EARTH ACTION REPORT

TOP PRIORITIES FOR SYSTEMIC CHANGE BY CHANGENOW & KPMG

changeNOW

KPMG

EDITO

We stand at the beginning of a new narrative on ecological and social transition. While the sense of urgency is growing, paths to achieve our goals are often points of contention. ChangeNOW's mission is to bridge these divides, fostering solution-driven collaboration and nurturing collective intelligence. With this report, we aim at transcending individual perspectives, creating a cohesive vision that incorporates the nuanced insights of our entire expert community.

In partnership with KPMG, we have harnessed this vision, crafting a report that not only consolidates individual wisdom but amplifies it, giving voice to a collective intelligence that can shape the future.

The Earth Action Report is more than an analysis: it is a call to action. It seeks to break down silos, encouraging leaders to adopt a systemic perspective that appreciates the interconnectedness of our challenges. With this report, readers can grasp the holistic context of our environmental and social imperatives within minutes, identifying key priorities and understanding the complexities of their interconnections. Functioning as a practical guide, the Earth Action Report delivers targeted recommendations, pinpointing the areas where efforts should be focused in 2024. This approach empowers leaders to make informed decisions that catalyze meaningful progress.

The report not only charts a course through the complexity of our current challenges but also instills a sense of hope and positivity. Through the proposal of concrete actions, it signals that, despite the daunting scope of our challenges, there are indeed viable pathways forward.

We're just at the beginning of an ongoing journey. The Earth Action Report is designed to be a living document, annually updated to reflect the changing landscape of ecological and social transition. Each edition will act as a pulse check, comparing year-over-year developments, emerging thoughts, and beliefs, thereby mapping our collective evolution towards sustainability.

As we look to 2024 and beyond, this report stands as both a guide and a beacon, illuminating the path toward a more sustainable and equitable world.

KEVIN TAYEBALY

Co-founder and Chief Development Officer, ChangeNOW

JEREMIE JOOS

Partner, ESG Center of excellence, KPMG France

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INTRODUCTION

EARTH ACTION REPORT
A CALL TO ACTION FOR EARTH AND ITS INHABITANTS

> **It is our task to enable the future, not to foresee it."**

These words from Antoine de Saint Exupéry express the ambition of the “Earth Action Report" carried out by ChangeNOW and KPMG.

This endeavor embarks on a **comprehensive exploration of actionable solutions** and strategies vital for tackling the environmental and societal challenges that we are facing. It delves into **identifying the interconnected systemic challenges** hindering the scaling up of solutions.

By doing so, we aim to craft a **roadmap** that not only **anticipates the future** but is also **adaptable to the unfolding dynamics** of our planet and societies, ensuring a sustainable legacy for generations to come.

We are aware that **2024 will represent a critical year**, as **41% of the world’s population is set to cast their votes** for new political representatives (source: Bloomberg).

2024 marks the first edition of this report, which will be published on a yearly basis embracing a **forward-looking, multi-year perspective** that allows us to chart the evolution of these changes over time. The report’s approach is voluntarily **focused on identifying feasible concrete actions and solutions to implement in the near future.** For this first year, the study includes the views of more than 100 international experts, from innovators and explorers such as Bertrand Piccard to CEOs such as Hakan Bulgurlu, Institutional representatives such as Barbara Trachte, Corporate Sustainability leaders such as Brune Poirson, NGO leaders such as Galitt Kenann or public figures such as Suzy Amis Cameron, with greater representation from European countries.

As this study unravels, the first and most important element highlighted by this study holds in the fact that **experts ranked Biodiversity as the top priority** moving forward. Other identified priorities include **energy transition and fossil fuel dependence, climate change adaptation, social inequalities, and water resources.** One of the main key findings of the report is the unnegotiable **interconnection of social and environmental challenges**. The report also aims to highlight the **crucial stepping stones to overcome** those systemic challenges which are hindering the scaling up of solutions.

We invite you to explore further the findings of this report, engage in the dialogue, and join us in our collective effort towards a more sustainable and equitable future. Together, **let us turn knowledge into action and forge a path towards a better tomorrow.**

METHODOLOGY

Our study is grounded in the analysis of responses from questionnaires and interviews with a broad range of individuals within the ChangeNOW ecosystem. These participants, representing various profiles and sectors, are actively engaged in advancing sustainability, encompassing both environmental and social dimensions, providing valuable insights and playing a crucial role in promoting sustainable practices across the board.

Key Figures

Analysis based on contributions from **100+ respondents** from companies (55%), associations (18%) and public and institutional institutions (7%) from 20 different countries, who answered 25 questions. The questionnaire was administered online from November to December 2023.

In addition to the questionnaire, one-hour of semi-directed interviews with some experts were conducted by ChangeNOW and KPMG teams.

Structure of the Approach

For our quantitative and qualitative analysis, our questions were structured around two sections:

On the one hand, respondents were asked to **rank their top 3 priorities from a list of 11 items, with the option of adding their own priorities:** Protection of biodiversity & ecosystems, Energy transition & Fossil fuel dependence, Adaptation to climate change, Social inequalities, Water resources, Agricultural transition, Waste Management, Women empowerment, Human Rights, Food Habits and Ocean Acidification. After rephrasing the priorities, respondents shared the barriers and obstacles preventing this priority from being developed, and the levers and solutions available to meet this challenge.

On the other hand, respondents were questioned on the **systemic issues that were hindering the scaling-up of the ecological and social transition.**

During interviews, we have asked our interlocutors to share their experiences and provide feedback, comments and points of view following their answers to the quantitative questionnaire and their own experiences.

Participants were finally invited to propose out-of-the-box- solutions.

RESULTS
OF THE STUDY

The Earth Action Report offers a detailed analysis of the pressing challenges confronting us and our planet in 2024, outlining key priorities and providing actionable solutions.

Out of the 11 priorities listed, **Biodiversity Protection is ranked at the top priority.** Together with **Energy transition**, those two crucial challenges gather almost half of the responses collected (43%). Moreover, the **top 5** priorities cover **74% of the answers** given by our experts.

The initial section of our study dives into the critical environmental and social issues as identified by our contributors. From a comprehensive list of major challenges, they have prioritized them in the following order.

11 PRIORITIES FOR SYSTEMIC CHANGE

Protection of Biodiversity & Ecosystems

Energy Transition & Fossil Fuel Dependence

Adaptation to Climate Change

Social Inequality

Water Resources (Pollution and Scarcity)

Agricultural Transition

Waste Management

Women Empowerment

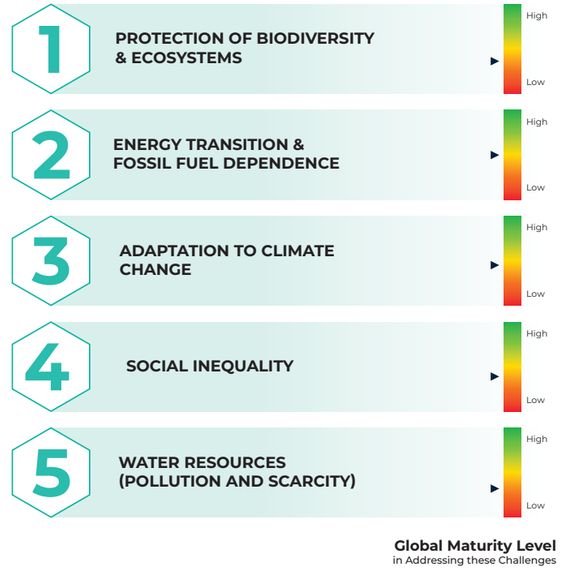
Human Rights

Food Habits

Ocean Acidification

TOP 5 PRIORITIES FOR SYSTEMIC CHANGE

Participants were asked how mature we are in addressing the main priorities mentioned above, aiming to identify the gaps that need bridging for each of them.

