (Schulte & Paris, 2024). Treating organizations as complex, interdependent systems that need to adapt requires taking time to carefully examine context when making decisions, paying attention to system feedback, and supporting learning and innovation (Ives & Wilkinson, 2023; Staub, 2025). Understanding the enormity of the challenges and valuing interdependence to address them can help create connections across systems and foster collaboration across differences, amplifying impact (Hull et al., 2021). To accomplish this, leaders need knowledge of complex systems (e.g., climate), including specific problems (e.g., greenhouse gas emissions) and their causes (e.g., supply chains, transportation choices; Pogutz & Winn, 2016). It is, therefore, unsurprising that **successful sustainability leaders tend to display systems-oriented, long-term thinking; the ability to manage complexity; a focus on innovation and interdisciplinarity; and the insight to build others' capacity** (Ayers et al., 2023; Rimanoczy & Klingenberg, 2023; Schulte & Paris, 2024).

Importantly, *anyone* can learn effective leadership behaviors (Hull et al., 2021), both vicariously (Robertson & Barling, 2013) and through formal methods such as executive coaching, mentorship, networking, goal-setting, feedback, and communities of practice (MacKie, 2023). For example, training can help leaders learn how to encourage goal commitment, delegate responsibilities, coach others, model appropriate behavior, provide support and recognition, foster collaboration and teamwork, and manage change (Wamsler et al., 2024). Training can also increase leaders' climate-related awareness and knowledge (Balda et al., 2023; Young et al., 2015), reduce cognitive biases that interfere with attention to environmental sustainability issues (Eckardt & Mazutis, 2023), cultivate a sustainability mindset (Rimanoczy & Klingenberg, 2023), and catalyze action (Alkaher & Avissar, 2017).

MOTIVATION IN ORGANIZATIONS

One of the primary tasks of anyone leading change is to understand and encourage others' motivation. In

psychological science, motivation is defined as **sustained engagement that is directed toward a particular outcome** (Mitchell & Daniels, 2003). Motivation can come from within (intrinsic), as when one feels an internal drive to engage in a behavior, or from external (extrinsic) circumstances, as when one engages in a behavior to gain a reward or avoid a punishment.

Intrinsic Drive

An intrinsically motivating task aligns with **people's basic psychological needs of competence, relatedness, and autonomy** (Ryan et al., 2022; Wullenkord, 2023). *Competence* is the ability to act effectively. *Relatedness* is maintaining stable relationships and feeling socially connected with important others. *Autonomy* is the sense of freedom to make choices rather than being limited or coerced. When tasks align with people's basic needs, they are more inclined to take action than when there is a conflict with one or more of those needs (Graves et al., 2013).

Just as in the rest of life, basic psychological needs matter within an organizational setting; therefore, those advocating for a shift toward climate protection need to be aware of potential conflicts with people's competence, relatedness, and autonomy (Deci et al., 2017). The transition to an environmentally sustainable, climate-friendly organization will require the organization and its individuals to do things differently, potentially threatening all three needs. However, it need not be so. Competence can be nurtured through opportunities to learn and practice new sustainable behaviors in a low-stakes setting (Unsworth & Tian, 2018). Relatedness may be fostered through social connections, such as building community within a department (Deci et al., 2017; Rupp et al., 2006) or intentionally creating networks of like-minded, climate-oriented colleagues across the organization (Endrejat & Kauffeld, 2018). The need for autonomy may be satisfied by offering people multiple ways to support the organization's sustainability and climate-related goals (Stein et al., 2025; Zacher et al., 2023).

Top-down change efforts, in particular, are often met with resistance because they threaten people's autonomy (Bentler et al., 2023; Rieg et al., 2021; Schmelz & Bowles, 2025). This does not have to be the case. Those leading the charge for change, whether in a formal leadership position or not, can reduce threats to autonomy by encouraging others to choose where to take initiative and by providing resources and support for their efforts (Deci et al., 2017; Dierdorff et al., 2025; Li et al., 2020; Slemp et al., 2018). Explicit encouragement may be especially important in organizations with strict hierarchies or bureaucracies, which inherently constrain individual autonomy (Blom et al., 2020).

Autonomy is important not only for individuals but also at the group level. For strong group performance, people need to feel that they collectively have the freedom to choose their path toward environmental sustainability and climate protection (Grant & Parker, 2009; Ryu et al., 2022). For example, a college might ask each club or sports team to propose its own plan to achieve a significant reduction in travel-related CO_2 emissions, rather than having the college develop one.

If people's work sparks self-determined motivation — because it offers choices, supports important human connections, and has the right level of challenge and interest — new behaviors can be sustained for the long haul in the face of challenges (Ryan & Deci, 2000; Steinhorst & Klöckner, 2018). A supportive environment then becomes less important (Pelletier & Aitken, 2014). However, if the work is not intrinsically motivating, for example, when it involves boring or repetitive tasks, formal leaders can structure the situation to encourage action using extrinsic consequences (Gatersleben et al., 2023).

Extrinsic Forces

It is rare for tasks to be done for purely self-determined reasons. People tackle most tasks because external motivators push them. These external forces can coexist with, and even complement, internal motivation.

In psychological terms, external contextual forces are called contingencies, and organizations provide numerous contingencies that impact an individual's climate-relevant behavior (Geller, 1987).

From a behavioral science perspective, **two types of contingencies shape behavior: antecedents and consequences**. *Antecedents* are the circumstances or settings that steer a person toward a certain behavior. Examples of antecedents within an organization include structural features such as an office designed with (or without) environmental sustainability in mind, making it easy (or difficult) to conserve energy; availability of climate-friendly transportation options; purchasing guidelines that encourage green choices; or an event theme that invites participants to connect their presentations or products to sustainability. *Consequences*, on the other hand, are the outcomes, such as rewards or punishments, that occur after an action has been taken. Within an organization, examples of consequences might be incentive structures that reward progress toward climate goals or special awards for sustainability achievements. Social feedback from others in the organization is also an important consequence that motivates (or discourages) people's behavior (Leung & Rosenthal, 2019).

Most everyday environments in the industrial world were not designed with environmental sustainability or energy conservation in mind. Instead, the infrastructure of daily life, full of cues about how to behave (antecedents), encourages climate-harming behaviors: meat-centric cafeteria options served on disposable plastic dishware, pressure to use energy-intensive technologies to increase productivity, and waste stations without recycling or compost bins. These contextual cues dramatically shape people's behavior by making less-sustainable actions the easy way, or even the only way. Thus, making climate-friendly options easily available and accessible is a concrete approach to increasing their use.

However, even when climate-friendly infrastructure is available, people do not always use it, often due to habit. *Habits* are automatically performed behaviors cued by context. They are notoriously difficult to disrupt, both inside and outside the workplace (Holland et al., 2006). Disrupting habits requires substantial changes to contextual cues, creating a *habit discontinuity*, i.e., an opportunity for new habits to form when the cues prompting old habits are removed (Verplanken & Orbell, 2022). Habit discontinuities may be small-scale, such as moving compost and recycling bins to a prominent location in front of the trash bin, or large-scale, such as relocating an organization's headquarters. When combined with resources and support to form new, more sustainable habits, these discontinuities can shift people's behavior.

Sometimes people intend to engage in climate-friendly behaviors but forget to do so. In these cases, antecedents such as *modeling, prompts*, and *default settings* can support a shift to climate-friendly behavior (van Valkengoed et al., 2022; Zacher et al., 2023). To illustrate:

- ***Role Modeling***. Seeing others within an organization model a particular climate or environmental sustainability behavior captures people's attention because of the human social tendency to watch and imitate others (Boiral et al., 2015; Young et al., 2015). This is especially effective when those modeling the behavior are influential (Carrico & Reimer, 2011; Endrejat & Kauffeld, 2018).
- ***Prompts*** are simple cues, such as physical signs or electronic notifications, that remind people of their intention to be climate-friendly (Gemmecke et al., 2025). They are most effective when placed at the location and time when the behavior should occur (Unsworth et al., 2013), for example, a catchy sign near an electronic equipment control panel that reminds users to turn it off after their use.
- Green ***default settings*** make the climate-friendliest option the default while still allowing

people to opt out if they prefer something else. Examples include automatic (but reversible) shut-off for lights and other electronic equipment after periods of non-use, or printers set to print double-sided by default unless users choose to override it. Such defaults support autonomy by allowing people to make a different choice with minimal effort (Gatersleben et al., 2023).

Consequences of organizational behavior are similarly powerful. Given the typical organizational structure, formal leaders often have the authority to impose consequences that shape employees' behavior. They may encourage employees to repeat an action or achievement by rewarding it, for example, with a financial bonus or positive recognition. Incentives for sustainable actions are often viewed by employees as sources of support and can increase their engagement, especially when they align with the organization's stated climate commitments (Paillé, Valéau et al., 2022; Unsworth & Tian, 2018). Organizational leaders could also choose to punish an undesired behavior or outcome, for example, by issuing a reprimand or demoting the individual. Punishment, however, is risky as it can make people feel manipulated or coerced (DeYoung, 2000). It is also counterproductive to punish people for poor performance when they are making honest efforts. Becoming more sustainable and climate-friendly takes practice and adjustment, and when people are punished for trying, they may give up and disengage (Jackson et al., 2011).

Consequences do not always come from organizational leaders. Peers' responses to a particular action can also be rewarding or punishing (Niemiec et al., 2020). Anyone in an organization can offer social feedback on others' environmental sustainability efforts (or lack thereof). Because of the innate human need for social connection, small gestures such as a smile, a thank-you, or a thumbs-up can feel rewarding, while signals of disapproval can feel deeply aversive. Informal social rewards can therefore encourage continued engagement in environmental sustainability. Importantly, what feels positive and rewarding to one person may feel unpleasant to another; it depends on the individual and how they interpret the situation. Organizations can therefore offer a wide range of incentives to meet people where they are.

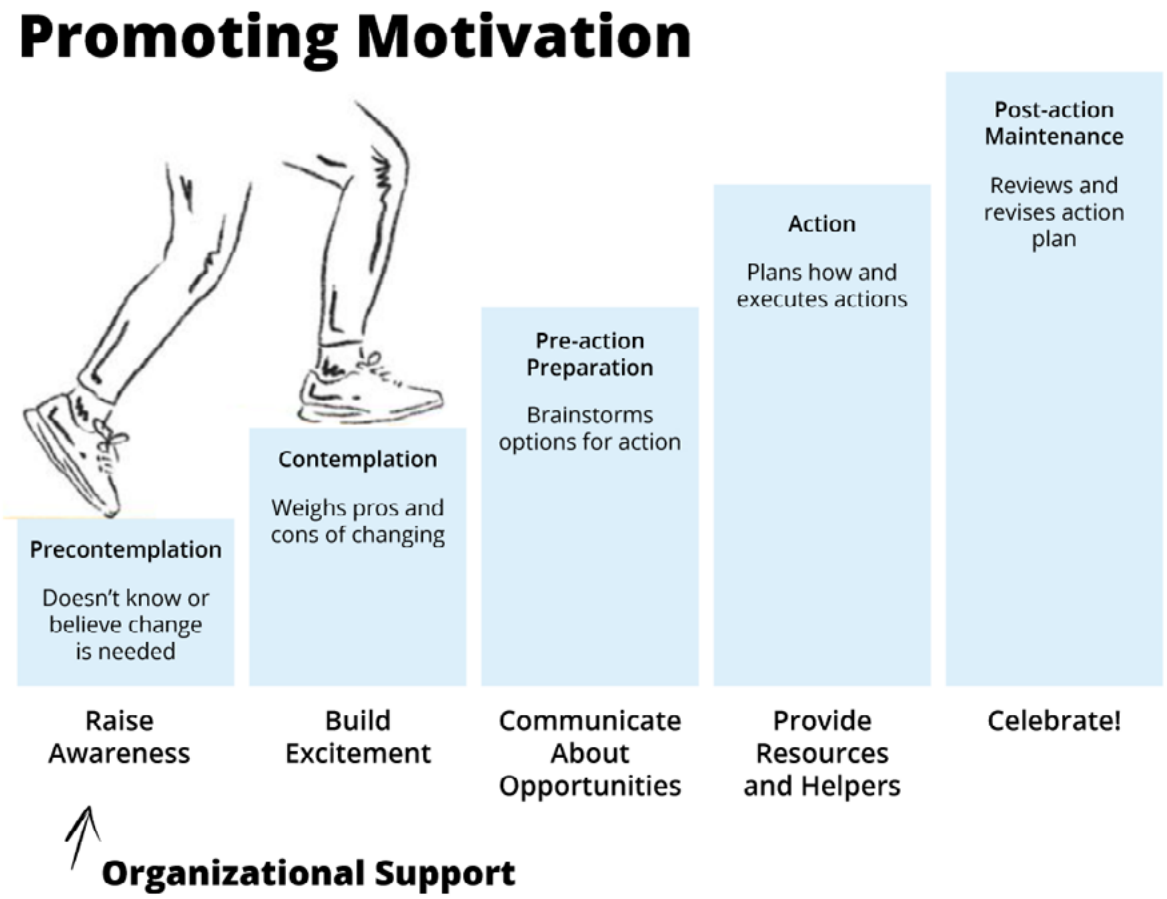
Managing Motivation

To maximize motivation, environmental sustainability plans need to be translated into specific individual, unit, and organizational goals (Carrico & Riemer, 2011). Setting goals and developing strategies to achieve them are essential tools that help people translate their values and intentions into actual behavior (Wiernik et al., 2018; Zacher et al., 2023). Specific, challenging, yet realistically attainable goals consistently outperform vague intentions (Locke & Latham, 2019; Yuriev et al., 2026). Identifying concrete tasks, such as having a manager develop a low-carbon travel policy for salespeople, explicitly directs behavior, and challenging goals (e.g., said travel policy), rather than "low-hanging fruit" (e.g., recycling), are more likely to stimulate substantive progress (see review in Amel et al., 2024).

Information about progress toward goals, in the form of feedback, is crucial for achieving them (Karlin et al., 2015; Young et al., 2015). Many tools (e.g., dashboards and apps) are now available to help people track work outcomes, such as energy and water use, and comparative feedback among co-workers enables social comparisons that can increase individuals' efforts by fueling competition (see review in Amel et al., 2024). Feedback allows people to *self-regulate* by adjusting effort, correcting errors, or even revising goals if needed. As a form of consequence, feedback is most effective when perceived as a reward rather than a punishment, as noted earlier. Thus, focusing on *progress* is critical, especially when people fall short of their goals.

Even when situational cues and consequences encourage climate-friendly behavior, not everyone will be ready to take action (Wells et al., 2024). Becoming sustainable is a *process*, and it is important to **meet people where they are** (Bamberg, 2013). Those who are not yet aware of the urgency of action need different support than those who are searching for ways to engage or planning their next steps (see Figure 3).

Figure 3. People need different support at different stages of change (Bamberg, 2013; Keller et al., 2019)



Motivation, learning, and reactions to change improve when sustainability champions **provide tailored support** for the unique problems typical of each stage (Keller et al., 2019).

CO-BENEFITS OF CLIMATE ACTION

The reality of climate change is worrying for many. A majority of people in most countries see climate change as a serious threat (Poushter et al., 2025). In the United States, between 2013 and 2023, the proportion who felt "alarmed" about climate change increased from 15% to 28% (Leiserowitz et al., 2023). Similarly, survey data from ecoAmerica indicate that nearly 70% of Americans report being somewhat or very concerned about climate change (Speiser & Ishaq, 2026). High levels of worry about climate, often labeled as *climate anxiety* or *eco-anxiety*, are a rational response to the threat and uncertainty to health and well-being posed by unaddressed climate change (Clayton, 2020; Kühner et al., 2025). These emotions can negatively impact well-being (Boehme et al., 2024; Ogunbode et al., 2022; Pihkala, 2020) and may also impair people's ability to carry out daily activities (Hickman et al., 2021). Precisely how climate worry affects people within organizational contexts has not been widely studied (Ayassamy et al., 2024). However, one review suggests that increased stress associated with extreme weather events may indirectly

affect people at work, particularly younger workers, by disrupting work-life balance and making decision-making more difficult (Brooks & Greenberg, 2023). As climate impacts intensify, these disruptions are likely to become more frequent, highlighting the practical need for organizational resilience planning and employee support systems that address climate-related stress.

A growing body of research shows that taking climate action can foster greater well-being. Taking action to address climate change may reduce climate anxiety and support mental health (Clayton, 2020; Kühner et al., 2025). Studies further suggest that taking meaningful, sustainable action is associated with positive emotions and reduces climate worry (Kühner et al., 2025; Mock et al., 2019; Venhoeven et al., 2020; Zawadzki et al., 2020). The social support gained from taking action alongside others can further enhance wellbeing and mental health, while also potentially reducing the negative workplace impacts of climate-related stress (Brooks & Greenberg, 2023).

