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MOBILIZATION AND BEHAVIORAL IMPACT A STRATEGIC FRAMEWORK FOR CLIMATE ACTION

Pro-environmental mobilizations can influence consumer behavior through three modes of exposure: direct participation, incidental exposure, and media exposure. In the proposed framework, we analyze the different psychological dynamics activated by each form of exposure and clarify why the adoption of green practices does not necessarily lead to a real reduction in environmental impact. Based on this evidence, we provide practical guidelines for organizations and policymakers interested in designing interventions that incentivize sustainable alternatives to harmful behaviors, rather than merely promoting the notion of adding ecological practices to existing habits.

SUSTAINABILITY//CONSUMER BEHAVIOR//CLIMATE ACTIVISM//GREEN MARKETING//ENVIRONMENT



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Environmental mobilizations, such as the Fridays for Future (FFF) movement, have become a widespread and recurring phenomenon all around the world. While their global visibility is undeniable, their local presence is equally impressive. In Italy, for example, FFF organized over 120 rallies in 2023 alone, spanning virtually all university cities. Major protests took place in Rome, Milan, Turin, Bologna, Florence, and Naples, with an estimated total participation of over 1 million individuals¹. These events are typically synchronized with symbolic dates on the international climate calendar, such as Earth Day, World Environment Day, or the dates of major UN climate summits and engage students, activists, and citizens of all ages.

¹ Estimates gathered from national news outlets (e.g., La Repubblica, September 27, 2019) and reported on Wikipedia (Fridays For Future). Participation figures for individual cities include: approximately 200,000 in Milan, 150,000 in Rome, 50,000 each in Turin and Naples, 50,000 in Florence, and 30,000 in Bologna. The total – considering only these six major cities – exceeds 500,000 participants.

These demonstrations receive broad media coverage and are further amplified on social media platforms like Instagram, TikTok, and X, where images of crowded squares and climate slogans circulate widely. As a result, the reach extends far beyond physical participants: many individuals are exposed indirectly, as bystanders, commuters, or online viewers, experiencing the event passively but potentially internalizing the message and integrating it into their belief system.

Participants in these mobilizations are often young, and digitally connected, a demographic frequently targeted by sustainability campaigns (e.g. Fernández-Zubieta et al., 2023; Adams, 2020). Their involvement in climate mobilizations often represents a form of identity-driven action, a way to express values, signal social belonging, and voice aspirations for change. But a critical question remains for businesses and policymakers: Do these highly visible events actually change how people consume?

This issue is particularly relevant given that individual consumption significantly contributes to global emissions: according to data from the United Nations' ActNow initiative, private consumption accounts for approximately 66% of total worldwide emissions. Individual behavioral choices are therefore a crucial factor not only for an effective climate response but also for businesses, as they can significantly influence the future trajectory of consumer demand. Yet, despite the centrality of these behaviors, the existing literature focuses predominantly on stated intentions – typically measured through surveys assessing willingness to reduce environmental impact or to purchase sustainable products – rather than on actual observed behaviors. However, as widely acknowledged, intentions, including pro-environmental ones, do not always translate into concrete actions (Morwitz, 2014).

Building on this premise, the present contribution advances a conceptual and operational framework designed to help companies and professionals better understand and address the behavioral dynamics underlying climate

mobilizations. The aim is to offer practical tools for managerial action and to provide guidance for the development of future empirical research at the intersection of environmental activism and consumer behavior.

FROM AWARENESS TO ACTION

To effectively guide consumer choices, organizations must first clarify what sustainable behavior entails in concrete terms. In practice, it involves adopting actions that reduce emissions and overall environmental impact. The United Nations' ActNow campaign provides a useful reference in this regard, identifying measurable actions that can be promoted or incentivized by companies and policymakers.

In the energy sector, for example, sustainable behaviors include switching to electric vehicles (supported by charging stations rather than fuel stations), choosing renewable energy sources, and reducing everyday energy consumption.

Similarly, in the domain of sustainable mobility, greater reliance on public transportation, cycling, and walking is encouraged, with the aim of reducing dependence on individual car use.

In the food sector, acting sustainably involves increasing vegetable consumption, reducing meat intake, and favoring local and seasonal products.