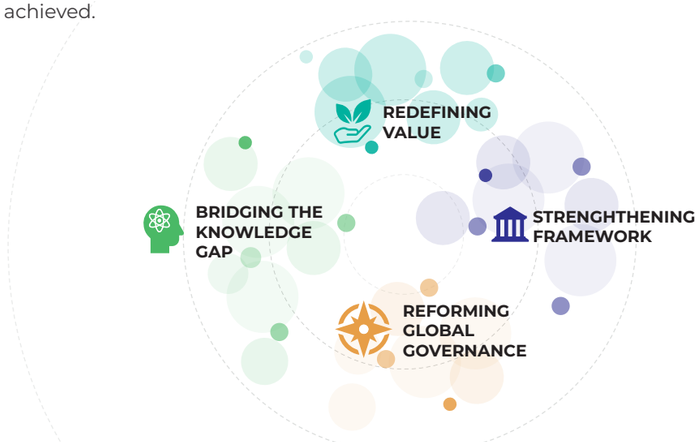


The highest score achieved, a modest 2.5 out of 5, was for the second priority: Energy Transition, while Water Resources received the lowest rating at 1.6 out of 5. These findings reflect a consensus among our contributors, **indicating uniformly low scores across the board.**

TOP 4 STEPPING STONES

Based on participants' inputs, systemic challenges and obstacles that need to be addressed, we organized these into four categories and compiled specific recommendations for progress.

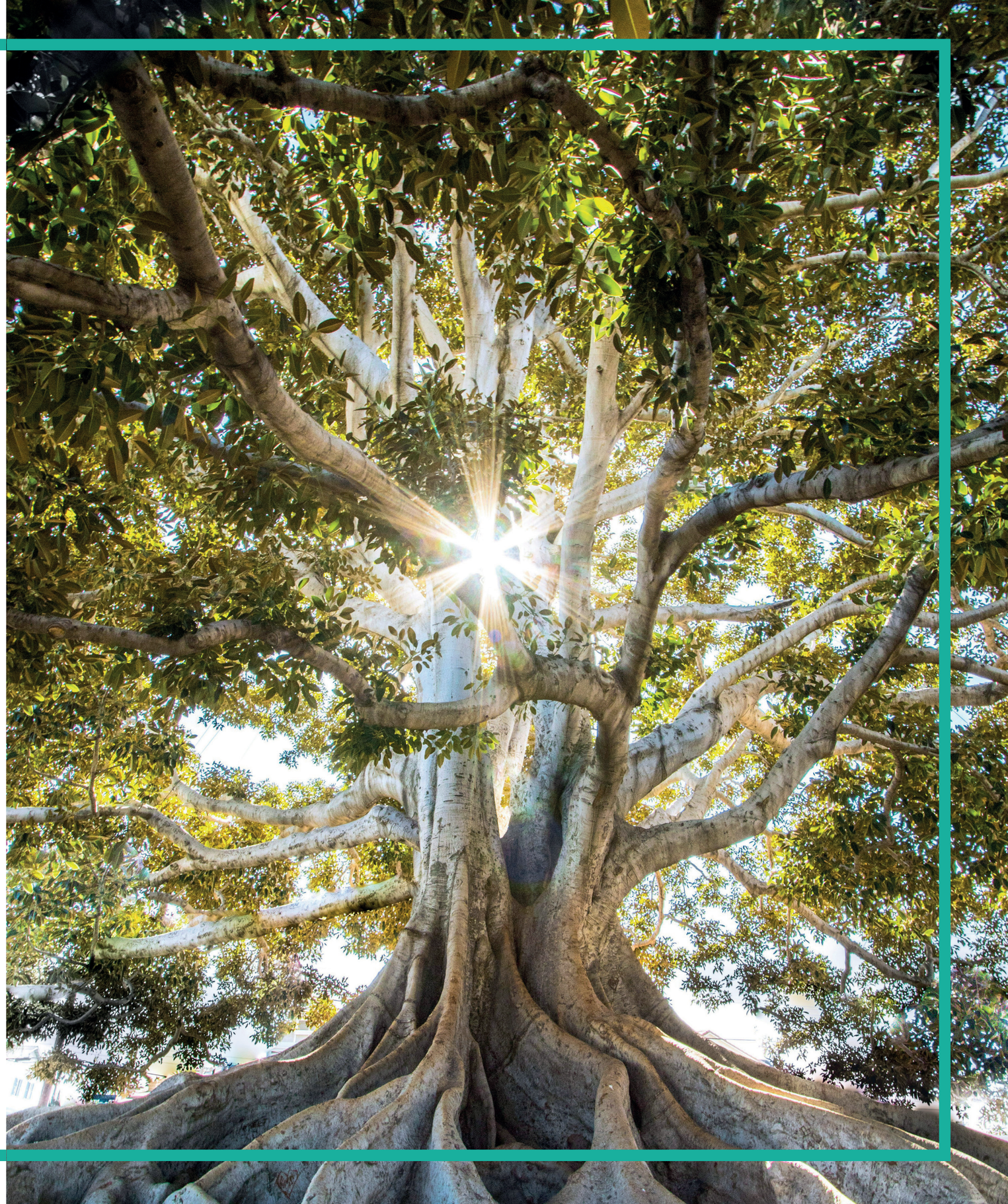
2024 marks the first edition of this report, which is going to be published on a yearly basis to monitor changes in priorities, their development over time and the progress achieved.



01

Top 5 Priorities

In this first section of the report, we turn our focus to the top 5 priorities identified by experts as essential for addressing the ecological and social challenges of 2024. These priorities have emerged as pivotal focal points demanding immediate attention and concerted action. Here, we delve into each priority, examining its current state of maturity, underlying complexities, and implications for different stakeholders to work towards a more resilient and equitable future for our planet and society.



TOP 1

PRIORITY

Protect Biodiversity and Ecosystems

In the face of escalating environmental challenges, study participants have unanimously placed the protection of biodiversity and ecosystems at the forefront of their concerns. This imperative goes beyond simple conservation efforts; it is about halting further damage and initiating the recovery of Earth's crucial natural environments. Protecting the vast array of species and recognizing the interconnectedness of all life are essential steps in this process.