Despite these benefits, not all formal leaders are ready or willing to embrace climate goals. When there is a mismatch between an employee's desire to address climate change and an organization's disinterest, employees may cognitively and emotionally distance themselves from their workplace and put less discretionary effort into their work (De Clercq, 2022). This mismatch may also compromise the employee's job satisfaction and increase turnover in organizations (Kühner et al., 2024). Climate-concerned individuals within organizations that are taking no meaningful climate action then face a choice of staying quiet or becoming a change agent or an insider activist (Heucher et al., 2024). However, while taking on the role of a climate champion within an organization can provide the aforementioned psychological benefits (e.g., Vestergren et al., 2017), it is hard work and can be emotionally draining when others are less ready or able to engage in change (Lin et al., 2019).

Alternatively, formal leaders who guide their organizations in pursuing climate goals create an environment that supports those eager to take climate action. Thus, being part of an organization working to address climate change may mitigate climate worry and some of its negative impacts on well-being. And organizations with a reputation for valuing environmental sustainability also benefit. For example, they attract more qualified candidates for open positions (IBM, 2021), who tend to be more motivated and better aligned with the organization, thereby strengthening the overall applicant pool (Bratton & Bratton, 2015; Cohen et al., 2010). Employees with a sustainability orientation also tend to exhibit positive workplace attributes, such as caring about how others are treated (Bridoux et al., 2016), a desire to make a difference through their work (Gully et al., 2013), and a sense of responsibility (Liao & Cheng, 2020; Rupp et al., 2013).

A Closer Look

From Uncertainty to Leadership: Building the Climate-Health Connection in Colorado

By Kirsti Klaverkamp & Karam Ahmad
Colorado Health Institute

The Colorado Health Institute (CHI) decided to incorporate climate change into our work in the mid-2010s. As a nonpartisan nonprofit health policy organization, we initially faced an important question: Did climate change fit within our scope of work? Staff and leadership wanted to ensure that any engagement was grounded in research and data, and aligned with CHI's mission. Conversations at all levels of the organization helped shape the decision. Ultimately, our CEO and leadership team supported moving forward because the climate health impacts were clear, evidence-based, and directly relevant to helping policymakers make informed decisions. Illuminating the links between the environment and human health helped build momentum. **The more we connected climate change to the health issues our partners already cared about, the more buy-in we gained**.

In 2016, we released an explainer on the connection between the environment and health, which laid the groundwork for how we talk about this relationship. In 2017, we released the paper, *Connecting Colorado's Climate and Health*, to understand how extreme heat, poor air quality, wildfires, drought, and other climate-related hazards affect human health in Colorado. Our work found an eager audience. The authors — Chrissy Esposito and Karam Ahmad — presented to local public health partners and policymakers in ways that felt clear, practical, and relevant to Colorado communities.

CHI also developed its own Health and Climate Index[1] to examine how environmental and social risk factors, along with local policies, influence vulnerability to climate-related exposures. The Index allowed us to quantify climate and health risks across Colorado. The analysis received widespread media attention, **elevating CHI as a trusted voice** by discussing climate and health in an accessible, data-informed way that connected with Coloradans' lived experiences.

In 2022, CHI formalized this work with Acclimate Colorado[2]: CHI's portfolio of climate, environmental health, and sustainability-related research and services. With support from local foundations, we convened a cross-sector action team of representatives from state and local government, community and advocacy organizations, and health care and mental health practitioners to develop Colorado's first climate and health policy agenda. CHI has since collaborated on *Colorado's Climate Preparedness Roadmap*, the first of its kind in the nation, informed extreme heat policy in Denver, and helped Kaiser Permanente advance climate and sustainability efforts across Colorado. What started as datasets, informational sheets, and presentations is now central to CHI's work: helping Colorado understand and respond to climate change as one of the defining public health issues of our time.

[1] coloradohealthinstitute.org/research/2022-climate-change-health-index
[2] coloradohealthinstitute.org/programs/acclimate-colorado

KEY TAKEAWAYS

+ **Lasting culture change requires sustained, supported behavior change.**

  Successful climate progress happens when organizations align people and systems around a clear sustainability roadmap, reducing fear and uncertainty.

+ **Environmental sustainability plans are most effective when they include high-impact climate actions and follow best practices to manage change.**

  These include regularly gathering data, engaging diverse stakeholders, communicating clearly and frequently, enabling and supporting climate-friendly behaviors, and embedding these behaviors into policies and daily practices.

+ **HR and administrative practices are powerful tools for change.**

  Hiring, onboarding, training, and performance management are not just administrative functions; they are mechanisms through which sustainability values are selected, socialized, and reinforced across the organization.

+ **Lasting change requires effective formal and informal leadership.**

  Climate action accelerates when leaders build trust, demonstrate integrity, communicate vision, and empower others — particularly through *transformational leadership* that fosters autonomy, creativity, and impact, and builds a pipeline of climate-oriented leaders for long-term continuity.

+ **Motivation for climate action comes from both internal drive and external factors.**

  People act when they feel competent, connected, and autonomous, and are rewarded for their actions. Organizations can maximize motivation by setting specific goals, giving progress-focused feedback, modeling behaviors, offering choices, and providing tailored support to meet people's readiness levels.

+ **Climate action benefits both people and organizations.**

  Taking action can reduce climate-related distress, support mental health, and foster a sense of purpose, connection, and positive well-being. For organizations, aligning with employee climate values strengthens engagement, retention, and commitment, while inaction or indifference can lead to disengagement and turnover.

IV.

Recommendations for Climate Leadership at Any Level

This section outlines evidence-based recommendations to drive climate action within specific roles in an organization, from bottom-up to middle-out to top-down, as well as human resources management (HRM) or operational roles. It also highlights opportunities available to everyone, both inside and outside the organization.

Organizational transformation can begin anywhere: through *top-down* influence from boards, senior staff, or Human Resources Management (HRM) personnel, *bottom-up* action originating from an organization's grassroots, or *middle-out* efforts from managers and supervisors. A comprehensive shift toward climate action will require leadership from all of these sources (see Figure 4). In fact, organizations that allow leadership to be shared and adaptive, so that those with the most pertinent expertise and skills lead specific efforts, are better positioned to address wicked problems such as climate change (Ives & Wilkinson, 2023; MacKie, 2023; Wielkiewicz & Stelzner, 2010). The following subsections outline unique climate leadership opportunities available to specific roles and environmental sustainability actions available to everyone.

FOR SPECIFIC ROLES

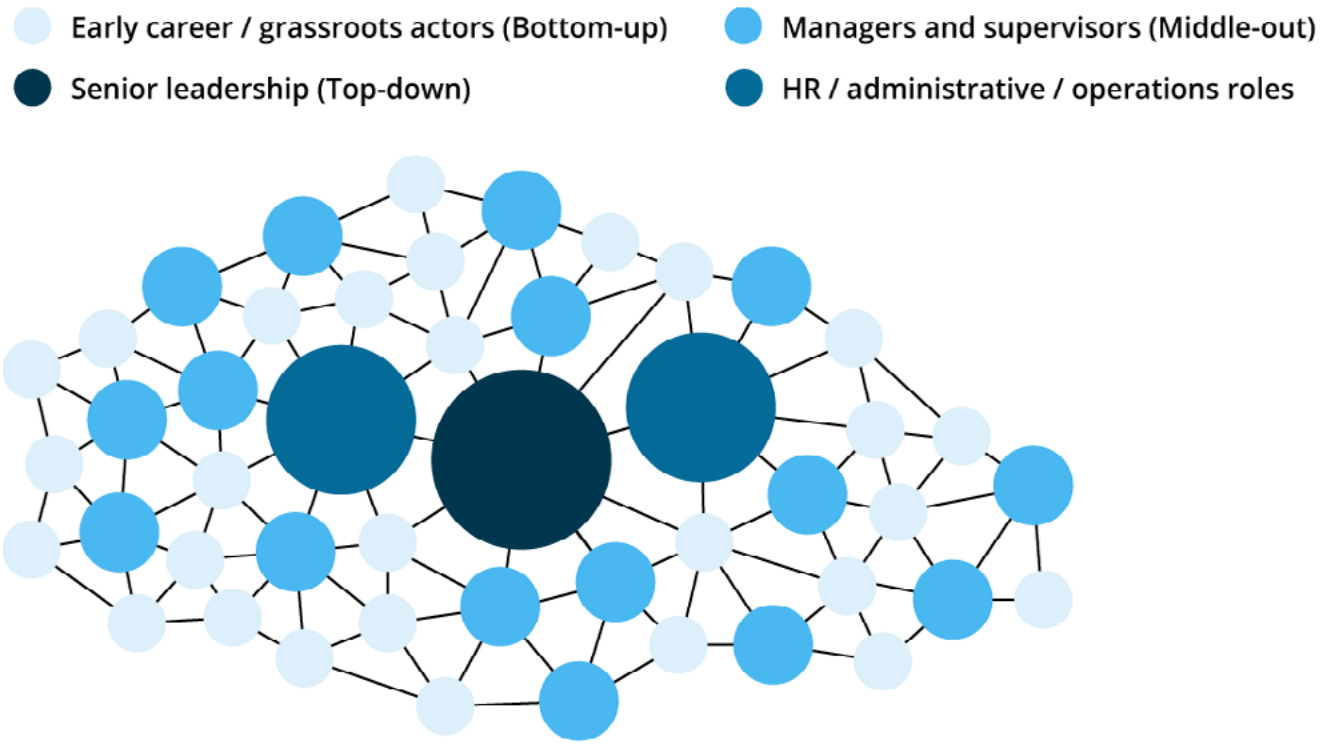
Bottom-up

Despite differences in authority to influence change, it cannot be overstated that *anyone* within an organization can become a leader in climate solutions (Stein et al., 2025). While grassroots action can be too risky for some (Girschik et al., 2022; Morrison, 2023) and, under certain circumstances, may carry professional consequences, those with autonomy who are less risk-averse or less sensitive to conformity can nevertheless catalyze action. Their efforts may start with small changes within their own sphere of influence (Akins et al., 2019; Constantino et al., 2022), and small wins can, in turn, spill over into broader impact (Kühner et al., 2026; Stein et al., 2025).

Grassroots actors can:

- **Impact norms through role modeling and direct requests** (Constantino et al., 2021; Constantino et al., 2022). This can

Figure 4. Organizational transformation is driven by climate leadership at all levels.



Nodes represent roles, with larger nodes indicating greater organizational authority.

include showing up and participating in organizational forums to surface questions and share information relevant to climate-related decisions or starting conversations during incidental encounters in the break room or lobby.

- **Provide social support** that encourages others to follow through on new climate-related ideas or initiatives (Katz et al., 2023). A thumbs up or fist bump can go a long way. These actions can feel risky, but there's a sense of psychological safety in numbers, so collaborate with others who might otherwise be reticent to speak up (Morrison, 2023).
- **Spread ideas through unofficial social networks** within an organization (Bolden et al., 2008; Nguyen-Van et al., 2021), such as sports leagues, lunchtime book clubs, Friday happy-hour groups, or other ensembles formed through informal connections. These spaces can help normalize conversations about sustainability, surface new ideas, and build broader support for climate action.
- **Facilitate social learning** by building communities of practice that share effective strategies for addressing challenges specific to vocation, projects, or industry (Myers et al., 2026). This could be less formal, such as convening interested people for a lunchtime discussion on climate-related issues, or more formally structured, with regular gatherings, agendas, goals, and sharing structures (such as online communities).

- **Share clear, evidence-based information about which actions have the greatest climate impact**. People tend to overestimate the effects of low-impact behaviors (e.g., recycling) while underestimating those of high-impact ones, such as reducing air travel or shifting to plant-rich diets (Johnson et al., 2024; Wynes & Nicholas, 2017; Wynes et al., 2020). Resources highlighting high-impact actions (Ivanova et al., 2020; Kraft-Todd et al., 2025) are well-suited for sharing within communities of practice or informal networks.
- **Identify opportunities for the organization to change its practices**, in small or large ways, connect them to climate goals, and talk to others about the value of making these changes (Andersson & Bateman, 2000). This could range from identifying a climate-friendly vendor for office supplies to creating a task force to studying the impacts of an organization's climate policy on member behaviors.
- **Increase internal support** from individuals in positions of institutional power, such as executives and boards, by contributing input through formal and informal communication channels that inform leadership decision-making (Grant & Ashford, 2008; Uhl-Bien et al., 2014). Initially, such meetings can serve an educational purpose, sharing success stories about grassroots climate initiatives or what other organizations are doing. People respond well to "good news" meetings and emails. Building trusting relationships over time makes it more likely that executives will commit resources and sustained attention to new climate initiatives and major, top-down changes.
- **Broaden external impact** by using one's position to influence the organization's supply chain relationships where possible (Pekaar et al., 2024), for example, by ordering from suppliers with verified climate-friendly practices or encouraging current vendors to change their processes. This amplifies impact by spreading change throughout the organization's networks, even if it starts small.

Middle-out

Middle management can directly offer support structures that shape behavior, increasing the likelihood that others will engage in climate action (Bertels et al., 2010). They can more directly influence workers' attitudes and behaviors (Afsar, Shahjehan et al., 2018; Paille, Mejía-Morelos et al., 2022). Thus, their support can play a valuable role in enabling climate and sustainability transformation throughout an organization, especially those who oversee larger groups (Katz et al., 2022; Zacher et al., 2024). Moreover, people are more willing to take action when they believe their managers support their innovations (Cantor et al., 2015; Yuriev et al., 2018). Middle managers already experience high rates of burnout, making it critical to integrate climate into existing activities, rather than piling it on top of pre-existing loads, while also providing institutional support and recognition for this work.

Managers and supervisors can:

- **Model environmentally sustainable behavior** (Blok et al., 2014; Xiao et al., 2024) by making climate-conscious decision processes visible and relatable. For instance, managers can explain how sustainability considerations shape their choices, such as opting to take a train instead of flying for business travel, and how they approach these decisions to clarify how climate priorities are applied in practice.
- **Integrate climate-related considerations into regular communications**. Solution-focused communication can prompt people to think about change constructively (Güntner et al., 2021). For example, highlighting climate-related initiatives or innovations in newsletters, podcasts, or internal communications can signal organizational priorities and help individuals understand how their actions relate to broader outcomes.
- **Help people build and use their climate-related competencies** (Delmas & Pekovic, 2018; Zacher et al., 2024). People need not only support in building climate-related knowledge

and skills, but also confidence in applying what they learn. Managers and supervisors can provide formal support (e.g., annual performance goals; payments or reimbursements to attend trainings) and informal encouragement (e.g., communicating training opportunities; shout-outs during morning stand-ups).

- **Align job and role design** to reflect evolving organizational priorities related to climate action (Katz & Stuhlmacher, 2026; Stein et al., 2025). Often, sustainability is a matter of *changing how one does* their work rather than engaging in new activities (e.g., when the ground crew chooses battery-powered equipment over gas-powered equipment). Other roles may incorporate updated procedures, tools, or tracking practices that align with climate priorities, such as documenting resource use or emissions data.
- **Provide resources, such as time and budget**, to make the necessary changes (Yuriev et al., 2018). If people's daily schedules are already full, they need recalibration to try new things. Managers and supervisors can work with their teams to clarify priorities so that climate action has a legitimate place in the workday. Gaining new skills takes time and money, so dedicating a pool of funds specifically to climate-related knowledge and skills increases the likelihood that people will engage in relevant training. In many cases, climate-related innovation requires financial resources, some of which may feel out of reach in the moment. When the timeline for calculating return on investment is lengthened, up-front costs for climate-related innovation often pay for themselves (Haner et al., 2025). Digital tools can support innovation and replace climate-intensive activities, such as travel to meetings, with videoconferencing (Kühner et al., 2025).
- **Assess where people are on their level of climate engagement and provide stage-appropriate support** (Keller et al., 2019). When people are new to the issue, they benefit from a basic understanding of the problem and how others in their profession are addressing it. Individuals who are already on board and have relevant skills benefit from opportunities to apply those skills within their roles, while those who have taken action are more likely to sustain engagement when their efforts are recognized.
- **Provide frequent progress feedback and celebrate goal achievement** (Stouten et al., 2018). For instance, middle management can implement digital dashboards to help people monitor relevant metrics and track changes in resource use (Kühner et al., 2025). Dashboards can also mark milestones, recognize goal achievement, and generate automatic celebratory messages. In-person kudos show that contributions are noticed and valued.
- **Support climate literacy** by helping team members understand which actions most effectively reduce emissions. Incorporating evidence-based guidance on high-impact domains, such as food, transportation, and energy (Hampton & Whitmarsh, 2023; Kraft-Todd et al., 2025), into team development conversations helps direct collective effort where it has the most impact.
- **Support autonomy** within organizations by empowering individuals to make decisions through a climate lens in their respective roles (Stein et al., 2025; Yuriev et al., 2018). It can be more broadly supported by encouraging individuals to redesign their work and how they do it, a process called ***job crafting***. Individuals are well-positioned to increase the sustainability content of their roles, drawing on their expertise and understanding of what needs to be done (Pekaar & Demerouti, 2023; Sutarmin et al., 2023). Job crafting can encourage people to identify opportunities to reduce resource use or integrate sustainability considerations into their work and interactions with customers or clients.