Finally, in the apparel sector, sustainable behaviors include avoiding fast fashion, purchasing second-hand items, or selecting products from circular economy channels. An often-overlooked but highly impactful lever is reducing the overall frequency of purchases.

One of the most significant – yet frequently neglected – implication of the United Nations' list of sustainable actions concerns not only what we consume, but how much. In other words, sustainability requires not only changing the way we consume but also reducing the overall volume of consumption – an approach that reflects a “less is more” logic.

The “Less is More” principle

More conscious choices + Reduced frequency = Real impact in terms of emission reduction.

Let’s imagine the case of a consumer who typically purchases 10 clothing items per year from brand X. To make their behavior more sustainable, several options are available:

- Switching to brand Y, which adopts more environmentally responsible practices, while maintaining the same number of purchases.
- Replacing part of their purchases with second-hand clothing.
- Reducing the total number of items purchased from brand X – for example, decreasing from 10 to 8 items per year.

All of these choices constitute steps toward greater sustainability, yet they do not receive equal attention from companies or consumers. In particular, reducing the overall quantity of purchases remains an often-overlooked lever, despite its potentially significant environmental impact.

Exposure to environmental movements

Pro-environmental movements convey climate messages through different channels, each capable of trigger distinct psychological responses. Understanding when and how these forms of exposure influence consumers is essential for designing effective interventions.

Direct participation – such as physically joining a climate protest – is often driven by social identity processes and the perception of subjective norms (Ajzen, 1991), as well as mechanisms of social contagion (Christakis and Fowler, 2013). These factors can reinforce commitment and foster sustained behavioral change over time. However, participation may also activate a moral licensing effect (Merritt, Effron, and Monin, 2010): after engaging in a virtuous act, individuals may feel they have “done their part,” thereby reducing their motivation to adopt further sustainable actions.

Incidental exposure – for instance, passing by a climate protest – can enhance the salience of environmental issues, temporarily increasing their visibility and perceived relevance. Yet, if the message is perceived as imposed, extreme, or polarizing, it may elicit psychological reactance (Brehm, 1966): a motivational response of resistance or rejection directed at the message or its source.

Media exposure – through social media, news outlets, or digital platforms – is more widespread and often more prolonged. Here too, salience plays a central role, but the tone and frequency of the message are critical. Moralizing or highly prescriptive appeals – such as urgent calls to action (“we must act now”) – can provoke reactance, particularly among more skeptical or ideologically distant audiences (Billfinger et al., 2014).

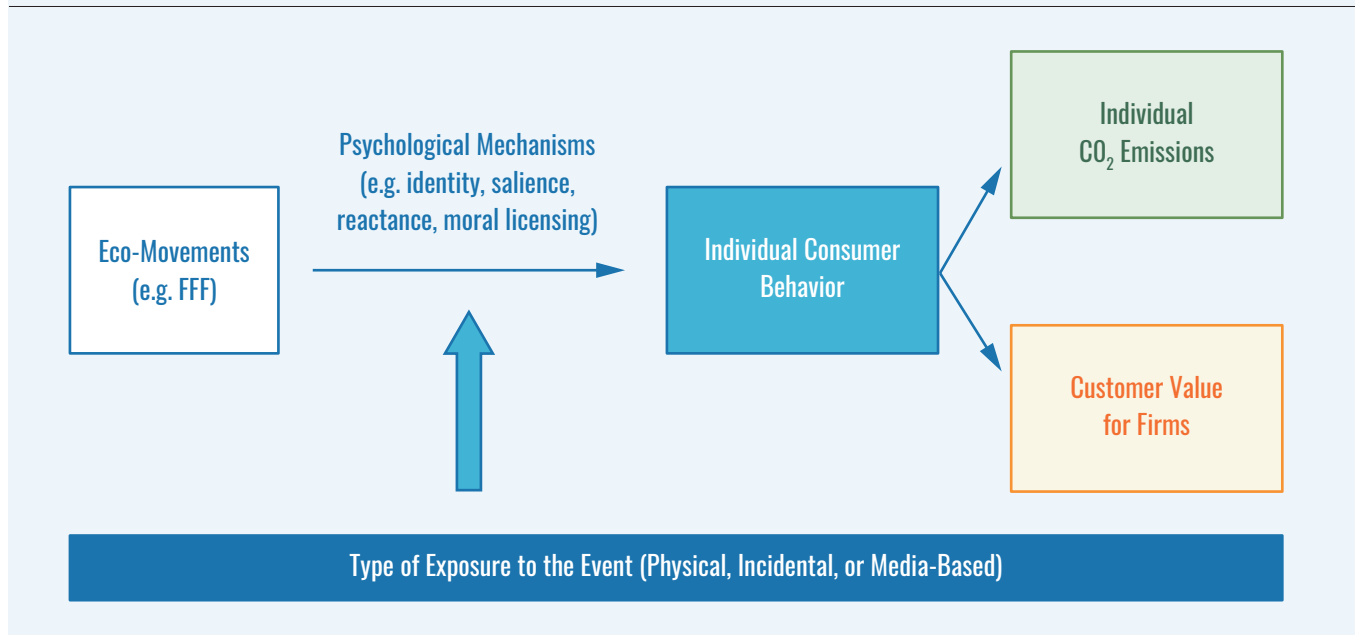
Across all forms of exposure, effects may vary significantly: they can facilitate sustainable behaviors, inhibit them, or produce no impact at all. Outcomes depend on the interplay between the type of exposure, message content, and individual recipient characteristics.