The collective assessment of **our progress in this domain stands at a modest 2.1 out of 5,** highlighting the early stages of our efforts to protect our planet's biodiversity and the wide gap that exists between awareness and meaningful action. This calls for a robust strategy that not only focuses on preserving ecosystems but also tackles systemic challenges to foster a sustainable future. Such an approach is vital not just for biodiversity's sake but for the health and well-being of future generations, marking a critical path towards sustainable development and climate resilience.

Critical Checkpoints

The study illuminates eight key obstacles impeding progress in this vital area. Half of these challenges are systemic, echoing broader themes across our discussions, and will be examined in their own context. The remaining four are unique to this topic, spotlighting specific areas where focused efforts can drive meaningful change.

Systemic Challenges at Play

1. Education and Awareness

Many individuals and stakeholders lack a comprehensive understanding of biodiversity and its importance (and its interconnection with climate issues), leading to apathy or insufficient action towards conservation efforts.

→ See Closing the Sustainability Education Divide

2. Incentives and Regulation

The absence of robust regulations and clear incentives, alongside gaps in enforcing legal requirements, significantly hampers our fight against biodiversity loss.

→ See Strengthening the (incentive and) regulation framework

3. Finance and Pricing Externalities

Our current financial models often overlook the environmental costs of production, failing to incorporate the true value of biodiversity. This oversight encourages practices that seek profit at the expense of ecological health.

→ See Redefining Value

4. Governance and Signal for Change

The existing global governance frameworks are inadequate to address the cross-border impacts of biodiversity loss, often hindered by corporate interests.

→ See Reforming global, political, and corporate Governance

Zooming in: Unique Challenges to tackle

- **Elevating Biodiversity's Profile**

Despite its critical importance, biodiversity conservation frequently finds itself in the shadow of climate change debates, resulting in less visibility, funding, and action dedicated to combating biodiversity loss.

- **Advancing Restoration Techniques and Enhancing Data Transparency**

The current shortfall in advanced methodologies for ecosystem restoration, especially in marine settings, presents a critical obstacle. The difficulties in accessing vital data and ensuring its transparency hinder effective collaboration and informed decision-making.

- **Clarifying Goals and Measuring Success**

The lack of explicit targets (e.g., soil health) and robust mechanisms for tracking progress complicates the ability to gauge advancements and enforce accountability in biodiversity conservation

INSPIRATION FOCUS

World Living Soil Forum

With its second edition in 2024, this international forum aims to bring together researchers, experts, public institutions, journalists, trade associations and companies from the Food & Beverage industry for two days of conferences, round tables, masterclasses, and workshops.

Its goal is to bring all the people committed to soil regeneration together (incl. project owners, companies in the sector, banks, insurance companies and institutions), share initiatives that work financially, socially and in taste and that they can be scaled up. It also aims to create bridges between Science, Innovation, and realities of the field and gather science based KPIs and methodologies to champion soil health.

IF I HAD A MAGIC WAND, I WOULD...

"Everyone should work in a farm once in their life and understand what it means to produce their food" -

LUDOVIC VINCENT
CEO of BIODEME

initiatives. Contrarily to carbon related KPIs, the other barrier lies in the difficulty to monitor comparable indicators from one organization or country to another. Moreover, the issue is also multi-geographical with specific issues to tackle that differ from a country or even region: for example, severe droughts in Argentina, floods in Brazil, or mountainous topography in China.

• Fostering cross-sector Collaboration for Biodiversity Collaboration

The entrenched habit of working within sector-specific silos and outdated legal frameworks obstructs the adoption of unified and comprehensive strategies for preserving biodiversity.

> We need to create collaboration between different sectors: for example, forestry and energy or agriculture and aquaculture.
> We need to think multidimensionally."

AZADEH FARAJPOUR
Founder of betterSoil for a better world
Associate member of the Club of Rome

Top 6 Practical Recommendations for Action and Solutions

Based on insights from study participants, this list represents the top 5 actionable steps we need to embrace. It's a straightforward guide to tackling biodiversity loss and ecosystem degradation, highlighting the critical areas where our collective efforts can drive meaningful change.

1. Cease Deforestation and Start Ecosystem Restoration

Immediately halt the clearing of forests and initiate comprehensive ecosystem restoration efforts to protect biodiversity and enhance climate resilience.

On top of halting imported deforestation (for products such as cocoa, coffee, palm oil, and timber), it is crucial to promote renaturation programs by financially supporting specialized entities in ecological restoration efforts (environmental engineering) for targeted renaturations. Additionally, efforts should be made to conserve areas of ecological interest by acquiring and setting aside wetlands, forests, natural grasslands, marine floors, etc., for preservation.

2. Promote Regenerative Agricultural Practices

Adopt farming methods that rejuvenate the earth, improving soil health and ecosystem vitality.

• Financially Support Agroforestry Adoption

Provide economic incentives, such as minimum revenue guarantees, to encourage farmers to shift towards sustainable agroforestry practices. As argued by Elisabeth Whitlow, Executive Director at Regenerative Organic Alliance, we need to "*demonstrate the benefits, to showcase the new world model for regenerative organic agriculture by bringing farmers to the stage and letting agriculture take the seat at the table".*

• Overcoming Habits and Cultural Barriers

in many countries for example, a "clean" field is one where there is nothing but vines. Conversely, a field with legumes has long been considered "unfit". To change this view, it was necessary to raise awareness and provide training, which can take time. On the other hand, there are areas where this has changed radically: in Cognac, for example, inter-rows of leguminous plants are now part of the AOC specifications.

3. Increase and Enforce Protected Areas, taking active steps to cut pollution and rehabilitate natural habitats.

Biodiversity reserves are crucial sanctuaries for species and habitats. Despite their limited overall area, nature reserves and parks hold a significant portion of the world's genetic, species, and ecosystem diversity, playing a key role in conserving and sustaining numerous species. However, it's essential to expand these protected areas to ensure ecological continuity, genetic diversity, and the survival of rich animal and plant populations. Additionally, reserves act as backup solutions for restoring vital species to natural cycles, such as marine reserves aiding overfished populations critical to both ecosystem and human survival

4. Implement Sustainable Fishing Practices and regulations to prevent overfishing, habitat destruction, and bycatch in marine and freshwater ecosystems.

5. Foster Community-Led Conservation Initiatives:

Engage local and Indigenous communities in conservation efforts, leveraging their traditional knowledge for more effective biodiversity protection.

6. Prioritize Soil Health for Ecosystem Stability:

> *40-50 years ago, soil was seen as a means of producing food. Farmers are starting to think differently and see soil as a friend or partner, because without soil, we as humans cannot exist. This problem has an impact on billions of people as more than 95% of our food depends on soil (FAO, 2022.. Without soil, we cannot survive."*

AZADEH FARAJPOUR
Founder of betterSoil for a better world
Associate member of the Club of Rome

IF I HAD A MAGIC WAND, I WOULD...