- **Cultivate a sense of organizational climate efficacy**. Those who identify with their organization and believe it can effectively address climate-related issues are more likely to invest effort in pushing their organization and fellow employees toward greater climate-friendliness (Guenther et al., 2025). A sense of organizational climate efficacy may arise through, for example, highlighting existing momentum, leadership communication about organizational sustainability priorities and progress, visible participation by others, the potential impact of incremental organizational changes, or other indicators that the organization is poised to take meaningful action.
- **Create effective reward systems:**
    - Climate-friendly actions that people are typically not intrinsically motivated to undertake, such as traveling by bus or train rather than flying, are good candidates for *financial incentives* (Renwick et al., 2013). Climate-friendly criteria can be built into standard incentives, such as pay, gift certificates, bonuses, and paid time off. Executive compensation linked to sustainability metrics may be one of the strongest top-down levers available (Bindeeba et al., 2025; Zacher et al., 2023). Importantly, the effects of incentives tend to be temporary, so they are most effective when reserved for consequential, one-time, or infrequent actions (Unsworth & Tian, 2018; Werner, 2013).
    - Recognize that incentives can undermine intrinsic motivation (Unsworth & Tian, 2018). To avoid this, ensure that incentives focus on competence, belonging, and autonomy — the foundations of intrinsic motivation (Deci et al., 2017). For instance, offer a prize to the organizational team that develops the most innovative energy-saving policy or circular production design.
    - *Non-financial incentives* like praise, awards, plaques, feedback, and other social rewards are also effective, especially when presented publicly (Handgraaf et al., 2013; Unsworth & Tian, 2018; Zibarras & Coan, 2015). Informal recognition, for example, a superhero shout-out at the start of a group meeting, makes it easy to offer positive feedback to those taking climate-friendly actions at work.
    - When people work in teams, *group-level incentives*, such as sponsored team happy hours, can be effective (Paillé et al., 2016; Young et al., 2015).
    - Incentives work best when they are clearly tied to behavior (Paillé, Valéau et al., 2022) and substantial enough to motivate action without encouraging deviance (Jackson et al., 2011). For instance, employees who choose to travel by train for work trips could be offered first-class seats, while those who fly travel in standard main-cabin seats.

Top-down

Senior leadership, by definition, is positioned to drive and catalyze organization-wide engagement (Aycan et al., 2025; Zacher et al., 2024) and is essential to scaling and sustaining organizational change. Organizational boards identify and interpret external demands, such as those from stakeholders, and set the strategy that determines where to focus attention and which resources to activate. Large, diverse, and independent boards whose members have extensive ties to other organizations have the greatest impact on an organization's environmental performance (Ones et al., 2026).

People who hold the most influential roles in an organization can:

- **Communicate about culture**. They can communicate vision and direction (Robertson & Barling, 2013) and facilitate shared meaning among employees (Bien & Sassen, 2020). They

can also tell new stories and introduce new symbols, such as climate-friendly imagery for use in organizational materials, or commitments related to the fair distribution of environmental benefits and burdens, prominently displayed on organizational websites.

- **Openly share values and beliefs** (Bertels et al., 2010). When formal leaders commit to and regularly communicate a value, they signal that it is central, rather than peripheral, to the organization's success (Hejjas et al., 2019; van Velsor & Quinn, 2012).
- **Model climate-supportive behavior**. High visibility makes formal leaders influential role models. For example, they can model prioritizing sustainable options and incorporate criteria such as regeneration or environmental harm reduction into decision-making (Zacher et al., 2024).
- **Focus on systemic solutions**. Although anyone can attempt to take on a transformative leadership role, executives have a bird's-eye view of the organization and, therefore, a broader understanding of the people and roles needed to create innovative systems-level solutions. They can build coalitions and empower collaboration (Dreier et al., 2019; Staub, 2025; Tirmizi & Staub, 2026). For instance, when food service and facilities fail to coordinate, food service may adopt compostable materials before facilities establish composting infrastructure, causing one department's actions to foil another's efforts. When they coordinate, waste reduction is enhanced.
- **Influence strategies, policies, and procedures** that guide behavior in a unified, strategic direction (Dierdorff et al., 2013; Ones et al., 2026). Examples include policies that integrate climate standards into new and renovated building projects, prioritize biodiversity in landscape design, mandate energy and water efficiency in technology purchasing, and prioritize sustainable organizational fleets and rentals. Senior leaders are also well-positioned to communicate these changes (Robertson & Barling, 2013).
- **Authorize action and allocate resources** (Blanco-Portela et al., 2017). Senior leadership can communicate that climate work is valid work. They can identify high-impact climate goals and encourage colleagues to integrate them into daily activities. They are also positioned to direct budget resources toward efforts that support climate goals, either directly or indirectly. Leaders who talk about climate without changing resource allocation, incentive structures, or their own behavior engage in performative leadership, likely undermining trust in the organization's commitment to climate action.
- **Inspire and maintain commitment to climate goals** (van Velsor & Quinn, 2012) by showing their own goal commitment (Akins et al., 2019). Senior leaders can make their goals public and openly share their strategies for achieving them. Being transparent about barriers they encounter and solutions they discover can help others do the same.

Workplace Specific: HR & HR-type Roles/ Administrative Roles/ Operations

As strategic partners, HRM professionals (or other professionals with similar administrative functions) are responsible for a variety of personnel practices that need to be aligned to signal the organization's strategic goals (Bratton et al., 2026; Chen & Wu, 2022; Norton et al., 2014) and provide clear and consistent expectations for worker behavior (Christina et al., 2017; Podgorodnichenko et al., 2021). Practices include analyzing job content, recruiting and selecting new employees, training current workers, and managing performance.

HR professionals or similar administrative/operational roles can:

- **Create a shared core competency about climate action**. At its most basic level, a shared climate-related competency ensures that everyone understands the organization's climate goals and how their work contributes to achieving them (Perez Salgado et al., 2018). Perhaps the most flexible way to instill this core competency is by educating all employees about basic ecological principles, such as designing circular systems, using resources at a rate that matches their ability to regenerate, thinking long-term, and understanding the broader systems in which they are embedded (Boone et al., 2023; Rimanoczy & Klingenberg, 2023). These principles will manifest differently across organizational roles: for some, they may inform resource conservation, process adaptation, or harm reduction, while for others, they may lay the groundwork for influencing colleagues or initiating new projects. The result is that every job becomes climate-friendly (Ones et al., 2018).
- **Change HR (administrative) systems to include the shared competency**. Sustainable activities need to be integrated throughout personnel systems (Bratton et al., 2026). Hiring individuals with pro-environmental values and behavioral tendencies is a highly efficient strategy for culture change, as people with climate-related KSAs can contribute immediately (Bratton et al., 2026). This underscores the importance of embedding climate-related responsibilities into job descriptions and assessing candidates' sustainability competencies. For current employees, the knowledge and skills underlying sustainability competencies can be developed through targeted training. Ongoing performance management can also help employees identify their sustainability-related strengths and areas for growth, informing their sustainability goals.
- **Create psychological safety for employee voices** by actively building trust within the organization and setting the stage for employees to speak up about their support for and ideas on climate action. Trust can be fostered through employee-oriented practices such as participative decision-making, skill development, and tailored work arrangements, including flexible schedules that respond to individual needs (Morrison, 2023). Similar support efforts should be provided across all organizational levels, including by managers and senior leaders.
- **Measure and evaluate intervention effectiveness** by identifying key indicators of whether culture change efforts are working. For example, annual surveys assessing people's perceptions of organizational values, norms, and policies can provide evidence of progress toward a climate-solutions culture. Once results are known, they should be shared and, if necessary, goals and strategies should be redefined.

FOR EVERYONE — RECOMMENDATIONS FOR SUSTAINING ACTION AND FOSTERING RESILIENCE

While organizational transformation is primarily the responsibility of those within the organization, there are also important roles for outsiders. Much can be learned through networks such as industry consortia, professional associations, alumni connections, and peer learning communities. Importantly, both those taking climate action within and outside an organization can benefit from understanding people's psychology to become effective change agents and develop strategies to foster resilience in the face of obstacles.

Internal Actors

People within an organization are best positioned to change it by promoting climate-friendly cognition, adopting and encouraging active coping strategies, and bolstering

their own resilience in the face of challenges. One effective way internal actors can make an impact is through communication — sharing information, framing climate issues in personally relevant ways, and using meetings, newsletters, or informal conversations to influence colleagues and shape organizational norms. Anyone can take these actions, and when used intentionally, they can help guide others toward climate-friendly behaviors and support a culture of collective engagement.

Guidelines to support climate-friendly cognition in any communication about climate change:

- **Emphasize personal relevance**. For some, climate change is a psychologically distant phenomenon rather than an urgent issue. There are many ways to make climate change more salient and personal, such as emphasizing its human health impacts (Maibach et al., 2010) or the legacy individuals will leave for their children and grandchildren (Law et al., 2025). Anytime climate change is the topic of an office conversation or communication, it can be connected to things people care about in their everyday lives. Consistent with this approach, survey data from ecoAmerica indicate that Americans overwhelmingly report strong support for climate action (nearly 90%) when it is connected to personal rights such as clean air, clean water, and clean energy or shared values such as ensuring a safe and healthy climate for future generations (Speiser & Ishaq, 2025b).
- **Inoculate against misinformation**. False information about climate change pervades websites and social media. Survey data from ecoAmerica indicate that 56% of Americans report low confidence in people's ability in the U.S. to distinguish between accurate and false information about climate change (Speiser & Ishaq, 2026). One way to help people discern between accurate and false information is to point out common strategies of climate misinformation, such as using fake experts, discrediting real experts, and trolling. This knowledge, which can be shared in an organization newsletter or in casual conversations, helps people reject climate change falsehoods (Traberg et al., 2022).
- **Emphasize scientific climate consensus**. When most people become aware of the consensus among scientists (over 97%) that climate change is real and human-caused, they become more concerned and open to action. Stating the high scientific consensus when climate change is brought up can even reduce ideologically motivated denial of the issue (Rode et al., 2025; Veckalov et al., 2024).
- **Elicit energizing emotion**. Emotions are critical motivators of climate action. Eliciting feelings of care, compassion, and empathy can move people to act (Lu & Schuldt, 2016; Pahl & Bauer, 2013; van Valkengoed & Steg, 2019). Feelings of worry and urgency also prompt action (Brosch, 2021; Kühner et al., 2025), but fear-based messages should be used sparingly and paired with clear actions people can take to address the source of that worry (deVries, 2020). Anger or frustration in response to perceived injustice toward one's group is another emotion that galvanizes action (Brosch, 2025). Public opinion research also suggests that many Americans respond to fairness-based framing, with a majority (85%) supporting climate solutions that benefit everyone fairly (Speiser & Ishaq, 2025b).

Guidelines to adopt and encourage active coping strategies:

- **Take action in one's own life**. Taking personal action, such as reducing personal carbon emissions, or collective action, such as joining a climate organization, is an effective way to cope with the uncomfortable emotions associated with climate change. Action can reduce anxiety (Bingley et al., 2022) and instill hope (Geiger et al., 2021; Ojala, 2023a).

- **Talk about climate**. Many people hesitate to talk about climate change because they believe others are less concerned than they are, even though a majority of Americans express concern (Leiserowitz et al., 2023; Speiser & Ishaq, 2026). This can reinforce self-silencing, creating a spiral of silence (Geiger & Swim, 2016). One way to break this pluralistic ignorance is to bring climate into casual conversations, connecting it to shared values and everyday issues. Clear, consistent communication that links climate solutions to practical outcomes people care about, such as saving money, protecting future generations, or supporting community resilience, can spur climate-friendly action.
- **Find and create opportunities to work with others from the organization**. Taking action in collaboration with others, or in their company, has many benefits. It creates social connections and opportunities for mutual support, whether through an existing group, such as a work team, or an informal group that gathers around shared interests. Having social support, especially when taking action on a meaningful issue, is positively correlated with well-being at work (Kleine et al., 2019) and creates a sense of purpose (Wilson & Hill, 2023). People pursuing environmental sustainability in unsupportive organizations have found that checking in with supportive peers helped their well-being (Easter et al., 2022). Acting as a group also amplifies the impact (Feeney & Collins, 2015).
- **Consider becoming an internal change agent.** If there are no existing climate or sustainability initiatives or if an organization is unsupportive of change, one can choose to become a change agent or an activist to influence the organization from within. While challenging, doing so has personal benefits. In general, activism tends to increase feelings of competence and foster constructive hope, the kind that spurs further action (Clayton & Parnas, 2025).
- **Let others know their contributions are important**. Participative efficacy is the perception that one's individual contribution is essential to the success of a group effort. When working toward organizational change with others, it is important to let people know how valuable their presence and contributions are to the greater collective effort. A sense that one can make a difference can be a strong motivator for participating in group action (van Zomeren et al., 2013).
- **Change social norms by making climate efforts visible**. Given that majorities worldwide and in the United States are concerned about climate change, others in an organization are likely to be willing to join change campaigns. Publicizing efforts through, for example, newsletter blurbs, invitations to meetings or information sessions, not only helps others find and join initiatives, but also increases the likelihood that people see climate concern and action as normal and expected at the organization (Constantino et al., 2022; Schultz, 2022). In addition, creating opportunities for others to act will increase job satisfaction among climate-concerned individuals (Kühner et al., 2024).
- **Find like-minded people *outside* the organization**. Being a climate activist inside an organization that is slow or unwilling to embrace climate action can feel isolating. Joining climate activists outside the organization is one way to combat isolation. Large gatherings of like-minded people, such as vegans or climate activists, can feel rejuvenating and foster a sense of belonging to a social identity group working for change (Prosser et al., 2025). People who feel part of and identify with a group working for change are more likely to take action aligned with the group's priorities (Agnostini & van Zomeren, 2021; Fritsche et al., 2018; van Zomeren et al., 2008).

Building resilience[2]

Over time, if internal actors face work-related setbacks, it may lead to burnout, a psychological state marked by exhaustion, cynicism, and a lack of efficacy (Demerouti, 2024). Those seeking to transform their organization, therefore, can benefit from **resilience** — the ability to respond effectively and with flexibility to challenges (Luthar et al., 2014).

Guidelines to bolster capacity for personal resilience:

- **Participate in training**. Resilience is a competence that can be developed. Trainings emphasize skills such as self-awareness, impulse management, relaxation techniques, mindfulness, and positive relationship-building (Robertson et al., 2015).
- **Look for humor**. Finding an amusing angle in frustrating situations may help reduce stress, and thoughtful use of dark humor about climate change can be a helpful coping tool for those concerned about it (Sachs, 2023). Humor is also useful when dealing with workplace stressors, such as colleagues who hold differing views on climate issues (Waddington & Brady, 2024).
- **Manage your mind**. Stress management strategies are helpful for everyone, and especially important for climate-concerned change agents. Interventions such as *mindfulness*, a practice of being present and aware of one's thoughts, feelings, and behaviors, increase feelings of empowerment and optimism (Nila et al., 2016; Nimo et al., 2025). *Meaning-focused coping*, finding deeper meaning in a difficult situation, is a form of cognitive reappraisal that has been linked to improved well-being and may also help people move from climate worry into action (Ojala, 2023b).
- **Find a safe space to express climate-related emotions**. While action is often suggested as an antidote to climate worries, it is equally important to find a safe space to feel, express, and work through the emotions sparked by climate change (Baudon & Jachens, 2021). This could be with a trusted therapist in individual counseling, in a group setting, or more informally with friends or family.
- **Join with others for collective action**. Taking part in collective action, such as attending a group meeting with a policymaker, volunteering for a climate non-profit, or joining a demonstration, has been associated with better mental health indicators among those worried about climate change (Schwartz et al., 2022).
- **Take a break outside**. Time spent in nature has meaningful benefits for mental, physical, and cognitive health (Barragan-Jason et al., 2023). Being in a natural setting has been associated with lower stress (Shuda et al., 2020), improved thinking and concentration (Bratman et al., 2015), and enhanced mood (Yao et al., 2021).

External Actors

External actors, i.e., people outside an organization, can also play a role in helping organizations take action on climate change. Sharing information and organizing collective action campaigns can capture the public's attention, as well as that of individuals and leaders within an organization, creating pressure to change. Organizational insiders are best able to translate external pressure into a greater positive movement within the organization (Ones et al., 2026). It is important to note that exerting pressure on organizations from the outside comes with potential complications. For example, it may encourage organizational leaders to take highly visible but symbolic action that does little to address climate change (MacLean & Behnam, 2010).