Figure 1 summarizes the proposed conceptual framework, which illustrates how exposure to pro-environmental movements (e.g., Fridays For Future) can influence individual consumption behavior through specific psychological mechanisms, generating effects both on individual CO₂ emissions and on consumer value for businesses.

THE GLOBAL SCALE OF OPPORTUNITY

Since its inception in 2018, the Fridays For Future (FFF) movement has become one of the most recognizable and influential environmental initiatives worldwide. According to official estimates, more than 14 million people have participated in FFF-led strikes and protests globally. The 2019 Global Climate Strike marked a watershed moment: in Germany alone, over 1.4 million people took part, while in Italy nearly 1 million citizens

FIGURE 1. CONCEPTUAL FRAMEWORK: THE IMPACT OF PRO-ENVIRONMENTAL EVENTS



joined demonstrations across 109 cities, with record turnouts in Milan (200,000), Rome (150,000), Turin (50,000), and Bologna (30,000). Comparable levels of participation were observed in France, Spain, and numerous other European countries.

Even in the post-pandemic period, large-scale demonstrations have not disappeared. As shown in Figure 2, the phenomenon remains both relevant and widespread on a global scale, while Figure 3 highlights a clear upward trend in the number of pro-environment events recorded in recent years.

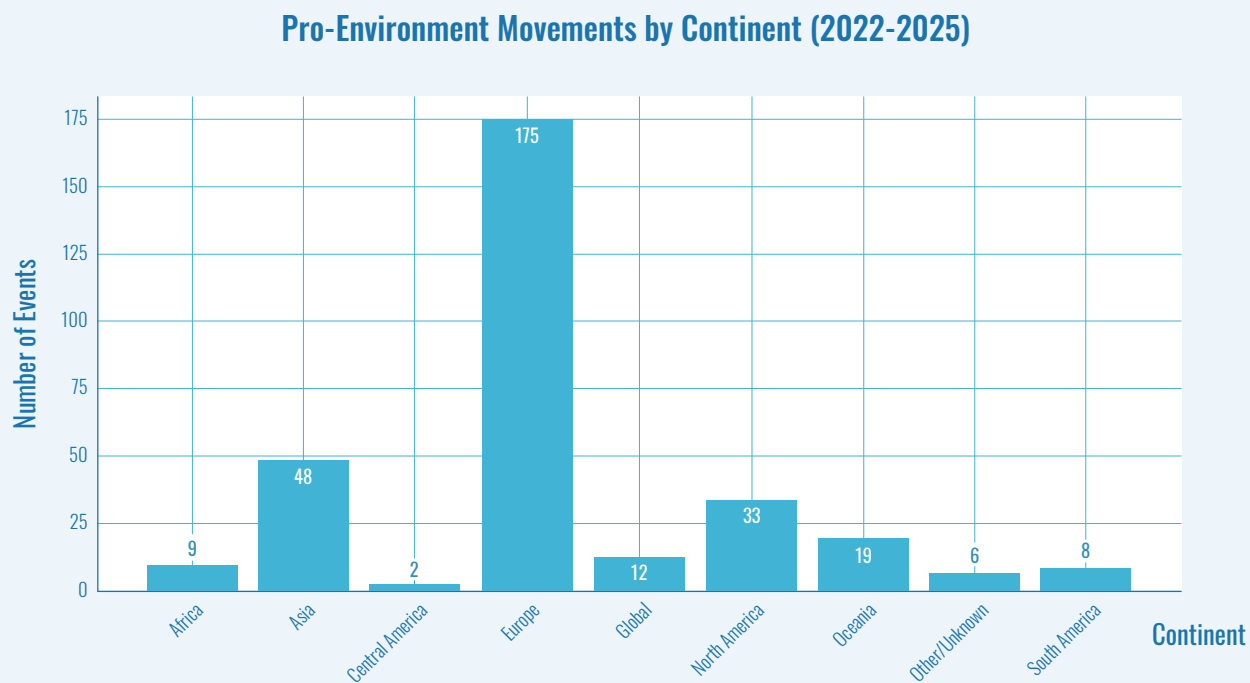
In 2024, for instance, FFF Italy coordinated demonstrations in more than 70 cities, mobilizing tens of thousands of students, teachers, and citizens. These figures confirm that climate-related activism is not a one-off wave but a recurring, structured phenomenon. More than simple marches, these protests act as temporary reconfigurations of urban space: familiar locations such as schools, streets, and public squares are transformed into arenas of political expression and collective awareness. For a few hours, the physical landscape itself becomes a reflection of climate urgency.