"I would build a global coalition with Indigenous partners to transfer capital and resources into the nature-critical expertise of Indigenous and Traditional rainforest peoples. Humanity ignores their expertise at our peril. We are the beneficiaries of their expertise. We must flip the script, change the colonial paradigm."

JONATHAN JENNINGS
CEO of Equiom Group

TOP 2

PRIORITY

Accelerate Energy Transition and Reduce Fossil Fuel Dependence

In the last Intergovernmental Panel on Climate Change (IPCC) report published in 2023 (AR6., scientists stressed the consensus that limiting global heating to 1.5°C to contain worst-case climate change scenarios is only possible with the **constraint of fossil fuel production.** The summary for policymakers of this IPCC report states to **stop new fossil fuel projects, phase down existing polluting projects**, and **put renewable energy access into hyperdrive**. Despite that, fossil fuels continue to receive significant public and private funding. As indicated by several participants of the study, the profits made by oil companies are a perfect illustration of this phenomenon.

Feedback provided by the study's participants suggests that our progress in this domain stands at a moderate **2.5 out of 5** highlighting that immediate global efforts are required to phase out fossil fuel extraction as fossil fuel consumption stands as the **primary driver of climate change**. Experts consulted for the study insisted on the fact that the transition requires both **ending reliance on fossil fuels** and **accelerating efforts towards energy sobriety and renewable energy adoption**.

Critical Checkpoints

According to the feedback received from the experts solicited, two specific barriers and four systemic barriers stand out regarding accelerating energy transition and reducing fossil fuel dependence.

Systemic Challenges at Play

1. Short-term Profit seeking and lack of financial investment

Actual economic models favor short-term gains, discouraging efforts to transition away from fossil fuels. Insufficient financial investments pose significant challenges. According to experts consulted, financial institutions prioritize fossil fuel investments due to perceived lower risk and higher financial returns. Limited funding and investment in renewable energy projects obstruct their scalability and adoption.

→ *See Redefining value*

2. Need for international cooperation

One of the risks identified by the contributors to the study is that geopolitical tensions and alliances can interfere with international cooperation on the transition to renewable energies. Additionally, countries that are heavily dependent on fossil fuels may hold back the transition to more sustainable energies because of short-term economic and strategic interests.

→ *See Reforming Global, Political and Corporate Governance*

3. Influence of Fossil Fuel Lobbying

Observations shared by some participants underscore that fossil fuel companies exert significant political and economic influence through lobbying and campaign contributions. One contributor took the example of COP28 in Dubai, where if fossil fuel lobbyists represented one country, they would have had the third largest delegation (with 2,456 accredited representatives). Some participants perceive that fossil fuel companies have the power to delay policy changes and investments towards renewable energy alternatives and phasing out of fossil fuels.

→ *See Reforming Global, Political and Corporate Governance*

4. Educational and Awareness

As with other issues linked to the ecological and social emergency, the contributors highlighted the need to educate and raise awareness. In fact, if the link made by IPCC scientists between fossil fuels and climate change is not understood on a large scale, this leads to resistance to change.

→ *See Closing the Sustainability Education Divide*

Zooming in: Unique Challenges to tackle

• Resistance to Change and Acceptance

Existing business models rely heavily on fossil fuels, posing challenges for companies to adapt. Indeed, fossil fuels have been the primary source of energy for centuries, and many industries have built their infrastructure and operations around them. Moreover, fossil fuels have traditionally been cheaper and more readily available than alternative energy sources and businesses often prioritize cost efficiency. From participant insights, societal norms and entrenched practices make it challenging to shift away from fossil fuels, even when alternatives exist.

• Country-specific Challenges

Achieving a sustainable energy transition on a global scale requires tailored strategies that consider each nation's socio-economic context, energy infrastructure, and geopolitical dynamics. Indeed, contributors underlined that accelerating the energy transition and reducing fossil fuel dependence present unique challenges for each country. Through participants feedback, an analysis can be made by differentiating the challenges faced by countries in the North, which need adapted power grids, promotion of renewable energy projects and skills to implement them, and countries from the Global South, that have a lower technology adoption capacity, planning and financing.

Top 6 Practical Recommendations for Action and Solution

The solutions identified by the contributors aim to address fossil fuel dependence and energy transition through policy changes, education, and global cooperation.

1. Develop a Stricter Regulatory Approach regarding Fossil Fuel Extraction

Several contributors have mentioned regulation and corporate accountability as a necessity to drive forward the energy transition. Overall, the idea shared by the participants is to establish a legal framework to hold companies accountable for fossil fuel extraction activities, fostering environmental responsibility. Different participants suggested the idea of establishing a global treaty like the Montreal Protocol to mandate a firm timeline for phasing out fossil fuels, prioritize ecological and social well-being in economic planning, and choose neutral locations for international climate negotiations. Other solutions proposed are to support carbon border tax mechanisms, raise taxes on oil and gas companies, and implement measures to reduce private vehicle weight and power, as well as impose quotas on air travel. To monitor progress in energy transition, some participants thought about implementing regular and precise measurements but also to establish standards and certifications for low-tech technologies.

2. Change Financial Market Rules to Accelerate the Energy Transition

Many contributors solicited for the study think that changing financial market rules to incentivize investment in renewable energy and penalize polluting activities represents a powerful tool in the transition towards a more sustainable future. Nonetheless, it requires a coordinated effort between governments, financial institutions, businesses, and civil society to enact and enforce these policies effectively. One solution proposed is to adopt legislation to phase out fossil fuel extraction, prohibit the extraction of new oil deposits and restrict investment in fossil fuels while subsidizing renewable energy. Multiple contributors suggested that stronger constraints were needed.

3. Develop an International Cooperation focused on Energy

Regarding energy production, international solidarity is needed to transition away from fossil fuels while fostering a worldwide consensus on realistic renewable energy development. One contributor quoted the words of Sheikh Zaki Yamani, former Saudi oil minister: *"The Stone Age did not end for lack of stones, and the Oil Age will not end for lack of oil"*. In other words, to tackle this issue, global and regional coordination is necessary.

4. Develop Energy Efficiency and Sobriety

Develop energy sobriety initiatives like energy-efficient equipment is essential to decrease energy usage and support behavioral changes. Some contributors also mentioned the importance of innovation and research in the energy field to improve renewable energy yields, decrease costs, and mitigate risks.

> The countries lagging furthest behind in the energy transition today could be the most advanced in 5 years' time, notably the United States, China and Germany".
>
> **CHRISTOPHER GUÉRIN**
> CEO of Nexans

5. Develop Education and Awareness in particular around Low-tech Solutions

Based on participant feedback, it would be interesting to integrate low-tech modules into educational programs to raise awareness among younger generations. Another solution would be to share success stories and case studies to inspire people. Finally, advocacy for low-tech-friendly policies and regulations could be done through lobbying efforts.

6. Continue the Research regarding Carbon Capture and Storage (CCS) to Store as much Carbon as possible

IF I HAD A MAGIC WAND, I WOULD...

"... create a VAT-like tax on any fossil fuel extracted from the ground."