[2] While this section focuses on building resilience within organizations, the psychological principles described here apply broadly to anyone engaged in climate work, including those outside formal organizational settings.

Guidelines to take action from outside an organization[3]:

- **Make invisible information visible**. A majority of people worldwide support climate justice, even if they are not directly familiar with the term (Ogunbode et al., 2024). Organizations do not always make their climate-related impacts fully visible, particularly when those impacts are complex or unevenly distributed across groups, seeking instead to be seen as positive and solution-oriented (Wright & Nyberg, 2024). External actors can help increase transparency by collecting and reporting data that clarifies an organization's climate-related impacts.

- **Support indirect action**. Indirect forms of collective action, such as boycotts, protests, and demonstrations, can put pressure on organizations and their leaders by drawing attention to issues and signaling public concern. Research suggests that public responses to these forms of action vary depending on how the actions are perceived, including their perceived peacefulness and the tone of media coverage (Sisco et al., 2021; Swim et al., 2019; Thomas-Walters et al., 2025). Actions perceived as nonviolent are more likely to receive broader public support, even when they involve disruption (Shuman et al., 2024; Thomas-Walters et al., 2025).

- **Be unconventional**. Creative and unconventional forms of activism can attract attention and may elicit positive reactions from the public. For example, a group of activists in Copenhagen donned cow suits and used humor to draw attention to the climate impacts of the beef and dairy industries. Their efforts were associated with more petition signatures than those of conventional approaches in that context (Duncombe & Harrebye, 2022). These findings suggest that, in some cases, creative approaches enhance engagement.

- **Go big**. Large-scale public events such as the People's Climate March in New York City in 2014 and the Global Climate Strikes in 2019 have been associated with increased public readiness to embrace climate action. These events can raise public awareness, increase information-seeking among those who have not participated, and increase optimism about climate solutions (Sisco et al., 2021; Thomas-Walters et al., 2025). At the same time, research suggests that the effectiveness of large-scale actions depends on how they are perceived. While more disruptive tactics may heighten concern, extreme actions may, in some cases, reduce public support for activist groups, in part due to perceived moral violations and reduced emotional connection and identification (Nylund et al., 2025). As noted earlier, the perceived peacefulness of an action therefore plays a vital role in shaping public support.

[3] Anyone engaged in climate work can benefit from fostering resilience to sustain action. See *"Building Resilience"* under the Internal Actors subsection for guidance

KEY TAKEAWAYS

+ **Climate leadership looks different at every level, and anyone can contribute.**

  Influence and authority vary by role, so organizational transformation is most effective at addressing *wicked problems* like climate change when driven by shared, adaptive leadership: from grassroots actors shaping norms and networks, to middle managers enabling day-to-day change, to senior leaders driving systems-wide transformation.

+ **HR and administrative functions play a key role in embedding environmental sustainability in workplaces.**

  Incorporating climate competencies into job descriptions, recruitment, training, and performance management embeds climate considerations across the organization, and creating psychological safety for employees' voices helps surface ideas and build trust.

+ **Both internal and external actors can drive change.**

  Internal actors can model and promote climate-friendly cognition and coping strategies, while external actors can create visibility and public pressure. Of note: external pressure is most effective when organizational insiders can translate it into meaningful action.

+ **Ongoing climate efforts benefit from resilience.**

  Protecting mental health, managing climate-related stress, and cultivating social connections help change agents sustain their impact over time.

References

1. Abourokbah, S., Bajaba, S., & Yaqub, M. Z. (2024). Leading the green wave: How and when green transformational leadership cultivates employee green creativity. *Acta Psychologica, 250*, 104503. https://doi.org/10.1016/j.actpsy.2024.104503

2. Adams, R., Martin, S., & Boom, K. (2018). University culture and sustainability: Designing and implementing an enabling framework. *Journal of Cleaner Production*, 171, 434-445. https://doi.org/10.1016/j.jclepro.2017.10.032

3. Afridi, S. A., Shahjehan, A., Zaheer, S., Khan, W., & Gohar, A. (2023). Bridging generative leadership and green creativity: Unpacking the role of psychological green climate and green commitment in the hospitality industry. *SAGE Open*, 13(3), 1-17. https://doi.org/10.1177/21582440231185759

4. Afsar, B., Maqsoom, A., Shahjehan, A., Afridi, S. A., Nawaz, A., & Fazliani, H. (2020). Responsible leadership and employee's proenvironmental behavior: The role of organizational commitment, green shared vision, and internal environmental locus of control. *Corporate Social Responsibility and Environmental Management*, 27(1), 297-312. https://doi.org/10.1002/csr.1806

5. Afsar, B., Shahjehan, A., & Shah, I. (2018). Leadership and employee pro-environmental behaviors. In V. K. Wells, D. Gregory-Smith, & D. Manika (Eds.), *Research handbook on employee pro-environmental behaviour*. Edward Elgar Publishing.

6. Agostini, M., & van Zomeren, M. (2021). Toward a comprehensive and potentially cross-cultural model of why people engage in collective action: A quantitative research synthesis of four motivations and structural constraints. *Psychological Bulletin*, 147(7), 667–700. https://doi.org/10.1037/bul0000256

7. Akins, E. E., Giddens, E., Glassmeyer, D., Gruss, A., Kalamas Hedden, M., Slinger-Friedman, V., & Weand, M. (2019). Sustainability education and organizational change: A critical case study of barriers and change drivers at a higher education institution. *Sustainability*, 11(2), 501. https://doi.org/10.3390/su11020501

8. Alkaher, I., & Avissar, I. (2017). Assessing the impact of a program designed to develop sustainability leadership amongst staff members in higher education institutes: A case study from a community of practice perspective. *Environmental Education Research*, 24(4), 492-520. http://doi.org/10.1080/13504622.2017.1291799

9. Amel, E.L., Manning, C.M., Daus, C.S., & Quinn, M.R. (2024). *Fostering sustainability in higher education: Leveraging human behavior in organizations*. Springer.

10. Amel, E.L., Manning, C.M., Scott, B.A., & Koger, S.M. (2017). Beyond the roots of human inaction: Fostering collective effort toward ecosystem conservation. Science, 356, 275–279. https://doi.org/10.1126/science.aal1931

11. Andersson, L. M., & Bateman, T. S. (2000). Individual environmental initiative: Championing natural environmental issues in U.S. business organizations. *Academy of Management Journal*, 43(4), 548-570.

12. Avissar, I., Alkaher, I., & Gan, D. (2018). The role of distributed leadership in mainstreaming environmental sustainability into campus life in an Israeli teaching college: A case study. *International Journal of Sustainability in Higher Education*, 19(3), 518-546. https://doi.org/10.1108/IJSHE-07-2017-0105

13. Ayassamy, P., Francoeur, V., & Paillé, P. (2024). Workplace eco-anxiety: A scoping review of what we know and how to mitigate the consequences. *Frontiers in Sustainability*, 5, 1371737. https://doi.org/10.3389/frsus.2024.1371737

14. Aycan, Z., Cinli, D., & Robertson, J. L. (2025). Green leadership's predictors and outcomes. Nature Reviews Psychology, 1-15.

15. Ayers, J., Missimer, M., & Bryant, J. (2023). Intrapersonal capacities for sustainability: A change agent perspective on the 'inner dimension' of sustainability work. *Sustainability Science*, 18(3), 1181-1197. https://doi.org/10.1007/s11625-022-01288-8

16. Balda, J. B., Stanberry, J., & Altman, B. (2023). Leadership and the regenerative economy-Concepts, cases, and connections: Leveraging the sustainable development goals to move toward sustainability leadership. *New Directions for Student Leadership*, 2023(179), 121-141. https://doi.org/10.1002/yd.20574

17. Bamberg, S. (2013). Changing environmentally harmful behaviors: A stage model of self-regulated behavioral change. *Journal of Environmental Psychology*, 34, 151–159. https://doi.org/10.1016/j.jenvp.2013.01.002

18. Barling, J., Christie, A., & Hoption, A. (2011). Leadership. In S. Zedeck (Ed.), *Handbook of industrial and organizational psychology* (pp. 183–240). American Psychological Association.

19. Barragan-Jason, G., Loreau, M., de Mazancourt, C., Singer, M. C., & Parmesan, C. (2023). Psychological and physical connections with nature improve both human wellbeing and nature conservation: A systematic review of meta-analyses. *Biological Conservation*, 277, 109842.

20. Bass, B. M., & Riggio, R. E. (2006). Transformational leadership (2nd ed.). Lawrence Erlbaum Associates. https://doi.org/10.4324/9781410617095

21. Baudon, P., & Jachens, L. (2021). A Scoping Review of Interventions for the Treatment of Eco-Anxiety. *International Journal of Environmental Research and Public Health*, 18(18), 9636. https://doi.org/10.3390/ijerph18189636

22. Beer, M. (2023). Developing a sustainable high-commitment, high-performance system of organizing, managing, and leading: An actionable systems theory of change and development. In D.A. Noumair, A.B. (Rami) Shani, & D.P. Zandee (Eds.), *Research in organizational change and development* (vol. 30, pp. 95-128). Emerald. https://doi.org/10.1108/S0897-301620220000030006

23. Bendell, J., Sutherland, N., & Little, R. (2017). Beyond unsustainable leadership: Critical social theory for sustainable leadership. Sustainability Accounting, Management and Policy Journal, 8(4), 418-444. https://doi.org/10.1108/SAMPJ-08-2016-0048

24. Bentler, D., Kadi, G., & Maier, G. W. (2023). Increasing pro-environmental behavior in the home and work contexts through cognitive dissonance and autonomy. *Frontiers in Psychology*, 14, 1199363. https://doi.org/10.3389/fpsyg.2023.1199363

25. Bertels, S., Papania, L., & Papania, D. (2010). Embedding sustainability in organizational culture: *A systematic review of the body of knowledge*. Network for Business Sustainability. https://embeddingproject.org/pub/resources/EP-Embedding-Sustainability-in-Organizational-Culture.pdf

26. Bien, C., & Sassen, R. (2020). Sensemaking of a sustainability transition by higher education institution leaders. *Journal of Cleaner Production*, 256, 120299. https://doi.org/10.1016/j.jclepro.2020.120299

27. Bindeeba, D.S., Tukamushaba, E.K., Bakashaba, R., & Atuhaire, S. (2025). Green human resources management and green innovation: A meta-analytic review of strategic human resources levers for environmental sustainability. *Discover Sustainability* 6, 650. https://doi.org/10.1007/s43621-025-01444-x

28. Bingley, W. J., Tran, A., Boyd, C. P., Gibson, K., Kalokerinos, E. K., Koval, P., Kashima, Y., McDonald, D., & Greenaway, K. H. (2022). A multiple needs framework for climate change anxiety interventions. *The American Psychologist*, 77(7), 812–821. https://doi.org/10.1037/amp0001012

29. Blanco-Portela, N., Benayas, J., Pertierra, L. R., & Lozano, R. (2017). Towards the integration of sustainability in higher education institutions: A review of drivers of and barriers to organisational change and their comparison against those found of companies. *Journal of Cleaner Production*, 166, 563-578. https://doi.org/10.1016/j.jclepro.2017.07.252

30. Blok, V., Wesselink, R., Studynka, O., & Kemp, R. (2014). Encouraging sustainability in the workplace: A survey on the pro-environmental behaviour of university employees. *Journal of Cleaner Production*, 106, 55-67. https://doi.org/10.1016/j.jclepro.2014.07.063

31. Blom, R., Kruyen, P. M., Van der Heijden, B. I. J. M., & Van Thiel, S. (2020). One HRM fits all? A meta-analysis of the effects of HRM practices in the public, semipublic, and private sector. *Review of Public Personnel Administration*, 40(1), 3–35. https://doi.org/10.1177/0734371X18773492

32. Boehme, B. A. E., Kinsman, L. M., Norrie, H. J., Tessier, E. D., Fleming, S. W., & Asmundson, G. J. G. (2024). Climate Anxiety: Current Evidence and Future Directions. *Current Psychiatry Reports*, 26(11), 670–677. https://doi.org/10.1007/s11920-024-01538-9

33. Boeske, J., & Murray, P. A. (2022). The intellectual domains of sustainability leadership in SMEs. *Sustainability*, 14(4), 1978. https://doi.org/10.3390/su14041978

34. Boiral, O., Talbot, D., & Paillé, P. (2015). Leading by example: A model of organizational citizenship behavior for the environment. *Business Strategy and the Environment*, 24(6), 532-550. https://doi.org/10.1002/bse.1835

35. Bolden, R., Petrov, G., & Gosling, J. (2008). Tensions in higher education leadership: Towards a multi-level model of leadership practice. Higher Education Quarterly, 62(4), 358–376. https://doi.org/10.1111/j.1468-2273.2008.00398.x

36. Boone, C. G., Bromaghim, E., & Kapuscinski, A. R. (2023). Sustainability careers. *Annual Review of Environment and Resources*, 48(1), 589-613.

37. Bratman G. N., Daily G. C., Levy B. J., Gross J. J. (2015). The benefits of nature experience: Improved affect and cognition. *Landscape and Urban Planning*, 138, 41–50. https://doi.org/10.1016/j.landurbplan.2015.02.005

38. Bratton, A., & Bratton, J. (2015). Human resource management approaches. In J. L. Robertson & J. Barling (Eds.), The psychology of green organizations (pp. 275–295). Oxford University Press. https://doi.org/10.1093/acprof:oso/9780199997480.001.0001

39. Bratton, A., Holland, P., Hejjas, K., Inam, A., Qureshi, T. M., & Renwick, D. W. S. (2026). Green human resource management: Sustainability and the employment relationship. In H. Zacher & K. L. Unsworth (Eds.), *Environmental Sustainability in the Workplace: Advances in Theory, Methods, and Practice*. Oxford University.

40. Bridoux, F., Stofberg, N., & Den Hartog, D. (2016). Stakeholders' responses to CSR tradeoffs: When other-orientation and trust trump material self-interest. *Frontiers in Psychology, 6*. https://doi.org/10.3389/fpsyg.2015.01992

41. Brinkhurst, M., Rose, P., Maurice, G., & Ackerman, J. D. (2011). Achieving campus sustainability: Top-down, bottom-up, or neither? *International Journal of Sustainability in Higher Education*, 12(4), 338-354. https://doi.org/10.1108/14676371111168269

42. Brooks, S. K., & Greenberg, N. (2023). Climate change effects on mental health: Are there workplace implications? *Occupational Medicine*, 73(3), 133-137. https://doi.org/10.1093/occmed/kqac100

43. Brosch, T. (2021). Affect and emotions as drivers of climate change perception and action: A review. *Current Opinion in Behavioral Sciences*, 42, 15–21. https://doi.org/10.1016/j.cobeha.2021.02.001

44. Brosch, T. (2025). From individual to collective climate emotions and actions: A review. *Current Opinion in Behavioral Sciences*, 61, 101466. https://doi.org/10.1016/j.cobeha.2024.101466

45. Cabral, C., & Dhar, R. L. (2019). Green competencies: Construct development and measurement validation. *Journal of Cleaner Production*, 235, 887–900. https://doi.org/10.1016/j.jclepro.2019.07.014

46. Cantor, D. E., Morrow, P. C., & Blackhurst, J. (2015). An examination of how supervisors influence their subordinates to engage in environmental behaviors. *Decision Sciences*, 46(4), 697-729. https://doi.org/10.1111/deci.12149

47. CarbonMajors. (2023). Carbon Majors Database Launch Report. https://carbonmajors.org/briefing/The-Carbon-Majors-Database-26913

48. Carrico, A. R., & Riemer, M. (2011). Motivating energy conservation in the workplace: An evaluation of the use of group-level feedback and peer education. *Journal of Environmental Psychology*, 31(1), 1-13. https://doi.org/10.1016/j.jenvp.2010.11.004

49. Ceulemans, K., Lozano, R., & Alonso-Almeida, M. D. M. (2015). Sustainability reporting in higher education: Interconnecting the reporting process and organisational change management for sustainability. *Sustainability*, 7(7), 8881–8903. http://doi.org/10.3390/su7078881

50. Chancel, L. (2022). Global carbon inequality over 1990–2019. Nature Sustainability, 5(5), 1–8. https://doi.org/10.1038/s41893-022-00955-z

51. Chater, N., & Loewenstein, G. (2022). The i-frame and the s-frame: How focusing on individual-level solutions has led behavioral public policy astray. *Behavioral and Brain Sciences*, 1-60. https://doi.org/10.1017/s0140525x22002023

52. Chen, T., & Wu, Z. (2022). How to facilitate employees' green behavior? The joint role of green human resource management practice and green transformational leadership. *Frontiers in Psychology*, 13, 906869. https://doi.org/10.3389/fpsyg.2022.906869