While Fridays For Future pioneered this format, other movements have broadened the scope and tone of environmental activism. Groups such as Extinction Rebellion, Just Stop Oil, and Gen Z for the Climate have introduced diverse strategies, ranging from art installations to road blockades to performance-based actions. Although their methods differ, they share the goal of embedding climate urgency into everyday discourse, both online and offline.

Together, these movements constitute a cultural and behavioral force that cannot be overlooked. They challenge existing consumption models and prompt individuals to reconsider daily habits. For marketers, institutions, and policymakers, understanding their ripple effects on actual behavior is therefore critical.

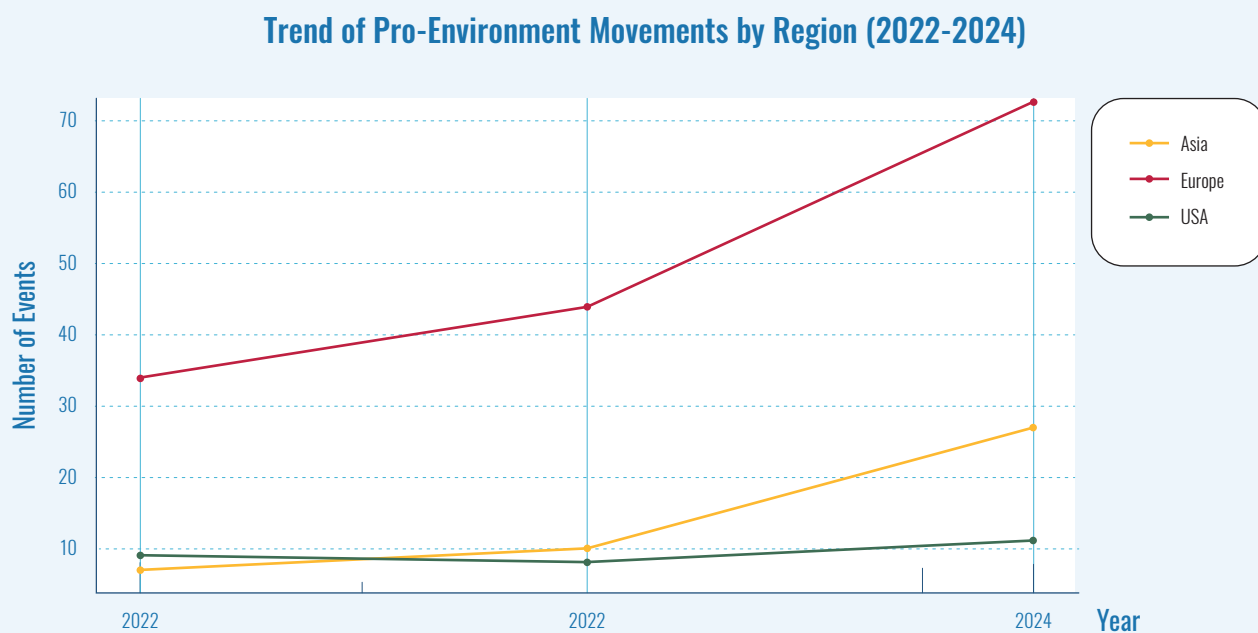
The scale and frequency of these mobilizations make them predictable and, to some extent, anticipatable events that can be strategically leveraged by companies and institutions. They are not sporadic episodes, but recurring moments in the public calendar during which collective attention converges on climate issues.