OLIVIER RAYBAUD
Managing Director chez SWEN Capital Partners

IF I HAD A MAGIC WAND, I WOULD...

"...remove all fossil fuel subsidies from one day to the next and will redistribute the funding to those most in need. "

TOP 3

PRIORITY

Reinforce Resilience and Adaptation to Climate Change

For decades, crucial targets for climate mitigation have gone unmet, and the consequences of global warming are already tangible worldwide. According to the Intergovernmental Panel on Climate Change (IPCC), the Earth has experienced approximately +1.1°C of warming since 1850-1900. **In this respect, reinforcing resilience and adaptation to climate change needs to be made a top priority. As indicated by several experts, we collectively need to realize** what adaptation to climate change means and how much it would cost. Thinking about adaptation to climate change allows us to ask ourselves some essential questions, as different participants mentioned: What lands to protect first? What about sewage, electric infrastructures, nuclear plants? What would acidification mean for our oceans and what about rising ocean temperatures? How will we be able to make people move to higher grounds? What is the cost of replacing all these infrastructures?

Feedback provided by the study's participants suggests that **our progress in this domain stands at a moderate 2.3 out of 5**, highlighting the need to define priorities to ensure the livability of our planet with temperatures elevated by +2°/+3° for as many countries and people as possible. The conclusion is unanimous: urgent and concrete action is required to enhance the resilience of our global systems - territorial, economic, social, political, and financial. Participants also stressed the need for collective action and holistic solutions - individuals, associations, companies, and governments.

Critical Checkpoints

According to the feedback received from the experts solicited, four specific barriers and two systemic barriers stand out regarding resilience and adaptation to climate change.

Systemic Challenges at Play

1. Lack of Investment

Adapting to global warming requires substantial investment to adapt our infrastructures, territories, value chains, and so on. The question of financing is often a brake on the ambition needed to work on adaptation, while financially, as well as humanly, the sooner we start working on the subject, the better and the least costly. The European Environment Agency reports that weather and climate-related events caused economic losses surpassing €560 billion in the 27 EU Member States from 1980 to 2021. To limit global temperature increase to 1.5°C, estimated adaptation investments are approximately €40 billion annually. It is €80-120 billion per year with a 2°C temperature rise and €175-200 billion per year if temperatures increase by 3-4°C.

→ *See Redefining value*

2. Lack of Coordination between Governments and Complexity of Systemic Changes

Countries managed to coordinate on the reduction of greenhouse gases with the Paris Agreement during COP21 in 2015. It is now necessary to coordinate adaptation to climate change. According to the contributors, the challenges of coordination and governance, political will, bureaucratic hurdles, and the complexity of systemic changes, all contribute to delays in policy development and difficulties in mobilizing resources.

→ *See Reforming global, political, and corporate Governance*

Zooming in: Unique Challenges to tackle

• **Building a Global and long-term Vision**

As with mitigation, adaptation to global warming requires a cross-sectoral vision and above all long-term projects to adapt our infrastructures for example or our food and economic systems. The contributors highlight the example of the agricultural sector, at the crossroads of a dual transition both to mitigate its impact on climate and to adapt to its warming. On a company scale, as mentioned by multiple stakeholders, companies are beginning to fear for their supply chain as it is directly affected by climate change. The impact is huge as they can no longer sell anything due to a lack of adaptation.

• **Educating the Public and raising Awareness about the Severity of Climate Change**

The consequences of climate change are often downplayed or seen as something that will happen in a distant future by general media and companies. The viewpoints of study participants underscore that the scientific facts need to be shared on a global scale for people and companies to realize the impact of climate change on our health and on the various systems that underpin human activity but also the urgency to adapt. According to a top executive, the rising sea level is a

critical issue that needs to be addressed urgently. It could lead to problems like putting ports, infrastructures, and the global trade system out of service. For instance, scientists assert that Miami will be 60% under water by the year 2060.

• Improving Transparency for Individuals to make Environmentally Conscious Choices

The perspectives offered by the study's participants illustrate that consumers' lack of information makes them vulnerable to various greenwashing attempts and prevents them from adopting more resilient lifestyle practices.

• Insufficient Scientific Standards in the use of Monitoring, Reporting, and Verification (MRV) Systems

According to experts that have participated in the study, it is vital that scientific standards underpin every decision taken in favor of adaptation. Indeed, MRV systems help to ensure transparency, accountability, and reliability.

Top 5 Practical recommendations for action and solutions

The priority actions and solutions identified encompass a range of strategies, including preparing cities for extreme weather conditions, adapting agriculture and food supply chain, encouraging investments and building a political and public commitment.

1. Prepare Cities for Extreme Weather Conditions

Contributors of the study thought about several solutions that already exist on a city scale. For instance, urban planning can include considerations for adapting to global warming. In the near future, it is necessary to limit constructions in high-risk areas. In addition, buildings need to be constructed with climate resilience in mind to resist extreme weather events. Campaigns can be developed to address responses to heatwaves, improve water retention, and enhance fire management strategies. Many solutions already exist. Regarding heat waves, cities can for instance increase green spaces to mitigate the effects of heat.

2. Adapt Agriculture and the Food Supply Chain, from Producers to Consumers

Experts interviewed highlighted how crucial it is to promote sustainable and resilient agricultural methods like organic farming, agroecology, and agroforestry which enable the resilience of territories that do not impact biodiversity, soil, or climate. It is important for the agricultural sector to anticipate extreme weather events and meteorological disruptions in advance to limit human and economic damage. The soil, in particular, is strategic. According to the United Nations, *"between 2015 and 2019, the world lost at least 100 million hectares of healthy and productive land every year, affecting food and water security globally. Human activities, intensified by climate change, are the main drivers of land degradation, directly affecting 1.3 billion people"*. But the good news is that a lot of solutions provided by science, studies and institutions already exist. Several experts interviewed highlighted the gap between the theory and the practice. And therefore, the urge of putting theory into practice. Additionally, consumers need to be informed about the distinctions, benefits, and constraints of different agricultural practices.

3. Adapt the Tax System and strengthen the Insurance System

According to participant inputs, a solution can be to reduce the risk for investors by establishing public-private partnerships aimed at mitigating climate-related risks. Another potential solution can be to modify the tax structure to incentivize investments in sustainable and resilient endeavors. To take the example of France, at the beginning of 2024, more than one hundred local authorities found themselves without insurance due to the increase in risks, particularly climatic ones, according to the Association of French Mayors and Chairs of Inter-municipal Bodies. *"It is likely that the balance of the insurance system in France, in its current configuration, will not be sustainable, given the increase in the number of claims"*, as the High Council for the Climate reminded in its latest report. It is essential to build a viable model to guarantee access to public goods and services for as many people as possible.

4. Build a Political and Public Commitment

A solution that once again appears essential is to raise awareness among the public and political leaders to foster mutual encouragement and action through democratic channels. Indeed, there are already successful adaptation models and existing support for transitioning to more resilient practices. Contributors indicate that it is necessary to require clear communication and engagement of opinion leaders to limit possible greenwashing and have a maximum of people aware of the adaptation to climate change we need but also of the irreversible effects we can't control (migration, sea level rise, ocean acidification).