53. Christina, S., Dainty, A., Daniels, K., Tregaskis, O., & Waterson, P. (2017). Shut the fridge door! HRM alignment, job redesign and energy performance. *Human Resource Management Journal*, 27(3), 382–402. https://doi.org/10.1111/1748- 8583.12144

54. Cialdini, R. B., Reno, R. R., & Kallgren, C. A. (1990). A focus theory of normative conduct: Recycling the concept of norms to reduce littering in public places. Journal of Personality and Social Psychology, 58(6), 1015–1026. https://doi.org/10.1037/0022-3514.58.6.1015

55. Clayton, S. (2020). Climate anxiety: Psychological responses to climate change. *Journal of Anxiety Disorders*, 102263. https://doi.org/10.1016/j.janxdis.2020.102263

56. Clayton, S., & Parnas, M. F. (2025). Anxiety and activism in response to climate change. *Current Opinion in Psychology*, 101996. https://doi.org/10.1016/j.copsyc.2025.101996

57. Cohen, E., Taylor, S., & Muller-Camen, M. (2010). HRM's role in corporate social and environmental sustainability. SHRM Foundation. https://www.shrm.org/content/dam/en/shrm/topics-tools/news/hr-magazine/4-12-csr-report-final-for-web.pdf

58. Composto, J. W. (2025). Virtuous cycles of organizational climate action: A multilevel view of pro-environmental behavior in the workplace. *Current Opinion in Behavioral Sciences*, 61, 101468. https://doi.org/10.1016/j.cobeha.2024.101468

59. Composto, J. W., Constantino, S. M., & Weber, E. U. (2023). Predictors and consequences of pro-environmental behavior at work. Current Research in *Ecological and Social Psychology*, 4, 100107. https://doi.org/10.1016/j.cresp.2023.100107

60. Constantino, S. M., Rinscheid, A., Pianta, S., Frey, R., & Weber, E. U. (2021). The source is the message: The impact of institutional signals on climate change-related norm perceptions and behaviors. *Climatic Change*, 166, 35. https://doi.org/10.1007/s10584-021-03095-z

61. Constantino, S. M., Sparkman, G., Kraft-Todd, G. T., Bicchieri, C., Centola, D., Shell-Duncan, B., Vogt, S., & Weber, E. U. (2022). Scaling up change: A critical review and practical guide to harnessing social norms for climate action. *Psychological Science in the Public Interest*, 23(2), 50-97. https://doi.org/10.1177/15291006221105279

62. Cook, J., Supran, G., Lewandowsky, S., Oreskes, N., & Maibach, E. (2019). America misled: How the fossil fuel industry deliberately misled Americans about climate change. Fairfax, VA: George Mason University Center for Climate Change Communication. https://www.climatechangecommunication.org/america-misled/

63. Davis, M. C., & Coan, P. (2015). Organizational change. In J. L. Robertson & J. Barling (Eds.), *The psychology of green organizations* (pp. 244-274). Oxford University Press. https://doi.org/10.1093/acprof:oso/9780199997480.003.0011

64. Deci, E. L., Olafsen, A. H., & Ryan, R. M. (2017). Self-determination theory in work organizations: The state of a science. *Annual Review of Organizational Psychology and Organizational Behavior*, 4, 19–43. https://doi.org/10.1146/annurev-orgpsych-032516-113108

65. De Clercq, D. (2022). Organizational disidentification and change-oriented citizenship behavior. *European Management Journal*, 40(1), 90-102. https://doi.org/10.1016/j.emj.2021.02.002

66. Delmas, M. A., & Pekovic, S. (2018). Corporate sustainable innovation and employee behavior. *Journal of Business Ethics*, 150, 1071-1088. https://doi.org/10.1007/s10551-016-3163-1

67. Demerouti, E. (2024). Burnout: a comprehensive review. *Zeitschrift für Arbeit Wissenschaft,* 78, 492–504. https://doi.org/10.1007/s41449-024-00452-3

68. de Vries, G. (2020). Public communication as a tool to implement environmental policies. Social Issues and Policy Review, 14(1), 244–272. https://doi.org/10.1111/sipr.12061

69. DeYoung, R. (2000). New ways to promote proenvironmental behavior: Expanding and evaluating motives for environmentally responsible behavior. *Journal of Social Issues*, 56(3), 509–526. https://doi.org/10.1111/0022-4537.00181

70. Dierdorff, E. C., Ellington, J. K., & Morgeson, F. P. (2025). Contexts, people, and work designs: Developing and testing a multilevel theory for understanding variability in work design consequences. *Journal of Applied Psychology*, 110(8), 1135–1156. https://doi.org/10.1037/apl0001267

71. Dierdorff, E. C., Norton, J. J., Gregory, C. M., Rivkin, D., & Lewis, P. (2013). O*NET's national perspective on the greening of the world of work. In A. H. Huffman & S. R. Klein (Eds.), G*reen organizations: Driving change with I-O psychology.* Routledge

72. Dreier, L., Nabarro, D., & Nelson, J. (2019). Systems leadership for sustainable development: Strategies for achieving systemic change. *Harvard Kennedy School, 5*.

73. Duncan, S., Hjelmskog, A., & Papies, E. K. (2024). No agency and responsibility for the privileged? Perceptions of climate action among high socioeconomic status citizens in the United Kingdom. *Energy Research & Social Science*, 115, 103604. https://doi.org/10.1016/j.erss.2024.103604

74. Duncombe, S. & Harrebye, S. (2022). The Copenhagen Experiment: Testing the effectiveness of creative vs. conventional forms of activism. *Social Movement Studies*, 21(6), 741–765. https://doi.org/10.1080/14742837.2021.1967125

75. Earthworks. (2024, June 27). Battery Circularity: The Key to an Ethical and Sustainable EV Transition. Earthworks. https://earthworks.org/blog/battery-circularity-the-key-to-an-ethical-and-sustainable-ev-transition/

76. Easter, S., Ceulemans, K., & Lynn, M. L. (2022). Moving beyond Sisyphus: Pursuing sustainable development in a business-as-usual world. Business & Society, 61(4), 924–963. https://doi.org/10.1177/00076503211015914

77. Eckardt, A., & Mazutis, D. (2023). Overcoming cognitive biases that contribute to corporate climate change inertia. In D. MacKie (Ed.), *The handbook of climate change leadership in organisations* (pp. 38-57). Routledge.

78. Endrejat, P. C., & Kauffeld, S. (2018). Motivation towards "green" behaviour at the workplace: Facilitating employee pro-environmental behaviour through participatory interventions. In V.K. Wells, D. Gregory-Smith, & D. Manika (Eds.), *Research handbook on employee pro-environmental behaviour*. Edward Elgar Publishing.

79. Etzion, D. (2018). Management for sustainability. *Nature Sustainability*, 1(12), 744-749. https://doi.org/10.1038/s41893-018-0184-z

80. Fawehinmi, O., Yusliza, M. Y., Mohamad, Z., Noor Faezah, J., & Muhammad, Z. (2020). Assessing the green behaviour of academics: The role of green human resource management and environmental knowledge. *International Journal of Manpower*, 41(7), 879-900. https://doi.org/10.1108/IJM-07-2019-0347

81. Feeney, B. C., & Collins, N. L. (2015). A new look at social support: A theoretical perspective on thriving through relationships. *Personality and Social Psychology Review,* 19(2), 113–147. https://doi.org/10.1177/1088868314544222

82. Filho, W. L., Will, M., Salvia, A. L., Adomßent, M., Grahl, A., & Spira, F. (2019). The role of green and sustainability offices in fostering sustainability efforts at higher education institutions. *Journal of Cleaner Production*, 232, 1394-1401. https://doi.org/10.1016/j.jclepro.2019.05.273

83. Folke, C., Biggs, R., Norström, A. V., Reyers, B., & Rockström, J. (2016). Social-ecological resilience and biosphere-based sustainability science. *Ecology and Society*, 21(3). http://www.jstor.org/stable/26269981

84. Fritsche, I., Barth, M., Jugert, P., Masson, T., & Reese, G. (2018). A social identity model of pro-environmental action (SIMPEA). *Psychological Review*, 125(2), 245-269. https://doi.org/10.1037/rev0000090

85. Gallagher, V. C., Porter, T. H., & Gallagher, K. P. (2019). Sustainability change agents: Leveraging political skill and reputation. *Journal of Organizational Change Management*, 33(1), 181–195. https://doi.org/10.1108/JOCM-01-2018-0031

86. Galpin, T., Whittington, J. L., & Bell, G. (2015). Is your sustainability strategy sustainable? Creating a culture of sustainability. *Corporate Governance*, 15(1), 1-17. https://doi.org/10.1108/CG-01-2013-0004

87. Gatersleben, B., Murrell, G., & Geusen, J. (2023). Evaluating the effectiveness of pro-environmental behaviour change interventions: A review of reviews. In B. Gatersleben & N. Murtagh (Eds.), *Handbook on pro-environmental behaviour change* (pp. 38-62). Edward Elgar.

88. Geiger, N., & Swim, J. K. (2016). Climate of silence: Pluralistic ignorance as a barrier to climate change discussion. *Journal of Environmental Psychology*, 47, 79–90. https://doi.org/10.1016/j.jenvp.2016.05.002

89. Geiger, N., Swim, J. K., Gasper, K., Fraser, J., & Flinner, K. (2021). How do I feel when I think about taking action? Hope and boredom, not anxiety and helplessness, predict intentions to take climate action. *Journal of Environmental Psychology,* 76, 101649. https://doi.org/10.1016/j.jenvp.2021.101649

90. Gelfand, M. J., & Harrington, J. R. (2015). The motivational force of descriptive norms: For whom and when are descriptive norms most predictive of behavior? *Journal of Cross-Cultural Psychology*, 46, 1273-1278. https://doi.org/10.1177/0022022115600796

91. Geller, E. S. (1987). Applied behavior analysis and environmental psychology: From strange bedfellows to a productive marriage. In D. S. Stokols & I. Altman (Eds.), *Handbook of environmental psychology* (Vol. 1, pp. 361–387). John Wiley & Sons.

92. Gemmecke, C., Kühner, C., Zacher, H., & Hüffmeier, J. (2025). Prompting change: A systematic review and meta-analysis of the (un)confounded effects of prompts on pro-environmental behavior. *Applied Psychology*, 74(2). https://doi.org/10.1111/apps.70003

93. Giddings, B., Hopwood, B., & O'Brien, G. (2002). Environment, economy and society: Fitting them together into sustainable development. Sustainable Development, 10(4), 187–196. https:// doi.org/10.1002/sd.199

94. Girschik, V., Svystunova, L., & Lysova, E. I. (2022). Transforming corporate social responsibilities: Toward an intellectual activist research agenda for micro-CSR research. *Human Relations*, 75(1), 3-32. https://doi.org/10.1177/0018726720970275

95. Grant, A. M., & Ashford, S. J. (2008). The dynamics of proactivity at work. *Research in Organizational Behavior*, 28, 3–34. https://doi.org/10.1016/j.riob.2008.04.002

96. Grant, A. M., & Parker, S. K. (2009). Redesigning work design theories: The rise of relational and proactive perspectives. *Academy of Management Annals*, 3(1), 317–375. https://doi.org/10.5465/19416520903047327

97. Graves, L. M., Sarkis, J., & Zhu, Q. (2013). How transformational leadership and employee motivation combine to predict employee proenvironmental behaviors in China. *Journal of Environmental Psychology,* 35, 81-91. https://doi.org/10.1016/j.jenvp.2013.05.002

98. Guadagno, R. E., & Cialdini, R. B. (2010). Preference for consistency and social influence: A review of current research findings. *Social Influence*, 5(3), 152-163. https://doi.org/10.1080/15534510903332378

99. Guenthner, L., Kühner, C., Masson, T., Fritsche, I., & Zacher, H. (2025). The social identity model of pro-environmental action (SIMPEA) at work: predicting organizational citizenship behaviour for the environment. *European Journal of Work and Organizational Psychology, 34(6)*, 750–765. https://doi.org/10.1080/1359432X.2025.2536830

100. Gully, S. M., Phillips, J. M., Castellano, W. G., Han, K., & Kim, A. (2013). A mediated moderation model of recruiting socially and environmentally responsible job applicants. *Personnel Psychology, 66(4)*, 935–973. https://doi.org/10.1080/09585192.2015.1062040

101. Güntner, A. V., Endrejat, P. C., & Kauffeld, S. (2021). The emergence of employees' change readiness for energy-conservation behavior during guided group discussions. *Frontiers in Psychology*, 12, 587529.

102. Hallinger, P., & Suriyankietkaew, S. (2018). Science mapping of the knowledge base on sustainable leadership, 1990–2018. *Sustainability, 10(12)*, 4846. https://doi.org/10.3390/su10124846

103. Hampton, S., & Whitmarsh, L. (2023). Choices for climate action: A review of the multiple roles individuals play. *One Earth*, 6(9), 1157–1172. https://doi.org/10.1016/j.oneear.2023.08.006

104. Handgraaf, M. J. J., de Jeude, M. A. V. L., & Appelt, K. C. (2013). Public praise vs. private pay: Effects of rewards on energy conservation in the workplace. Ecological Economics, 86, 86–92. https://doi.org/10.1016/j.ecolecon.2012.11.008

105. Haner, D. M., Wang, Y., Ones, D. S., Dilchert, S., Yazar, Y., & Kaura, K. (2025). Survival of the greenest: Environmental sustainability and longevity of organizations. *Frontiers in Organizational Psychology, 3*, 1521537. https://doi.org/10.3389/forgp.2025.1521537

106. Haney, A. B., Pope, J., & Arden, Z. (2020). Making it personal: Developing sustainability leaders in business. *Organization & Environment, 33(2)*, 155–174. https://doi.org/10.1177/1086026618806201

107. Harvard Law School Environmental & Energy Law Program. (2026). *Paris Climate Agreement*. https://eelp.law.harvard.edu/tracker/paris-climate-agreement/

108. Hejjas, K., Miller, G., & Scarles, C. (2019). "It's like hating puppies!" Employee disengagement and corporate social responsibility. *Journal of Business Ethics*, 157(2), 319-337. https://doi.org/10.1007/s10551-018-3791-8

109. Heucher, K., Alt, E., Soderstrom, S., Scully, M., & Glavas, A. (2024). Catalyzing action on social and environmental challenges: An integrative review of insider social change agents. *The Academy of Management Annals, 18(1)*, 295-347. https://doi.org/10.5465/annals.2022.0205

110. Hickel J., O'Neill D.W., Fanning A.L. & Zoomkawala (2022). National responsibility for ecological breakdown: A fair-shares assessment of resource use, 1970–2017. *Lancet Planet Health, 6*: e342–e349. https://doi.org/10.1016/S2542-5196(22)00044-4

111. Hickman, C., Marks, E., Pihkala, P., Clayton, S., Lewandowski, R. E., Mayall, E. E., et al. (2021). Climate anxiety in children and young people and their beliefs about government responses to climate change: A global survey. *Lancet Planetary Health, 5(12)*, e863–e873. https://doi.org/10.1016/s2542-5196(21)00278-3

112. Holland, R. W., Aarts, H., & Langendam, D. (2006). Breaking and creating habits on the working floor: A field-experiment on the power of implementation intentions. *Journal of Experimental Social Psychology, 42(6)*, 776-783. https://doi.org/10.1016/j.jesp.2005.11.006

113. Hull, R. B., Robertson, D. P., & Mortimer, M. (2021). Teaching leadership skills to sustainability professionals. In W. L. Filho, A. L. Salvia, & F. Frankenberger (Eds.), *Handbook on teaching and learning for sustainable development* (pp. 152–162).

114. IBM. (2021). IBM Study: COVID-19 Pandemic Impacted 9 in 10 Surveyed *Consumers' Views on Sustainability*. IBM News Room. https://newsroom.ibm.com/2021-04-22-IBM-Study-COVID-19-Pandemic-Impacted-9-in-10-Surveyed-Consumers-Views-on-Sustainability

115. Imran, M., Zahra, F., Tallat, A., & Özçatalbaş, O. (2024). Powering up together: How group dynamics affect energy conservation in shared workspaces. *Environment, Development and Sustainability*, 1-23. https://doi.org/10.1007/s10668-024-05237-6

116. Intergovernmental Panel of Climate Change (2023). Summary for policymakers. In H. Lee & J. Romero (Eds.), *Climate Change 2023: Synthesis Report. Contribution of Working Groups I, II and III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change,* pp. 1-34. https://doi.org/10.59327/ipcc/ar6-9789291691647.001

117. International Energy Agency. (2025). *World Energy Outlook 2025*. https://www.iea.org/reports/world-energy-outlook-2025

118. Ivanova, D., Barrett, J., Wiedenhofer, D., Macura, B., Callaghan, M. W., & Creutzig, F. (2020). Quantifying the potential for climate change mitigation of consumption options. *Environmental Research Letters, 15(9)*.