FIGURE 2. NUMBER OF PRO-ENVIRONMENT EVENTS FROM 2022 THROUGH MAY 2025



Source: Authors' elaboration on data from the *Carnegie Endowment for International Peace, Climate Protest Tracker*.

FIGURE 3. TREND IN THE NUMBER OF PRO-ENVIRONMENT EVENTS



Source: Authors' elaboration on data from the *Carnegie Endowment for International Peace, Climate Protest Tracker*.

THE CONSUMER BEHAVIOR CHALLENGE

Research in consumer psychology reveals a common pattern that echoes findings from other domains, such as nutrition and energy consumption (Chandon and Wansink, 2007; Gillingham, Rapson, and Wagner, 2016; Hope et al., 2018). When exposed to environmental messaging, consumers often add sustainable behaviors rather than replacing unsustainable ones. This creates a false sense of environmental progress, a feeling which is explained by mechanisms such as single-action bias, compensatory green beliefs, and the negative footprint illusion (Choudhary and Dutt, 2024; Sörqvist and Langeborg, 2015).

For instance, in nutrition research consumers tend to overconsume snacks labeled as low-fat, underestimating their calorie content and eating larger portions – a phenomenon known as the health halo effect (Wansink and Chandon, 2006). In the environmental domain, a similar dynamic can emerge: adopting one sustainable behavior may lead individuals to perceive their overall impact as lower, even when high-impact actions persist or proliferate (e.g. Carrington et al., 2014).

In sustainability, this often manifests as the “Do More” trap: people are encouraged to add eco-friendly behaviors (recycling, buying local, eating plant-based once a week), but rarely challenged to subtract or replace more harmful ones. The unintended consequence is a portfolio of actions that feels green but isn’t necessarily greener.

For example, someone might start buying local produce at the weekend market, but still rely on imported convenience foods or heavily packaged snacks during the week. Or they might diligently separate household waste for recycling but continue to order frequently from online platforms that use excessive packaging and fast shipping. A consumer may proudly purchase a reusable water bottle or tote bag, yet keep taking short-haul flights for leisure or commute by car alone every day.

The result? The addition of small green behaviors can create a sense of moral satisfaction, while the

more impactful habits remain unchanged, leading to an overall increase in emissions.

TIMING WINDOWS OF OPPORTUNITY

Climate events create temporary periods of heightened environmental awareness. These moments (often sparked by media coverage, peer conversations, or direct participation) can boost issue salience and emotional engagement (Gollwitzer and Sheeran, 2006; Kasser et al., 2004). While the *peak* of attention may last only a few hours or days, research suggests that such episodes can serve as behavioral catalysts when leveraged appropriately.

In fact, exposure to emotionally charged or identity-relevant events can prompt individuals to try new behaviors, such as going to a local food market, signing up for a bike-sharing app, or cooking a vegetarian meal for the first time (Verplanken et al., 2008). And these windows of opportunity are not just theoretical. Emerging empirical evidence confirms that climate protests can shift actual behavior. For example, a 2022 study in Switzerland found that cantons with higher FFF protest participation saw a surge in online searches for pro-environmental topics like “vegan” and “public transport,” suggesting direct, albeit sometimes temporary, behavioral impact (Bruns et al., 2023). According to habit formation theory, these “first tries” matter: they offer the entry point for forming new routines, particularly if the behavior is repeated in a stable context and met with positive reinforcement (Lally et al., 2010; Wood and Neal, 2007).

This creates a strategic window, one that is not limited to the *day* of the event but instead extends into the days or weeks immediately before and after exposure. Still, without timely support, personalization, and repetition, even well-intentioned changes may fade before becoming habits. In short, climate events open a motivational door. But it’s the follow-through (by organizations, communities, or platforms) that determines whether that door leads to lasting behavioral transformation. Yet this moment of opportunity doesn’t affect all

consumers equally. The magnitude and direction of change depend not only on timing, but also on who the consumer is.