5. Equipping Organizations with Tools to Assess and manage Climate Risks

To manage the risks of adapting to climate change as effectively as possible, organizations need to assess climate scenarios and therefore climate risks. This requires the use of dedicated tools and advanced technology, for example:

> by building prediction models for floods or weather to minimize the risks and the cost of climate change"

JEAN-PHILIPPE COURTOIS
Executive Vice President and President, National Transformation Partnerships at Microsoft Corp.

IF I HAD A MAGIC WAND, I WOULD...

"...transfer the authority, influence and decision-making for financing to local and regional levels, ensuring the development of sustainable and inclusive solutions"

TOP 4

PRIORITY

Reduce Social Inequalities

Contributions from study participants rank social inequalities as their top 4 priority to be addressed, with **a perceived level of maturity of 2.2 out of 5**. In other words, the issue behind social inequalities refers to disparities and unfair distribution of resources, opportunities, and essential services among individuals and communities. It involves ensuring access to crucial services for everyone while respecting natural ecosystems.

> We cannot make the transition without having resolved social issues. Yet, climate change exacerbates inequalities.This requires major societal changes such as reforming our tax system."

BRUNE POIRSON
Former Secretary of State at the French Ministry of Ecological Transition and Director of Sustainable Development at Accor

Climate change is recognized as a factor exacerbating social inequalities, disproportionately affecting vulnerable communities, and widening existing disparities. These two topics are inextricably linked leading to the conclusion that there is no climate transition without social justice.

Critical Checkpoints

The study highlights six key barriers preventing social inequalities from being tackled properly. Two of these challenges are systemic and will be examined in their own context. The remaining four are subject-specific.

Systemic Challenges at Play

1. Education and Awareness

The recurring challenge is the lack of awareness and information regarding the importance of addressing social inequalities as weak as the social justice and climate change nexus. This obstacle can also lead to discriminatory practices (hiring, education, social interactions) which amplifies the initial problem of inequalities amongst people, genders and communities.

→ See Closing the Sustainability Education Divide

2. Finance and Pricing Externalities

Our current financial models prioritize indicators based on economic growth rather than on access to basic infrastructures and services provided to society. Shifting this perspective is crucial for integrating environmental considerations into social equalities initiatives.

→ See Redefining Value

Zooming in: Unique Challenges to tackle

• Competition over Cooperation

The market-oriented system promoting particular interests slows solidarity and collaborative efforts to address and promote social equalities. Some experts, including Carine de Boissezon, Chief Impact Officer at EDF, suggested that we needed a "new social contract" to generate more solidarity and a "new narrative around well being and no longer around social status". Overcoming resistance from established interests prevents meaningful social progress. In addition, essential themes of living well, eating well, and transporting well compete with economic interests and are thus put on the back burner.

• Allowance and lack of Financial Resources

Limited financial resources allocated by governments and businesses indicate a challenge in balancing economic considerations with Social Inequalities issues. This encompasses challenges in funding initiatives and programs aimed at promoting equitable access to resources and opportunities.

> Equitable access to healthcare remains a challenge, necessitating more inclusive resources and interventions that cater to communities' diverse needs, anytime and anywhere."

ANIL SONI
CEO of the WHO Foundation

• Structural Inequalities

Deep-rooted structural inequalities, such as unequal access to resources and opportunities, are identified as significant barriers by our respondents. Limited economic mobility, especially for marginalized communities, is also identified as a challenge. Breaking down barriers to economic advancement, such as access to credit and job opportunities, is crucial for addressing social inequalities. Beyond strictly financial inequalities, one expert also mentioned that we need to look at territorial disparities, by placing greater trust in mayors and encouraging industrialization. Galith Kenan, Director of the Jane Goodall France Institute, also noted the "importance of women empowerment".

• Administrative Complexity

The complexity of administrative processes is highlighted as a barrier, potentially impeding efficient and timely implementation of policies and initiatives aimed at reducing social inequalities.

Top 2 Practical Recommendations for Action and Solutions

1. Provide Universal Access to Essential Services

Adopt the principles of Donut Economics (K. Raworth) at international, national and local levels to design policies that promote sustainability. Participants identified the need to rethink economic models to include environmental considerations, while ensuring social foundations which are essential for a safe and just lifestyle (incl. access to energy, education, health, decent housing and security).

• Combat Energy Precarity

Access to (low carbon) energy constitutes one of the essential services that all individuals should have access to. To do so, communication on fuel poverty coupled with professional training for energy renovation and increased grants can promote energy efficiency, as well as reducing living costs for low-income households.

• Encourage Access to Nutritious Food

In addition to access to food for all, some respondents have suggested the need of a "Healthy Eating Voucher" program to ensure access to nutritious food for all socio-economic groups, especially the underprivileged. This includes education on plant-based diets and therefore promotes less carbon-intensive food (with less meat and fish).

• Develop Inclusive Transportation

Develop and expand access to affordable, decarbonized public transportation, ensuring it serves and is accessible to all, including rural and economically disadvantaged areas.

IF I HAD A MAGIC WAND, I WOULD...

"...like to see environmental issues become a lever for emancipation. I'm so pleased to see women from unprivileged neighborhoods starting up entrepreneurial projects. It's part of women's right to shape their own destiny, and to do so in harmony with the environment."

• Improve Access to Health

Respondents also highlighted the need for communities to globally access to health. Aside from global sanitary issues countries faced during the pandemic, respondents insisted on the need to reposition health at the center of preoccupations but also to address the evolving landscape and foster meaningful improvements in healthcare outcomes worldwide.

2. Encourage Redistribution Policies between Countries, within Countries and within Companies

Redirect economic flows to find the resources for socio-ecological transition amongst the wealthiest countries. All in all, the end is to narrow the gap between the global North and South recognising the Common But Differentiated Responsibilities (CBDR). As stated by some experts, minimum revenue and socialized services can contribute to fair redistribution. At the company level, the value-sharing within stakeholders is also a topic to address. Some participants have argued that to combat social inequalities in companies, the priority should be to raise the lowest wages instead of enriching those with the highest wages through employer's matching contribution for example as it already favors the wealthiest.

TOP 5

PRIORITY

Water Resources

(scarcity and pollution)

Based on study participants, the protection of water resources has been ranked as the fifth priority topic to focus on, **with a perceived maturity of 1.6 out of 5**, which is the lowest among our five priorities and therefore in line with its ranking in last position.

The issues behind water resources encompasses various aspects, including environmental pollution and water scarcity. First, it is worth remembering that **freshwater change is one of the nine planetary boundaries and as six of them have already been crossed**, it underlines the urgency to act.

Regarding water pollution and its impact on human health and biodiversity, it is directly impacted to another planetary boundary (i.e., novel entities). Among others, microplastics, originating from various sources including textiles, threaten ecosystems worldwide as well as CO2 and pesticides. The urgent need to reduce pollution is emphasized, transitioning to a circular, water-smart society to safeguard the planet's health.