119. Ives, C. D., & Wilkinson, J. (2023). Ecological leadership in a planetary emergency. In D. MacKie (Ed.), *The handbook of climate change leadership in organisations* (pp. 129-154). Routledge.

120. Jackson, S. E., Renwick, D. W. S., Jabbour, C. J. C., & Muller-Camen, M. (2011). State-of-the-art and future directions for green human resource management: Introduction to the special issue. *German Journal of Human Resource Management, 25*(2), 99-116. https://doi.org/10.1177/239700221102500203

121. Johnson, E. J., Sugerman, E. R., Morwitz, V. G., Johar, G. V., & Morris, M. W. (2024). Widespread misestimates of greenhouse gas emissions suggest low carbon competence. *Nature Climate Change, 14*(7), 707–714. https://doi.org/10.1038/s41558-024-02032-z

122. Jones, R. G. (2023). Why organizational psychology should be a leading force for sustainability. *The Industrial/Organizational Psychologist, 61*(1).

123. Karamally, T., & Robertson, J. L. (2023). Green leadership. In D. MacKie (Ed.), *The handbook of climate change leadership in organisations* (pp. 179-202). Routledge.

124. Karlin, B., Zinger, J. F., & Ford, R. (2015). The effects of feedback on energy conservation: A meta-analysis. Psychological Bulletin, 141(6), 1205–1227. https://doi.org/10.1037/a0039650

125. Katz, D., & Kahn, R. L. (1978). *The social psychology of organizations* (Vol. 2). Wiley.

126. Katz, I. M., Rauvola, R. S., Rudolph, C. W., & Zacher, H. (2022). Employee green behavior: A meta-analysis. *Corporate Social Responsibility and Environmental Management, 29*(5), 1146–1157. https://doi.org/10.1002/csr.2260

127. Katz, I. M., Rudolph, C. W., Kühner, C., & Zacher, H. (2023). Job characteristics and employee green behavior. *Journal of Environmental Psychology, 92*, 1–11. https://doi.org/10.1016/j.jenvp.2023.102159

128. Katz, I. M., & Stuhlmacher, A. F. (2026). Work design, job characteristics, and environmental sustainability. In H. Zacher & K. L. Unsworth (Eds.), *Environmental Sustainability in the Workplace: Advances in Theory, Methods, and Practice*. Oxford University.

129. Keller, E., Eisen, C., & Hanss, D. (2019). Lessons learned from applications of the stage model of self-regulated behavioral change: a review. *Frontiers in psychology, 10*, 1091. https://doi.org/10.3389/fpsyg.2019.01091

130. Kennedy, B., & Tyson, A. (2024). How Americans View Climate Change and Policies to Address the Issue. Pew Research Center. https://www.pewresearch.org/science/2024/12/09/how-americans-view-climate-change-and-policies-to-address-the-issue/

131. Ketprapakorn, N., & Kantabutra, S. (2022). Toward an organizational theory of sustainability culture. S*ustainable Production and Consumption, 32*, 638-654. https://doi.org/10.1016/j.spc.2022.05.020

132. Kleine, A.-K., Rudolph, C. W., & Zacher, H. (2019). Thriving at work: A meta-analysis. Journal of Organizational Behavior, 40(9-10), 973–999. https://doi.org/10.1002/job.2375

133. Kok, G., Peters, G. J. Y., Kessels, L. T., Ten Hoor, G. A., & Ruiter, R. A. (2018). Ignoring theory and misinterpreting evidence: the false belief in fear appeals. *Health psychology review, 12*(2), 111-125.

134. Kraft-Todd, G., Hernandez, M., & Composto, J. (2025, April 9). *The Effective Impact of Behavioral Shifts in Energy, Transport, and Food*. World Resources Institute. https://www.wri.org/research/effective-impact-behavioral-shifts?apcid=006594703e2d6cc16911b900

135. Kühner, C., & Amel, E. L. (2026). The impact of economic activities and organizations on the natural environment (and vice versa). In H. Zacher & K. Unsworth (Eds.), *Environmental sustainability in the workplace: Advances in theory, methods, and practice*. Oxford University Press.

136. Kühner, C., Gemmecke, C., Hüffmeier, J., & Zacher, H. (2025). Climate change anxiety: A meta-analysis. Global Environmental Change, 93, Article 103015. https://doi.org/10.1016/j.gloenvcha.2025.103015

137. Kühner, C., Hüffmeier, J., & Zacher, H. (2025). Environmental sustainability at work: It's time to unleash the full potential of industrial and organizational psychology. *Industrial and Organizational Psychology*, 1–41. doi:10.1017/iop.2025.10015

138. Kühner, C., Rudolph, C. W., & Zacher, H. (2024). Reciprocal relations between climate change anxiety and pro-environmental behavior. *Environment and Behavior, 56*(5-6), 408 - 439. https://doi.org/10.1177/00139165241297050

139. Kühner, C., Stein, M., & Zacher, H. (2024). A person-environment fit approach to environmental sustainability in the workplace. Journal of Environmental Psychology, 95, Article 102270. https://doi.org/10.1016/j.jenvp.2024.102270

140. Kühner, C., Stein, M., Zacher, H., & Unsworth, K. L. (2026). Do conservation and citizenship green behaviors spill over within and between work and nonwork contexts? A longitudinal study. Journal of Environmental Psychology, 111, 102965. https://doi.org/10.1016/j.jenvp.2026.102965

141. Kühner, C., Stein, M., Zacher, H., & Weiss, M. (2025). Employee environmental voice shapes environmental attitudes and green organizational climate (but not vice versa): A 1-year, 5-wave longitudinal study. *Journal of Environmental Psychology, 107*, 102756. https://doi.org/10.1016/j.jenvp.2025.102756

142. Law, K. F., Colaizzi, G., & Syropoulos, S. (2025). Climate change is an intergenerational challenge that requires intergenerationally focused behavioral solutions. *Current Opinion in Behavioral Sciences, 61*. https://doi.org/10.1016/j.cobeha.2024.101467

143. Leiserowitz, A. A., Kates, R. W., & Parris, T. M. (2006). Sustainability values, attitudes, and behaviors: A review of multinational and global trends. *Annual Review of Environment and Resources, 31*, 413–444. https://doi.org/10.1146/annurev.energy.31.102505.133552

144. Leiserowitz, A., Maibach, E., Rosenthal, S., Kotcher, J., Lee, S., Verner, M., Ballew, M., Carman, J., Myers, T., Goldberg, M., Badullovich, N., & Marlon, J. (2023). *Climate change in the American mind: Beliefs & attitudes, Spring 2023*. Yale Program on Climate Change Communication. https://climatecommunication.yale.edu/publications/climate-change-in-the-american-mind-beliefs-attitudes-spring-2023/

145. Leone, K., Davis, S., Velasquez, C., & Nagle-Roides, K. (2021). Creating a culture of sustainability: Organizational strategies and employee training. In K. Leone, S. Komisar, & E. M. Everham III (Eds.), *Making the sustainable university: Education for sustainability* (pp. 45-61). Springer. https://doi.org/10.1007/978-981-33-4477-8_4

146. Leung, Y. W., & Rosenthal, S. (2019). Explicating perceived sustainability-related climate: A situational motivator of pro-environmental behavior. *Sustainability, 11*(1), 231. https://doi.org/10.3390/su11010231

147. Levy, B. L. M., & Marans, R. W. (2012). Towards a campus culture of environmental sustainability: Recommendations for a large university. *International Journal of Sustainability in Higher Education, 13*(4), 365-377. https://doi.org/10.1108/14676371211262317

148. Lewis Jr, N. A., Green, D. J., Duker, A., & Onyeador, I. N. (2021). Not seeing eye to eye: Challenges to building ethnically and economically diverse environmental coalitions. *Current Opinion in Behavioral Sciences, 42*, 60-64. https://doi.org/10.1016/j.cobeha.2021.02.025

149. Li, H., Sajjad, N., Wang, Q., Ali, A. M., Khaqan, Z., & Amina, S. (2019). Influence of transformational leadership on employees' innovative work behavior in sustainable organizations: Test of mediation and moderation processes. *Sustainability, 11*(6), 1594. https://doi.org/10.3390/su11061594

150. Li, Z., Xue, J., Li, R., Chen, H., & Wang, T. (2020). Environmentally specific transformational leadership and employee's pro-environmental behavior: The mediating roles of environmental passion and autonomous motivation. *Frontiers in Psychology, 11*, 1408. https://doi.org/10.3389/fpsyg.2020.01408

151. Liao, Z., & Cheng, J. (2020). Can a firm's environmental innovation attract job seekers? Evidence from experiments. *Corporate Social Responsibility and Environmental Management, 27*(2), 542–551. https://doi.org/10.1002/csr.1818

152. Lin, S. H., Scott, B. A., & Matta, F. K. (2019). The dark side of transformational leader behaviors for leaders themselves: A conservation of resources perspective. *Academy of Management Journal, 62*(5), 1556-1582. https://doi.org/10.5465/amj.2016.1255

153. Locke, E. A., & Latham, G. P. (2019). The development of goal setting

theory: A half century retrospective. Motivation Science, 5(2), 93. https://doi.org/10.1037/mot0000127

154. Lopez, Y. P., & Martin, W. F. (2018). University mission statements and sustainability performance. *Business and Society Review, 123*(2), 341-368. https://doi.org/10.1111/basr.12144

155. Lozano, R., Ceulemans, K., Alonso-Almeida, M., Huisingh, D., Lozano, F. J., Waas, T., Lambrechts, W., Lukman, R., & Hugé, J. (2015). A review of commitment and implementation of sustainable development in higher education: Results from a worldwide survey. *Journal of Cleaner Production, 108*, 1-18. https://doi.org/10.1016/j.jclepro.2014.09.048

156. Lu, H., & Schuldt, J. P. (2016). Compassion for climate change victims and support for mitigation policies. *Journal of Environmental Psychology, 45*, 192–200. https://doi.org/10.1016/j.jenvp.2016.01.007

157. Lülfs, R., & Hahn, R. (2014). Sustainable behavior in the business sphere: A comprehensive overview of the explanatory power of psychological models. *Organization & Environment, 27*(1), 43-64. https://doi.org/10.1177/1086026614522631

158. Luthar, S. S., Lyman, E. L., & Crossman, E. J. (2014). Resilience and positive psychology. In J. Schulenberg, M. E. Patrick, J. Maslowsky, J. L. Maggs, M. Lewis, & K. D. Rudolph (Eds.), *Handbook of developmental psychopathology*. Springer.

159. MacKie, D. (2023). Developing climate change leadership in organisations. In D. MacKie (Ed.), *The handbook of climate change leadership in organisations* (pp. 385-405). Routledge.

160. MacLean, T. L., & Behnam, M. (2010). The Dangers of Decoupling: The Relationship Between Compliance Programs, Legitimacy Perceptions, and Institutionalized Misconduct. *Academy of Management Journal, 53*(6), 1499–1520. https://doi.org/10.5465/amj.2010.57319198

161. Maibach, E. W., Nisbet, M., Baldwin, P., Akerlof, K. & Diao, G. (2010). Reframing climate change as a public health issue: An exploratory study of public reactions. *BMC Public Health, 10*, 299. https://doi.org/10.1186/1471-2458-10-299

162. Mauro, J. (2023). Vatican enters new phase in net-zero emissions goals. Aleteia. Retrieved February 3, 2025, from https://aleteia.org/2023/06/13/vatican-enters-new-phase-in-net-zero-emissions-goals

163. McCarthy, S. (2025). 2025 Global 100 list: World's most sustainable companies are still betting on a greener world. Corporate Knights. Retrieved February 3, 2025, from https://www.corporateknights.com/issues/2025-01-global-100-issue/100-most-sustainable-companies-still-betting-greener-world/

164. McNamara, K. H. (2010). Fostering sustainability in higher education: A mixed-methods study of transformative leadership and change strategies. *Environmental Practice, 12*(1), 48-58. https://doi.org/10.1017/S1466046609990445

165. Miller, D. T. (2023). A century of pluralistic ignorance: what we have learned about its origins, forms, and consequences. Frontiers in Social *Psychology, 1*. https://doi.org/10.3389/frsps.2023.1260896

166. Mitchell, T. R., & Daniels, D. (2003). Motivation. In W. C. Borman, D. R. Ilgen, & R. J. Klimoski (Eds.), Handbook of psychology: Industrial and organizational psychology (Vol. 12, pp. 225–254). Wiley.

167. Mock, M., Omann, I., & Panno, A. (2019). "Something inside me has been set in motion": Exploring the psychological wellbeing of people engaged in sustainability initiatives. *Ecological Economics, 160*, 1–11. https://doi.org/10.1016/j.ecolecon.2019.02.002

168. Morrison, E. W. (2023). Employee voice and silence: Taking stock a decade later. *Annual Review Organizational Psychology and Organizational Behavior, 10*, 79-107. https://doi.org/10.1146/annurev-orgpsych-120920-054654

169. Moser, S. C. (2007). More bad news: The risk of neglecting emotional responses to climate change information. In S. C. Moser and L. Dilling (Eds.), *Creating a climate for change: Communicating climate change and facilitating social change* (pp. 64-80). Cambridge University Press.

170. Myers, T., Kohl, E., Tucker, D., Kotcher, J., & Maibach, E. (2026). Professional Engagement With Climate Change Among Five Communities of Practice in Virginia, USA: An Exploratory Study. *Climate Resilience and Sustainability, 5*(1). https://doi.org/10.1002/cli2.70029

171. NASA. (2024). Extreme Weather and Climate Change (L. Lindsey, Ed.). NASA; NASA. https://science.nasa.gov/climate-change/extreme-weather/

172. Nguyen-Van, P., Stenger, A., & Tiet, T. (2021). Social incentive factors in interventions promoting sustainable behaviors: A meta-analysis. PLOS One, 16(12), e0260932. https://doi.org/10.1371/journal.pone.0260932

173. Niedlich, S., Kummer, B., Bauer, M., Rieckmann, M., & Bormann, I. (2020). Cultures of sustainability governance in higher education institutions: A multi-case study of dimensions and implications. *Higher Education Quarterly, 74*(4), 373-390. https://doi.org/10.1111/hequ.12237

174. Nielsen, K. S., Clayton, S., Stern, P. C., Dietz, T., Capstick, S., & Whitmarsh, L. (2021). How psychology can help limit climate change. *American Psychologist, 76*(1), 130–144. https://doi.org/10.1037/amp0000624

175. Niemiec, R. M., Champine, V., Vaske, J. J., & Mertens, A. (2020). Does the impact of norms vary by type of norm and type of conservation behavior? A meta-analysis. *Society & Natural Resources, 33*(8), 1024-1040. https://doi.org/10.1080/08941920.2020.1729912

176. Nila, K., Holt, D. V., Ditzen, B., & Aguilar-Raab, C. (2016). Mindfulness-based stress reduction (MBSR) enhances distress tolerance and resilience through changes in mindfulness. *Mental Health & Prevention, 4*(1), 36–41. https://doi.org/10.1016/j.mhp.2016.01.001

177. Nimo, T. K. O. A., Akoto-Baako, H., Antiri, E. O., & Ansah, E. W. (2025). Coping strategies for climate change anxiety: a perspective on building resilience through psychological capital. *BMJ Mental Health, 28*(1). https://doi.org/10.1136/bmjment-2024-301421

178. Northouse, P. G. (2022). Leadership: Theory and practice (9th ed.). Sage.

179. Norton, T. A. (2026). Organizational culture for environmental sustainability: An ecosystem perspective. In H. Zacher & K. L. Unsworth (Eds.). E*nvironmental Sustainability in the Workplace: Advances in Theory, Methods, and Practice*. Oxford University Press.