BEHAVIORAL SEGMENTS IN THE CLIMATE RESPONSE

Not all consumers respond to climate events in the same way, and these differences do not necessarily align with traditional green labels. Rather than relying solely on stated values or sustainability intentions, it is often more effective to segment consumers based on observable behaviors prior to exposure.

Today, digital technologies make this possible. For example, anonymized geolocation data from mobile devices can reveal how much a person walks, whether they frequent fast-food restaurants or organic stores, or what modes of transportation they use. Such data allow for the identification of actual behavioral profiles and help anticipate which consumer segments are more likely to be sensitive or reactive to climate-related exposure – and which are not.

Individuals already highly committed to sustainability often display strong attitudinal alignment but limited room for behavioral growth – a phenomenon sometime referred to as a “ceiling effect” (e.g., Gifford and Nilsson, 2014). These consumers tend to use climate events as identity-reinforcing moments, deepening existing practices rather than adopting entirely new ones.

More revealing, however, are the segments exposed incidentally (e.g., by passing a protest or encountering climate content on social media) or those engaging out of curiosity or peer influence. These individuals may not initially identify as environmentally active, but they often hold low-cost/high-potential profiles: they lack entrenched green behaviors, but also face fewer psychological barriers to change. Behavioral research shows that people with less structured consumption routines or higher behavioral frequency (e.g., frequent shoppers or diners) are more susceptible to habit

disruption when presented with timely alternatives (Verplanken and Wood, 2006; White et al., 2019).

In other words, consumers who engage in behaviors more frequently (e.g., high-frequency buyers) may paradoxically offer the greatest margin for emissions reduction – if their habits can be redirected. These consumers often fly under the radar in segmentation models focused on pro-environmental attitudes, yet they represent high-leverage targets for behavioral change.

Understanding which segments are most “movable” depends not only on their values but also on when, how, and why they engage with climate messaging. Climate events can create temporary openings in consumer identity – but it is often the unexpected participant, rather than the usual advocate, who holds the greatest potential for systemic change.

ACTIONABLE RECOMMENDATIONS

For business leaders

To fully capture the value of climate mobilizations, companies must rethink not only their communication strategies, but also their operational models. Embracing the principle of “less is more” can create long-term value – for example, by strengthening customer trust through credible and consistent messaging, increasing retention via longevity-based models (such as subscription services or circular products), and unlocking new differentiation opportunities in saturated markets by emphasizing environmental authenticity.

Simply adding a “green” label to products is no longer enough. Companies seeking real impact must design solutions that encourage substitution and reduced consumption – while ensuring business sustainability. This does not necessarily mean selling less but selling differently: shifting toward revenue models based on subscriptions, value-added services, loyalty programs, reuse, or “light” product versions. In this way, profitability can be preserved while environmental impact is reduced.

Strategic levers for creating sustainable value include:

- *Substitution as a loyalty driver*: Instead of pushing “new green products,” create pathways where customers return, deactivate, or upgrade high-impact options (e.g., buy-back programs, light service tiers).
- *Reduction as a differentiation driver*: Develop “essential yet sustainable” product lines that optimize use without stimulating excess demand (e.g., shared-use formats, modular packaging, or ‘low-impact-first’ offerings).
- *Alignment with global standards*: Connecting initiatives to international frameworks (e.g., SDGs, ActNow, net-zero pathways) enhances access to funding, certifications, and procurement advantages.
- *Leveraging mobilizations as activation moments*: Global climate days or local events can serve as effective triggers for time-limited campaigns, offering clear calls to action that promote mindful, durable choices.

To maximize impact and minimize waste, targeting – both in terms of timing and audience – must evolve. In the post-event phase, companies should distinguish among different consumer segments:

- *Engaged participants*: Already involved and open to radical change, these consumers respond best to long-term solutions such as sustainable subscriptions or premium regenerated products.
- *Occasional exposure (physical or digital)*: Here, salience is key. When climate issues are top-of-mind, it is the right moment to offer sustainable alternatives that meet real needs without excess. Messaging should remain clear and non-moralizing: “Do you really need X today? Maybe Y is enough. Less waste, same value”.
- *High-frequency consumers*: With larger environmental footprints, these users are strategic leverage points. Providing feedback tools (e.g., personalized dashboards) and incentives to reduce

purchase volume – not just substitute products – can help transform awareness into habit change, driving gradual and lasting impact.