As for water scarcity, the allocation and protection of water resources are essential to avoid conflict of use and ensure access for vulnerable populations. Clean water scarcity threatens ecosystems and human survival, necessitating concerted efforts to secure ecological flows and access to potable water.

Critical Checkpoints

The study brings our seven key obstacles hampering progress. Three of these challenges are systemic and will be examined in their own context. The remaining four are water related.

Systemic Challenges at Play

1. Awareness & Education

Lack of education and information about water challenges deters community engagement in finding solutions. The second obstacle identified is the limited understanding of the interconnected nature of environmental challenges, often with an overemphasis on carbon-related issues.

→ *See Closing the Sustainability Education Divide*

2. Lack of Legal Action

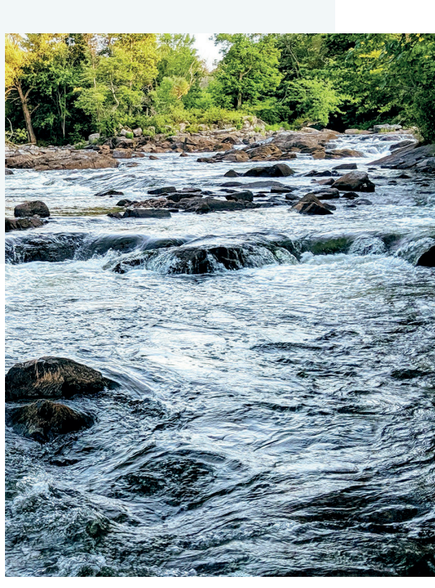
Insufficient awareness (i.e. public understanding) and political backing for environmental initiatives halts policy implementation and public engagement.

→ *See Strengthening the incentive and regulation framework*

3. Financial Constraints

Lack of funding and short-term Return On Investment (ROI) appeal reduces investment in pollution reduction and sustainable practices.

→ *See Redefining Value*



Zooming in: Unique Challenges to tackle

• Lack of Resilience Strategies and Systemic Approach (administrative silos)

Decision-making processes suffer from a lack of systemic thinking and resilience strategies, often confined within administrative silos, hindering comprehensive solutions to environmental problems.

• Strong Industry Lobbies

Influence of certain industries (e.g., chemical, oil and gas companies) as well as the responsibility denial of other industries (e.g., textile) inhibits environmental policy progress. All in all, this constitutes resistance to change.

• Lack of (financial) Resources Allocated

Insufficient resources for waste filtration exacerbate pollution and health risks. In addition, insufficient investment in vulnerable populations leads to a lack of support for technologies addressing the needs of these communities, hindering equitable access to sustainable solutions.

• Inadequate infrastructure

Regions facing water-related issues (i.e., stress regions) lack necessary infrastructure for adopting advanced water management technologies.

IF I HAD A MAGIC WAND, I WOULD...

"... make sure that scientists are more represented in decision-making."
"... introduce a pollution score for companies to evaluate how companies and industries address pollution, allowing informed consumer choices and influencing purchasing decisions."

Top 4 Practical Recommendations for Action and Solutions

Based on insights from participants, this list represents the top 4 actions to put in place to protect water resources, to tackle both water pollution and scarcity.

1. Provide Greater Visibility to Nature-based Solutions (NBS)

Respondents stressed the importance of tools and natural solutions to remedy water scarcity and pollution by respecting and delivering on the water cycle. One way to do so is to publish studies to reach a broader audience and raise awareness for the protection of biodiversity.

2. Invest in Circular Water Management Infrastructures

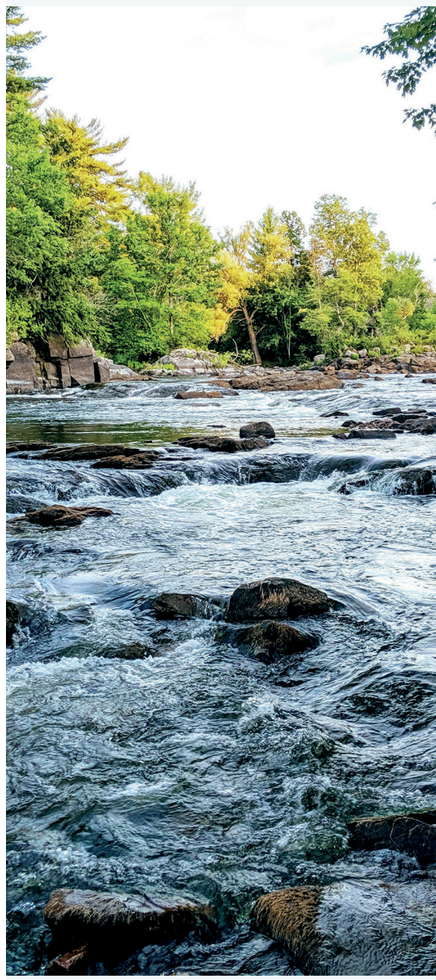
To improve water management, participants have emphasized the need to provide financial support for wastewater treatment systems. The need to advocate for alternative circular water solutions and thus the reuse of water in closed loop systems (incl. the reuse of greywater in buildings and in agriculture) in regulation and building codes has also been shared. Consequently, the aim is to fund decentralized technologies that are scalable, affordable, and deployable in developing countries so that they can empower local communities, ensuring more sustainable and efficient water management.

3. Foster Partnerships and Transparency

Based on participant insights, it is necessary to form partnerships with original equipment manufacturers (OEMs) and major players in the industries (e.g., textile) and cross industries, ensuring visibility, transparency, and collaboration for pollution solutions. In parallel, participants have shared the need to engage with communities facing water-related challenges to ensure solutions that are tailored to their specific needs and are more likely to succeed.