180. Norton, T. A., Zacher, H., & Ashkanasy, N. M. (2014). Organisational sustainability policies and employee green behaviour: The mediating role of work climate perceptions. *Journal of Environmental Psychology, 38*, 49-54. https://doi.org/10.1016/j.jenvp.2013.12.008

181. Norton, T. A., Zacher, H., Parker, S. L., & Ashkanasy, N. M. (2017). Bridging the gap between green behavioral intentions and employee green behavior: The role of green psychological climate. *Journal of Organizational Behavior, 38*(7), 996-1015. https://doi.org/10.1002/job.2178

182. Nylund, J. L., Thai, M., & Hornsey, M. J. (2025). The climate activist's dilemma: Extreme protests reduce movement support but raise climate concern and intentions. *Journal of Environmental Psychology, 106*, 102682. https://doi.org/10.1016/j.jenvp.2025.102682

183. Ogunbode, C. A., Doran, R., Ayanian, A. H., Park, J., Utsugi, A., van den Broek, K. L., Ghorayeb, J., Aquino, S. D., Lins, S., Aruta, J. J. B. R., Reyes, M. E. S., Zick, A., & Clayton, S. (2024). Climate justice beliefs related to climate action and policy support around the world. *Nature Climate Change, 14*(11), 1144–1150. https://doi.org/10.1038/s41558-024-02168-y

184. Ogunbode, C. A., Doran, R., Hanss, D., Ojala, M., Salmela-Aro, K., van den Broek, K. L., Bhullar, N., Aquino, S. D., Marot, T., Schermer, J. A., Wlodarczyk, A., Lu, S., Jiang, F., Maran, D. A., Yadav, R., Ardi, R., Chegeni, R., Ghanbarian, E., Zand, S., et al. (2022). Climate anxiety, wellbeing and pro-environmental action: correlates of negative emotional responses to climate change in 32 countries. *Journal of Environmental Psychology, 84*. https://doi.org/10.1016/j.jenvp.2022.101887

185. Ojala, M. (2023a). Hope and climate-change engagement from a psychological perspective. *Current Opinion in Psychology, 49*, 101514. https://doi.org/10.1016/j.copsyc.2022.101514

186. Ojala, M. (2023b). How do children, adolescents, and young adults relate to climate change? Implications for developmental psychology, *European Journal of Developmental Psychology, 20*(6), 929-943. https://doi.org/10.1080/17405629.2022.2108396

187. Ones, D. S., & Dilchert, S. (2012). Employee green behaviors. In S. E. Jackson, D. S. Ones, & S. Dilchert (Eds.), *Managing human resources for environmental sustainability* (pp. 85–116). Jossey-Bass/Wiley.

188. Ones, D.S., & Dilchert, S. (2026). Prologue: From a call to action to a science of environmental sustainability at work. In H. Zacher & K. L. Unsworth (Eds.), *Environmental Sustainability in the Workplace: Advances in Theory, Methods, and Practice*. Oxford University.

189. Ones, D.S., Dilchert, S. & Wang, Y. (2026). Organizational environmental sustainability: Antecedents, impacts, and cybernetics. In H. Zacher & K. L. Unsworth (Eds.). *Environmental Sustainability in the Workplace: Advances in Theory, Methods, and Practice*. Oxford University Press.

190. Ones, D. S., Dilchert, S., Wiernik, B. M., & Klein, R. M. (2018). Environmental sustainability at work. In D. S. Ones, N. Anderson, C. Viswesvaran, & H. K. Sinangil (Eds.), The Sage handbook of industrial, work and organizational psychology (2nd ed., Vol. 3: Managerial psychology and organizational approaches, pp. 351–373). Sage.

191. Oreg, S., & Berson, Y. (2019). Leaders' impact on organizational change: Bridging theoretical and methodological chasms. *The Academy of Management Annals, 13*(1), 272-307. https://doi.org/10.5465/annals.2016.0138

192. Oreg, S., Vakola, M., & Armenakis, A. (2011). Change recipients' reactions to organizational change: A 60-year review of quantitative studies. *Journal of Applied Behavioral Science, 47*(4), 461–524. https://doi.org/10.1177/0021886310396550

193. Pahl, S., & Bauer, J. (2013). Overcoming the distance: Perspective taking with future humans improves environmental engagement. *Environment and Behavior, 45*, 155-169. https://doi.org/10.1177/0013916511417618

194. Paillé, P., Mejía-Morelos, J. H., Amara, N., & Norrin, H. (2022). Greening the workplace through supervisory behaviors: Assessing what really matters to employees. *International Journal of Human Resource Management, 33*(9), 1754–1781. https://doi.org/10.1080/09585192.2020.1819857

195. Paillé, P., Mejía-Morelos, J. H., Marché-Paillé, A., Chen, C. C., & Chen, Y. (2016). Corporate greening, exchange process among co-workers, and ethics of care: An empirical study on the determinants of pro-environmental behaviors at coworkers-level. *Journal of Business Ethics, 136*(3), 655–673. https://doi.org/10.1007/s10551-015-2537-0

196. Paillé, P., & Raineri, N. (2015). Linking perceived corporate environmental policies and employees eco-initiatives: The influence of perceived organizational support and psychological contract breach. *Journal of Business Research, 68*(11), 2404-2411. https://doi.org/10.1016/j.jbusres.2015.02.021

197. Paillé, P., Valéau, P., & Carballo-Penela, A. (2022). Green rewards for optimizing employee environmental performance: Examining the role of perceived organizational support for the environment and internal environmental orientation. *Journal of Environmental Planning and Management, 66*(14), 1-22. https://doi.org/10.1080/09640568.2022.2092723

198. Palomo-Vélez, G., & Van Vugt, M. (2023). Guidance to green action: Environmental leadership through the lens of evolutionary psychology. In D. MacKie (Ed.), T*he handbook of climate change leadership in organisations* (pp. 85-110). Routledge.

199. Parker, C. P., Baltes, B. B., Young, S. A., Huff, J. W., Altmann, R. A., LaCost, H. A., & Roberts, J. E. (2003). Relationships between psychological climate perceptions and work outcomes: A meta-analytic review. *Journal of Organizational Behavior, 24*(4), 389–416. https://doi.org/10.1002/job.198

200. Pekaar, K. A., & Demerouti, E. (2023). Crafting for sustainability: A daily diary study and self-training intervention on proactive employee engagement in sustainability. *European Journal of Work and Organizational Psychology, 32*(6), 839–857. https://doi.org/10.1080/1359432X.2023.2255318

201. Pekaar, K. A., Demerouti, E., & van Gool, P. J. R. (2024). Sustainability champions: A proactive perspective on the inter-organizational job design dynamics of sustainability implementation. *Organizational Psychology Review, 14*(4), 594-617. https://doi.org/10.1177/20413866241267198

202. Pelletier, L. G., & Aitken, N. M. (2014). Encouraging environmental actions in employees and in the working environment: A self-determination theory perspective. *The Oxford handbook of work engagement, motivation, and self-determination theory*, 314-334.

203. Perez Salgado, F., Abbott, D., & Wilson, G. (2018). Dimensions of professional competences for interventions towards sustainability. *Sustainability Science, 13*, 163–177. https://doi.org/10.1007/s11625-017-0439- z

204. Pihkala, P. (2020). Anxiety and the ecological crisis: An analysis of eco-anxiety and climate anxiety. *Sustainability, 12*(19), 7836. https://doi.org/10.3390/su12197836

205. Pinzone, M., Guerci, M., Lettieri, E., & Redman, T. (2016). Progressing in the change journey towards sustainability in healthcare: The role of 'green' HRM. *Journal of Cleaner Production, 122*, 201-211. https://doi.org/10.1016/j.jclepro.2016.02.031

206. Podgorodnichenko, N., Edgar, F., Akmal, A., & McAndrew, I. (2021). Sustainability through sensemaking: Human resource professionals' engagement and enactment of corporate social responsibility. *Journal of Cleaner Production, 293*, 126150. https://doi.org/10.1016/j.jclepro.2021.126150

207. Pogutz, S., & Winn, M. I. (2016). Cultivating ecological knowledge for corporate sustainability: Barilla's innovative approach to sustainable farming. *Business Strategy and the Environment, 25*(6), 435–448. https://doi.org/10.1002/bse.1916

208. Poushter, J., Fagan, M., Smerkovich, M., & Prozorovsky, A. (2025, August 19). International Opinion on Global Threats. Pew Research Center. https://www.pewresearch.org/2025/08/19/global-climate-change-as-a-threat/

209. Prosser, A. M. B., O'Neill, S., Whitmarsh, L., Bolderdijk, J. W., Kurz, T., & Blackwood, L. (2025). Overcoming (vegan) burnout: Mass gatherings can provide respite and rekindle shared identity and social action efforts in moralized minority groups. *Political Psychology, 46*(2), 257–278. https://doi.org/10.1111/pops.13009

210. Quintana, D. S. Z., Esquer, J., & Munguía, N. (2022). Factors that hinder the implementation of sustainability initiatives in higher education institutions. *The Wiley Handbook of Sustainability in Higher Education Learning and Teaching*, 79-98. https://doi.org/10.1002/9781119852858.ch5

211. Raineri, N., & Paillé, P. (2016). Linking corporate policy and supervisory support with environmental citizenship behaviors: The role of employee environmental beliefs and commitment. *Journal of Business Ethics, 137*(1), 129-148. https://doi.org/10.1007/s10551-015-2548-x

212. Renwick, D. W. S., Redman, T., & Maguire, S. (2013). Green human

resource management: A review and research agenda. *International Journal of Management Reviews, 15*(1), 1-14. https://doi.org/10.1111/j.1468-2370.2011.00328.x

213. Rieg, N. A., Gatersleben, B., & Christie, I. (2021). Organizational change management for sustainability in higher education institutions: A systematic quantitative literature review. *Sustainability, 13*(13), 7299. https://doi.org/10.3390/su13137299

214. Rietze, S., Schölmerich, F., Kühner, C., & Zacher, H. (2025). Green transformational leadership and green voice behavior: the motivational role of green psychological empowerment. Corporate social responsibility and environmental management, 32(6), 7727-7743.

215. Rimanoczy, I., & Klingenberg, B. (2023). Sustainability leadership starts with our mindset. In D. MacKie (Ed.), *The handbook of climate change leadership in organisations* (pp. 111-128). Routledge.

216. Robertson, I. T., Cooper, C. L., Sarkar, M., & Curran, T. (2015). Resilience training in the workplace from 2003 to 2014: A systematic review. *Journal of Occupational and Organizational Psychology, 88*(3), 533–562. https://doi.org/10.1111/joop.12120

217. Robertson, J. L., & Barling, J. (2013). Greening organizations through leaders' influence on employees' pro-environmental behaviors. *Journal of Organizational Behavior, 34*, 176-194. https://doi.org/10.1002/job.1820

218. Robertson, J. L., & Carleton, E. (2018). Uncovering how and when environmental leadership affects employees' voluntary pro-environmental behavior. *Journal of Leadership & Organizational Studies, 25*(2), 197-210. https://doi.org/10.1177/1548051817738940

219. Rockström, J., Gupta, J., Qin, D. et al. (2023). Safe and just Earth system boundaries. *Nature*, 619, 102–111. https://doi.org/10.1038/s41586-023-06083-8

220. Rode, J. B., Remshard, M., Groot, L. J., & van der Linden, S. (2025). A meta-analytic structural equation analysis of the Gateway Belief Model: highlighting scientific consensus increases support for public action on climate change. *Current Opinion in Behavioral Sciences, 63*. https://doi.org/10.1016/j.cobeha.2025.101521

221. Ruepert, A. M., Keizer, K., & Steg, L. (2017). The relationship between Corporate Environmental Responsibility, employees' biospheric values and pro-environmental behaviour at work. *Journal of Environmental Psychology, 54*, 65-78. https://doi.org/10.1016/j.jenvp.2017.10.006

222. Rupp, D. E., Ganapathi, J., Aguilera, R. V., & Williams, C. A. (2006). Employee reactions to corporate social responsibility: An organizational justice framework. *Journal of Organizational Behavior, 27*(4), 537–543. https://doi.org/10.1002/job.380

223. Rupp, D. E., Shao, R., Thornton, M. A., & Skarlicki, D. P. (2013). Applicants' and employees' reactions to corporate social responsibility: The moderating effects of first-party justice perceptions and moral identity. Personnel Psychology, 66(4), 895–933. https://doi.org/10.1111/peps.12030

224. Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist, 55*(1), 68. https://doi.org/10.1037/0003-066X.55.1.68

225. Ryan, R. M., Duineveld, J. J., Di Domenico, S. I., Ryan, W. S., Steward, B. A., & Bradshaw, E. L. (2022). We know this much is (meta-analytically) true: A meta-review of meta-analytic findings evaluating self-determination theory. *Psychological Bulletin, 148*(11-12), 813.

226. Ryu, J. W., Neubert, E. M., & Gonzalez-Mulé, E. (2022). Putting the team in the driver's seat: A meta-analysis on the what, why, and when of team autonomy's impact on team effectiveness. *Personnel Psychology, 75*(2), 411-439. https://doi.org/10.1111/peps.12468

227. Sachs, A. (2023). Stay cool: *Why dark comedy matters in the fight against climate change*. NYU Press.

228. Schein, E. H. (1985). Defining organizational culture. *Classics of Organization Theory, 3,* 490–502.

229. Schermuly, C. C., Creon, L., Gerlach, P., Graßmann, C., & Koch, J. (2022). Leadership styles and psychological empowerment: A meta-analysis. *Journal of Leadership & Organizational Studies, 29*(1), 73–95. https://doi.org/10.1177/15480518211067751

230. Schilling, H., Ritter, M., Kühner, C., Hirschberger, S., Zacher, H., & Kauffeld, S. (2026). Leveraging the science and practice of industrial and organizational psychology for effective circular economy implementation. *Industrial and Organizational Psychology*, 1-18. https://doi.org/10.1017/iop.2026.10071

231. Schmelz, K., & Bowles, S. (2025). An empirically based dynamic approach to sustainable climate policy design. *Nature Sustainability*. https://doi.org/10.1038/s41893-025-01715-5

232. Schölmerich, F. & Rietze, S. (2026). Leadership behaviors for environmental sustainability. In H. Zacher & K. L. Unsworth (Eds.), *Environmental Sustainability in the Workplace: Advances in Theory, Methods, and Practice*. Oxford University.

233. Schönborn, G., Berlin, C., Pinzone, M., Hanisch, C., Georgoulias, K., & Lanz, M. (2019). Why social sustainability counts: The impact of corporate social sustainability culture on financial success. *Sustainable Production and Consumption, 17*, 1-10. https://doi.org/10.1016/j.spc.2018.08.008

234. Schulte, M. N., & Paris, C. M. (2024). Working the system—An empirical analysis of the relationship between systems thinking, paradoxical cognition, and sustainability practices. *Corporate Social Responsibility and Environmental Management, 31*(5), 4154-4171. https://doi.org/10.1002/csr.2798

235. Schultz, P. W. (2022). Secret agents of influence: Leveraging social norms for good. *Current Directions in Psychological Science, 31*(5), 443-450. https://doi.org/10.1177/09637214221109572

236. Schwartz, S. E. O., Benoit, L., Clayton, S., Parnes, M. F., Swenson, L., & Lowe, S. R. (2022). Climate change anxiety and mental health: Environmental activism as buffer. *Current Psychology, 42*(20), 16708-16721. https://doi.org/10.1007/s12144-022-02735-6

237. Shuda, Q., Bougoulias, M. E., & Kass, R. (2020). Effect of nature exposure on perceived and physiologic stress: A systematic review. *Complementary Therapies in Medicine, 53,* 102514.

238. Shuman, E., Goldenberg, A., Saguy, T., Halperin, E., & van Zomeren, M. (2024). When are social protests effective? *Trends in Cognitive Sciences, 28*(3), 252-263. https://doi.org/10.1016/j.tics.2023.10.003

239. Sisco, M. R., Pianta, S., Weber, E. U. & Bosetti, V. (2021). Global climate marches sharply raise attention to climate change: Analysis of climate search behavior in 46 countries. *Journal of Environmental Psychology, 75*, 101596. https://doi.org/10.1016/j.jenvp.2021.101596

240. Slemp, G. R., Kern, M. L., Patrick, K. J., & Ryan, R. M. (2018). Leader autonomy support in the workplace: A meta-analytic review. Motivation and Emotion, 42(5), 706–724. https://doi.org/10.1007/s11031-018-9698-y

241. Smith, A. M., & O'Sullivan, T. (2012). Environmentally responsible behaviour in the workplace: An internal social marketing approach. *Journal of Marketing Management, 28*(3-4), 469-493. https://doi.org/10.1080/0267257X.2012.658837

242. Sparkman, G., & Walton, G.M. (2017). Dynamic Norms Promote Sustainable Behavior, Even if It Is Counternormative. *Psychological Science, 28*(11). 1663–1674. https://doi.org/10.1177/0956797617719950

243. Speiser, M., & Ishaq, M. (2025a). *Americans Reject President Trump's Climate Rollbacks, Republicans Under 45 See the Downsides*. ecoAmerica. https://ecoamerica.org/american-climate-perspectives-survey-2025-vol-i-blog/

244. Speiser, M., & Ishaq, M. (2025b). *Beyond Partisanship: Americans Unite on Clean Air, Water, Energy, and Fair Climate Solutions for All*. ecoAmerica. https://ecoamerica.org/american-climate-metrics-survey-2025-article-ii-blog/

245. Speiser, M., & Ishaq, M. (2025c). *From the Ballot Box to City Hall, Americans Press Leaders for Bold Climate Action*. ecoAmerica. https://ecoamerica.org/american-climate-metrics-survey-2025-article-i-blog/

246. Speiser, M., & Ishaq, M. (2026). *Trust, Media Habits, and Misperceptions Shape Public Understanding of Climate Change. Americans Underestimate How Much Others Care About Climate Change*. ecoAmerica. https://ecoamerica.org/american-climate-perspectives-survey-2026-vol-i-blog/

247. Stahl, G. K., Brewster, C. J., Collings, D. G., & Hajro, A. (2020). Enhancing the role of human resource management in corporate sustainability and social responsibility: A multi-stakeholder, multidimensional approach to HRM. *Human Resource Management Review, 30*(3), 100708. https://doi.org/10.1016/j.hrmr.2019.100708

248. Staub, T. (2025). Complexity, Polycentricity, and Climate Change: An Embedded, Multi-Level Case Study of a Climate Meta-Network. AURA - Antioch University Repository and Archive. https://aura.antioch.edu/etds/1179/

249. Steg, L. (2023). Psychology of climate change. *Annual Review of Psychology, 74*(1), 391–421. https://doi.org/10.1146/annurev-psych-032720-042905

250. Steg, L., & Vlek, C. (2009). Encouraging pro-environmental behaviour: An integrative review and research agenda. Journal of *Environmental Psychology, 29*(3), 309–317. https://doi.org/10.1016/j.jenvp.2008.10.004

251. Stein, M., Kühner, C., Katz, I. M., & Zacher, H. (2025). Do green workplaces grow green employees, and vice versa? Investigating reciprocal relations between green work characteristics and proactive employee green behaviour. *European Journal of Work and Organizational Psychology, 34(*3), 348–362. https://doi.org/10.1080/1359432X.2025.2468649

252. Steinhorst, J., & Klöckner, C. A. (2018). Effects of monetary versus environmental information framing: Implications for long-term pro-environmental behavior and intrinsic motivation. *Environment and Behavior, 50*(9), 997–1031. https://doi.org/10.1177/0013916517725371

253. Stouten, J., Rousseau, D. M., & De Cremer, D. (2018). Successful organizational change: Integrating the management practice and scholarly literatures. *Academy of Management Annals, 12*(2), 752-788. https://doi.org/10.5465/annals.2016.0095

254. Suieubayeva, S., Sánchez-García, E., Martínez-Falcó, J., Marco-Lajara, B., Sadenova, A., & Montalvo-Falcón, J. V. (2025). Green leaders and global change: Uncovering the drivers of corporate environmental sustainability. *Environmental Development, 54,* 101148.