For policymakers

Policymakers play a critical enabling role. Climate events may spark attention, but that attention is most valuable when supported by infrastructure and smart defaults. Through structural nudges and practical enablers – such as subsidized public transport, local food initiatives, and accessible recycling – communities can foster environments where behavioral intentions turn into lasting habits. To this end, policymakers should:

- Prioritize substitution in public campaigns, not just the promotion of green additions.
- Offer behavioral feedback tools that help citizens visualize the impact of their choices.
- Tailor interventions to different segments (e.g., offering convenience for disengaged citizens and incentives for “occasional greens”).

Framing is equally important. Policies should normalize and reward reduction (not only green consumption) by promoting aspirational identities rooted in sufficiency rather than excess. Making “less is more” socially desirable is not only beneficial for the planet; it also aligns with emerging preferences for minimalism, intentionality, and authenticity.

REAL-WORLD EXAMPLES

The principles of substitution and “less is more” are already being applied by forward-thinking organizations. These examples show how to translate heightened awareness from climate events into tangible behavioral change.

Institutional and public campaigns

- **Promoting substitution**: During major climate events, several European cities offer free or heavily subsidized public transport for the day to help

citizens avoid using private cars². This provides a direct, low-friction alternative at a moment of peak salience (Klimaticket, 2024).

- **Normalizing reduction:** The “Meat-Free Monday” campaign³, supported by local governments and public institutions worldwide, is a classic example of a structured nudge. It inspires people to make a specific, recurring reduction in high-impact behavior rather than simply adding a green product.

Business initiatives

- **Celebrating durability over disposability:** Patagonia’s “Don’t Buy This Jacket” ad campaign is a famous example of framing “less” as a core brand value⁴. Their Worn Wear program, which promotes repairing and trading in used gear, builds a business model around durability and circularity, directly countering the logic of fast fashion.
- **Shifting from ownership to access:** The Dutch brand MUD Jeans offers a “Lease A Jeans” model⁵. Consumers pay a monthly fee to use jeans made from organic and recycled cotton and can swap them for a new pair after a year. The old jeans are then recycled. This initiative replaces the high-frequency purchase model with a lower-impact subscription service, a clear example of substitution.

PRACTICAL IMPLEMENTATION GUIDE

Implementation should follow three distinct phases.

Preparation (before climate events):

- Segment customers by environmental behavior baseline.
- Develop messaging frameworks centered on substitution and impact.

- Design behavioral feedback systems to measure outcomes.

Activation (during moments of heightened awareness):

- Launch targeted, location-based, digital campaigns.
- Promote timely access to sustainable options.
- Use incentives to encourage behavioral replacement, not just trials.

Reinforcement (after events):

- Sustain engagement with personalized feedback and social recognition.
- Recalibrate product and service offerings based on adoption trends.
- Plan for recurring climate moments as part of a behavioral strategy.

CONCLUSIONS

Environmental protests and climate mobilizations represent visible cultural phenomena that can serve as entry points for broader behavioral shifts (under certain conditions). These events signal rising public concern, but their long-term impact depends entirely on how businesses, institutions, and policymakers respond. Indeed, such demonstrations may open temporary windows of opportunity to influence consumer behavior. When paired with clear messaging, practical alternatives, and systemic support, they can catalyze meaningful change. But absent those conditions, they risk remaining symbolic or even counterproductive.

For businesses, these moments present a strategic – not ideological – opportunity. Those who respond with credible, substitution-focused solutions can strengthen their brand, improve customer loyalty, and align with evolving expectations around

² www.klimaticket.at/en/home/.

³ www.mondaycampaigns.org/meatless-monday/about.

⁴ www.patagonia.com/worn-wear/.

⁵ <https://mudjeans.eu/pages/how-it-works>.

sustainability. The shift toward substance over symbolic gestures is already underway.

Ultimately, climate mobilizations are not inherently transformative. Their value lies in what follows: the infrastructure that's deployed, the incentives that are aligned, and the choices that are made available to consumers. Turning awareness into impact is not guaranteed – it requires strategy, investment, and execution.



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