255. Sutarmin, S., Yulianeu, A., Darmawan, A., & Kurniawan, A. A. (2023). Driving Sustainable Change: Green Transformational Leadership, Job Crafting, and Work Engagement in Frugal Eco-Innovation. *International Journal of Sustainable Development & Planning, 18*(12), 3883-3893. https://doi.org/10.18280/ijsdp.181220

256. Swim, J. K., Geiger, N., & Lengieza, M. L. (2019). Climate change marches as motivators for bystander collective action. *Frontiers in Communication, 4*, 4. https://doi.org/10.3389/fcomm.2019.00004

257. Sylvestre, P., Wright, T., & Sherren, K. (2013). Exploring faculty conceptualizations of sustainability in higher education: Cultural barriers to organizational change and potential resolutions. *Journal of Education for Sustainable Development, 7*(2), 223-244. https://doi.org/10.1177/0973408214526491

258. Tajfel, H., & Turner, J. C. (1979). *The Social Identity Theory of Intergroup Behavior*. https://christosaioannou.com/Tajfel%20and%20Turner%201986.pdf

259. Taras, V., Kirkman, B. L., & Steel, P. (2010). Examining the impact of Culture's consequences: A three-decade, multilevel, meta-analytic review of Hofstede's cultural value dimensions. Journal of Applied Psychology, 95(3), 405–439. https://doi.org/10.1037/a0018938

260. Thomas-Walters, L., Scheuch, E. G., Ong, A., & Goldberg, M. H. (2025). The impacts of climate activism. *Current Opinion in Behavioral Sciences, 63,* 101498. https://doi.org/10.1016/j.cobeha.2025.101498

261. Tian, Q., & Robertson, J. L. (2019). How and when does perceived CSR affect employees' engagement in voluntary pro-environmental behavior? *Journal of Business Ethics, 155*, 399-412, https://doi.org/10.1007/s10551-017-3497-3.

262. Tirmizi, S. A., & Staub, T. G. (2025). Building an adaptive metanetwork to fight climate change. *Stanford Social Innovation Review, 24*(1), 20–27. https://doi.org/10.48558/C5EC-VE41

263. Toelch, U., & Dolan, R. J. (2015). Informational and normative influences in conformity from a neurocomputational perspective. *Trends in Cognitive Sciences, 19*(10), 579–589. https://doi.org/10.1016/j.tics.2015.07.007

264. Traberg, C. S., Roozenbeek, J., & van der Linden, S. (2022). Psychological inoculation against misinformation: Current evidence and future directions. *The ANNALS of the American Academy of Political and Social Science, 700*(1), 136-151. https://doi.org/10.1177/00027162221087936

265. Trezise, M., & Richardson, M. J. (2024). Risky business: Understanding the green voice behaviour of Australian professionals. *International Journal of Ethics and Systems, 40(*2), 256-280. https://doi.org/10.1108/IJOES-12-2022-0305

266. Tu, Y., Li, Y., & Zuo, W. (2023). Arousing employee pro-environmental behavior: A synergy effect of environmentally specific transformational leadership and Green human resource management. *Human Resource Management, 62*(2), 159–179. https://doi.org/10.1002/hrm.22138

267. Uhl-Bien, M., Riggio, R. E., Lowe, K. B., & Carsten, M. K. (2014). Followership theory: A review and research agenda. *The Leadership Quarterly, 25*(1), 83–104. https://doi.org/10.1016/j.leaqua.2013.11.007

268. Unsworth, K. L., Davis, M. C., Russell, S. V., & Bretter, C. (2021). Employee green behaviour: How organizations can help the environment. *Current Opinion in Psychology, 42*, 1-6. https://doi.org/10.1016/j.copsyc.2020.12.006

269. Unsworth, K. L., Dmitrieva, A., & Adriasola, E. (2013). Changing behaviour: Increasing the effectiveness of workplace interventions in creating pro-environmental behaviour change. *Journal of Organizational Behavior, 34*(2), 211–229. https://doi.org/10.1002/job.1837

270. Unsworth, K. L., & Tian, A. (2018). Motivation and GHRM: Overcoming the paradox. In D.W. Renwick (Ed.), *Contemporary developments in green human resource management research* (pp. 23-38). Routledge.

271. U.S. Bureau of Labor Statistics. (2025). *Labor Force Participation Rate*. FRED, Federal Reserve Bank of St. Louis. https://fred.stlouisfed.org/series/CIVPART

272. van der Werff, E., Wagner, B. A., & Steg, L. (2026). An environmental psychology perspective on pro-environmental behavior at work. In H. Zacher & K. L. Unsworth (Eds.), *Environmental Sustainability in the Workplace: Advances in Theory, Methods, and Practice*. Oxford University.

273. van Valkengoed, A. & Steg, L. (2019). T*he psychology of climate change adaptation*. Cambridge University Press.

274. van Valkengoed, A.M., Abrahamse, W. & Steg, L. (2022). To select effective interventions for pro-environmental behaviour change, we need to consider determinants of behaviour. Nat Hum Behav 6, 1482–1492. https://doi.org/10.1038/s41562-022-01473-w

275. van Velsor, E., & Quinn, L. (2012). Leadership and environmental sustainability. In S. E. Jackson, D. Ones, & S. Dilchert (Eds.), *Managing human resources for environmental sustainability* (pp. 241–262). Jossey-Bass.

276. van Zomeren, M., Postmes, T., & Spears, R. (2008). Toward an integrative Social Identity Model of Collective Action: A quantitative research synthesis of three socio-psychological perspectives. *Psychological Bulletin, 134*(4), 504–535. https://doi.org/10.1037/0033-2909.134.4.504

277. van Zomeren, M., Saguy, T., & Schellhaas, F. M. H. (2013). Believing in "making a difference" to collective efforts: Participative efficacy beliefs as a unique predictor of collective action. *Group Processes & Intergroup Relations, 16*(5), 618–634. https://doi.org/10.1177/1368430212467476

278. Veckalov, B., Geiger, S. J., Bartoš, F., White, M. P., Rutjens, B. T., van Harreveld, F., Stablum, F., Akın, B., Aldoh, A., Bai, J., Berglund, F., Bratina Zimic, A., Broyles, M., Catania, A., Chen, A., Chorzępa, M., Farahat, E., Götz, J., Hoter-Ishay, B., … van der Linden, S. (2024). A 27-country test of communicating the scientific consensus on climate change. *Nature Human Behaviour, 8*(10), 1892–1905. https://doi.org/10.1038/s41562-024-01928-2

279. Venhoeven, L.A., Bolderdijk, J.W., and Steg, L. (2020). Why going green feels good. *Journal of Environmental Psychology, 71*, 101492. https://doi.org/10.1016/j.jenvp.2020.101492

280. Verplanken, B. & Orbell, S. (2022). Attitudes, Habits, and Behavior Change. *Annual Review Psychology, 73*, 327-352. https://doi.org/10.1146/annurev-psych-020821-011744

281. Vestergren, S., Drury, J., & Chiriac, E. H. (2017). The biographical consequences of protest and activism: A systematic review and a new typology. *Social Movement Studies, 16*(2), 203–221. https://doi.org/10.1080/14742837.2016.1252665

282. Waddington, J.A. & Brady, L.L. (2024). If I don't laugh, I'll cry: Using humor to cope with work-related stressors. In: Stress and quality of working life: Coping at work and at home. Rossi, A.M, McAllister, C.P., & Mackey, J.D. (Eds); pp. 213-229; Charles C Thomas Publisher, Ltd.

283. Wagner, B., van der Werff, E., & Steg, L. (2025). Values at work: Understanding how individual and perceived organisational values relate to employees' motivation and pro-environmental behaviour at work. *Journal of Environmental Psychology, 103*. https://doi.org/10.1016/j.jenvp.2025.102547

284. Wamsler, C., Osberg, G., Janss, J., & Stephan, L. (2024). Revolutionising sustainability leadership and education: Addressing the human dimension to support flourishing, culture and system transformation. *Climatic Change, 177*(1), 4. https://doi.org/10.1007/s10584-023-03636-8

285. Wells, V. K., Ciocirlan, C. E., Manika, D., & Gregory-Smith, D. (2024). Green, keen, and somewhere in between: An employee environmental segmentation study. *Journal of Cleaner Production, 445*, 141296. https://doi.org/10.1016/j.jclepro.2024.141296

286. Werner, C. M. (2013). Designing interventions that encourage permanent changes in behavior. In A. H. Huffman & S. R. Klein (Eds.), Green organizations: Driving change with IO psychology (pp. 208–230). Routledge.

287. Wesselink, R., Blok, V., van Leur, S., Lans, T., & Dentoni, D. (2015). Individual competencies for managers engaged in corporate sustainable management practices. *Journal of Cleaner Production, 106*, 497–506. https://doi.org/10.1016/j.jclepro.2014.10.093

288. Westerman, J. W., Rao, M. B., Vanka, S., & Gupta, M. (2020). Sustainable human resource management and the triple bottom line: Multi-stakeholder strategies, concepts, and engagement. *Human Resource Management Review, 30*(3), 100742. https://doi.org/10.1016/j.hrmr.2020.100742

289. Wiek, A., Bernstein, M. J., Foley, R. W., Cohen, M., Forrest, N., Kuzdas, C., Kay, B., & Keeler, L. W. (2015). Operationalising competencies in higher education for sustainable development. In M. Barth, G. Michelsen, M. Rieckmann, & I. Thomas (Eds.), *Routledge handbook of higher education for sustainable development* (pp. 241-260). Routledge.

290. Wielkiewicz, R. M., & Stelzner, S. P. (2010). An ecological perspective on leadership theory, research, and practice. In B. W. Redekop (Ed.), *Leadership for environmental sustainability* (Vol. 3). Routledge.

291. Wiernik, B. M., Ones, D. S., Dilchert, S., & Klein, R. M. (2018). Individual antecedents of pro-environmental behaviours: Implications for employee green behaviours. In V. K. Wells, D. Gregory-Smith, & D. Manika (Eds.), *Research handbook on employee pro-environmental behaviour* (pp. 63–82). Edward Elgar.

292. Wilson, M. E., & Hill, P. L. (2023). Activist purpose orientation: Definition and predictors. *Social and Personality Psychology Compass, 17*(2). https://doi.org/10.1111/spc3.12725

293. Wright, C., & Nyberg, D. (2017). An inconvenient truth: How organizations translate climate change into business as usual. *Academy of Management Journal, 60*(5), 1633-1661. https://doi.org/10.5465/amj.2015.0718

294. Wright, C., & Nyberg, D. (2024). Corporations and climate change: An overview. *WIREs Climate Change, 15*(6), e919. https://doi.org/10.1002/wcc.919

295. Wullenkord, M. C. (2023). Basic psychological needs and autonomous motivation: A humanistic perspective on pro-environmental behaviour change. In [eds.?], *Handbook on pro-environmental behaviour change* (pp. 211-225). Edward Elgar Publishing.

296. Wynes, S., & Nicholas, K. A. (2017). The Climate Mitigation Gap: Education and Government Recommendations Miss the Most Effective Individual Actions. *Environmental Research Letters, 12*(7), 074024. https://doi.org/10.1088/1748-9326/aa7541

297. Wynes, S., Zhao, J., & Donner, S. D. (2020). How well do people understand the climate impact of individual actions? *Climatic Change, 162*, 1521–1534. https://doi.org/10.1007/s10584-020-02811-5

298. Xiao, J., Yan, Y., Li, B., & Liu, S. (2024). Leading by example: Understanding the trickle-down effect of voluntary green behavior in the workplace. *Journal of Managerial Psychology, 39*(5), 613-627. https://doi.org/10.1108/JMP-04-2022-0192

299. Yang, D., Law, K. S., & Tang, G. (2023). Not all pro-environmental initiatives can increase pro-environmental behavior: An empirical examination of employees' pro-environmental attributions. *Journal of Environmental Psychology, 92*, 102177. https://doi.org/10.1016/j.jenvp.2023.102177

300. Yao, W., Chen, F., Wang, S., & Zhang, X. (2021). Impact of exposure to natural and built environments on positive and negative affect: A systematic review and meta-analysis. *Frontiers in Public Health, 9*, 758457. https://doi.org/10.3389%2Ffpubh.2021.758457

301. Yi, L., Uddin, M., Das, A. K., Mahmood, M., & Sohel, S. M. (2019). Do transformational leaders engage employees in sustainable innovative work behaviour? Perspective from a developing country. *Sustainability, 11*(9), 2485. https://doi.org/10.3390/su11092485

302. Young, W., Davis, M., McNeill, I. M., Malhotra, B., Russell, S., Unsworth, K., & Clegg, C. W. (2015). Changing behaviour: Successful environmental programmes in the workplace. *Business Strategy and the Environment, 24*(8), 689-703. https://doi.org/10.1002/bse.1836

303. Yuriev, A., Boiral, O., & Boivin, D. V. (2026). Advancing theory on individual and contextual antecedents of employee green behaviors. In H. Zacher & K. L. Unsworth (Eds.), *Environmental Sustainability in the Workplace: Advances in Theory, Methods, and Practice*. Oxford University.

304. Yuriev, A., Boiral, O., Francoeur, V., & Paillé, P. (2018). Overcoming the barriers to pro-environmental behaviors in the workplace: A systematic review. *Journal of Cleaner Production, 182*, 379-394. https://doi.org/10.1016/j.jclepro.2018.02.041

305. Zacher, H., Kühner, C., Katz, I. M., & Rudolph, C. W. (2024). Leadership and environmental sustainability: An integrative conceptual model of multilevel antecedents and consequences of leader green behavior. *Group & Organization Management*, 10596011241229891.

306. Zacher, H., Rudolph, C. W., & Katz, I. M. (2023). Employee green behavior as the core of environmentally sustainable organizations. *Annual Review of Organizational Psychology and Organizational Behavior, 10*, 465–494. https://doi.org/10.1146/annurev-orgpsych-120920-050421

307. Zawadzki, S. J., Steg, L., & Bouman, T. (2020). Meta-analytic evidence for a robust and positive association between individuals' pro-environmental behaviors and their subjective wellbeing. *Environmental Research Letters, 15*(12), 123007. https://doi.org/10.1088/1748-9326/abc4ae

308. Zhang, Y., Dong, Y., Wang, R., & Jiang, J. (2024). Can organizations shape eco-friendly employees? Organizational support improves pro-environmental behaviors at work. *Journal of Environmental Psychology, 93*, 102200. https://doi.org/10.1016/j.jenvp.2023.102200

309. Zibarras, L. D., & Coan, P. (2015). HRM practices used to promote pro-environmental behavior: A UK survey. *The International Journal of Human Resource Management, 26*(16), 2121-2142. https://doi.org/10.1080/09585192.2014.972429

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