4. Advocate for a more Responsible Waste Management Legislation

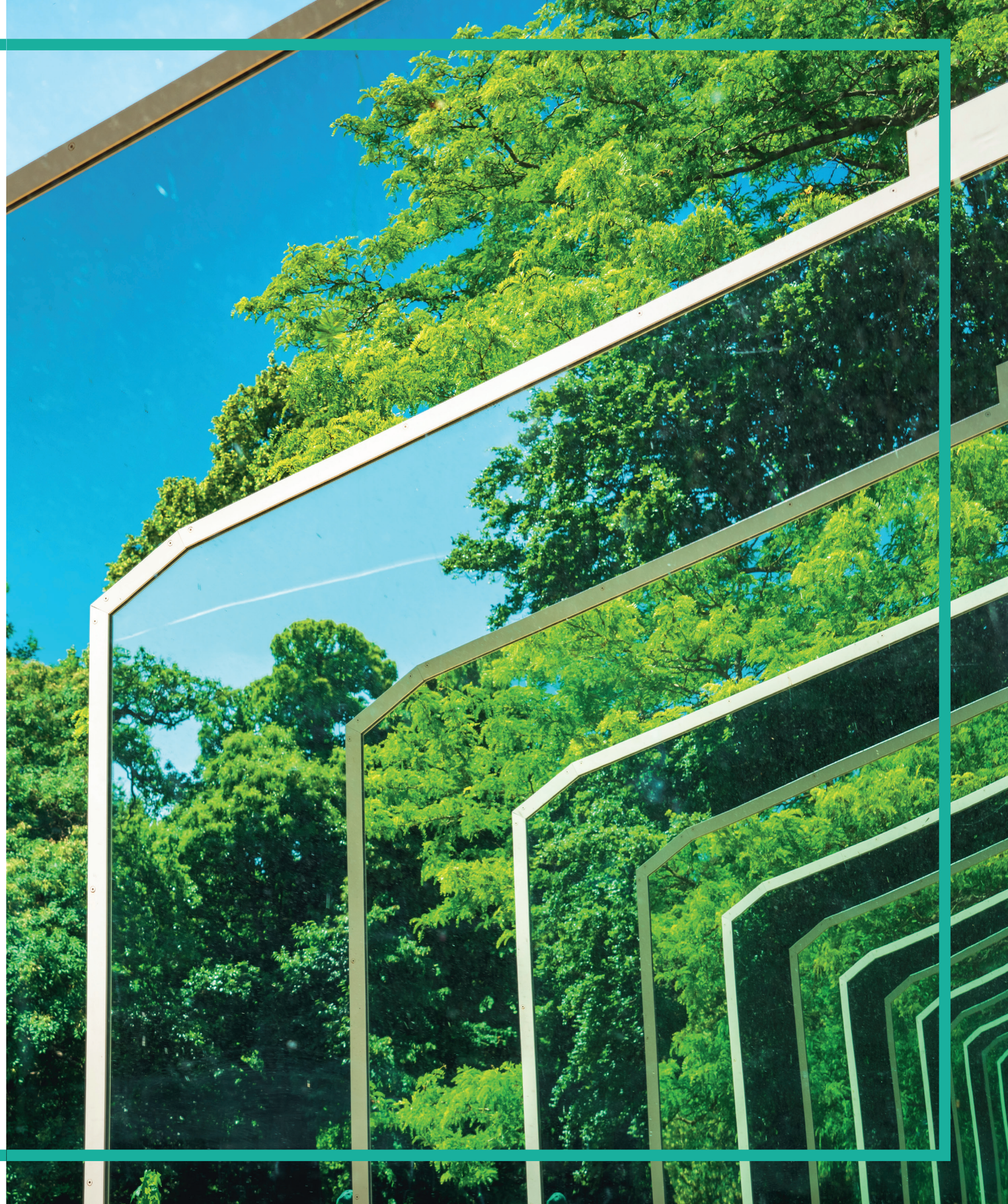
Recommendations shared by our experts are threefold: 1. reduce direct waste disposal in rivers and oceans, emphasizing responsible waste management, 2. advocate for legislation on microplastic filters and wastewater treatment improvement, and 3. implement measures to treat industrial waste before discharging it into water bodies in order to combat water pollution.



02

Systemic Challenges and Stepping Stones

Contributors to the study were asked to identify the inter-connected systemic challenges hindering the scaling up of solutions. Based on their inputs, we outline strategic stepping stones that are essential pathways towards overcoming these systemic obstacles. Through this analysis, stakeholders can gain insights into the complex interaction of systemic factors and paving the way for transformative change.



STEPPING STONE 1

Closing the Sustainability Education Divide

Most of the top priorities identified by our respondents start from the lack of education and awareness on sustainability issues. The main barrier lies in the limited resources, outdated teaching systems and slow adaptation of educational programs. This knowledge gap applies to specific subjects (climate, biodiversity, etc.) but also to a lack of systemic vision of social and environmental issues.

> Way too few people are aware of sustainability holistically"
>
> **RAINER KARCHER**
> Global Head of Sustainability of Allianz Technology.

Moreover, insufficient education and awareness about the severity of climate change among the public perpetuates misconceptions, leading to minimal concern, and the perception of climate action as solely "saving the planet" whilst the aim is in reality to save the living including human beings.

Top 3 Practical Recommendations for Action and Solutions

To overcome this lack of both awareness and education on sustainability issues, the following list highlights the top actionable steps recommended by participants:

ACTION 1 Initiate Ambitious Universal Education Reform for Equity and Access

Guided by the insights gathered, there is a profound recognition of the urgent need to reform education, ensuring it is accessible to everyone, everywhere. The first step in making a significant difference would be to introduce comprehensive education reforms aimed at providing quality education to all individuals, no matter their socio-economic status. This envisioned transformation goes beyond merely adjusting curricula; it is about fundamentally rectifying the imbalances in access to educational resources, opportunities, and achieving equitable outcomes for all.

Such reforms are crucial in addressing the current global challenges in education, where disparities are not just persistent but widening, affecting all countries. By promoting education as a driving force for social change, this transformative process can create opportunities for a fairer and more inclusive society.

ACTION 2 Shape (future) Leaders by integrating Sustainability into Education and Training

Education for current businesses leaders and institutions: It is essential to raise awareness and train current leaders and managers on these issues as tomorrow's decisions are made today. There are many dedicated and specialized training courses on each sustainability subject, but it's harder to find courses that combine the different issues, while maintaining a systemic vision. As put forward by some participants, systems thinking approaches and tools like the Sustainability Fresks should be mandatory for company, institutions and NGO leaders.

Dedicated education and training for young generations as part of all curriculums: Educating the next generation of leaders about the shortcomings of current systems thanks to dedicated educational programs and advocacy is also key. This can be implemented through climate change modules in schools, or through plant-based nutritional curriculum in medical schools for instance. Leading universities should, for instance, change their curriculum to focus on alternative business models.

ACTION 3 Craft Desirable Futures and overcome Sociological and Cultural Obstacles

Much deeper-routed brakes need to be lifted to encourage a cultural shift to promote this socio-ecological transition. We need to work on the desirability of this transition, by creating new imaginaries and ideals. As stated by a certain number of top executives during their interviews, we live in a society where performance and success are defined in a way that is not compatible with planetary boundaries. We value over-consumption. Success is associated with domination, growth and the quest for ever-higher profits. We need to redefine these notions through education and a complete change in contemporary narratives and imaginaries. It's no longer a question of aspiring to the biggest house, the most luxurious car or the most capital. This can be done through the launch of awareness campaigns to make ecological sobriety desirable, cultural training to align values, the promotion of sustainable lifestyles and by sharing success stories and case studies to inspire others (for example. For that matter, contributors highlighted the need for cooperation between communication, creatives, advertising experts, media and journalists to come up with bold programming. Some already exist such as the Purpose Disruptors in the UK. To put it in a nutshell, what came out of multiple interviews, is the need to create desirable futures and stop scaring people each time we bring up climate change.

IF I HAD A MAGIC WAND, I WOULD...

"...reform school and university programs at all ages to train educated, altruistic, compassionate and committed citizens so that they are able to adopt the necessary behavioral change to preserve the habitability of Planet Earth"

STEPPING STONE 2

Strengthening the (incentive and) Regulation Framework

Regulation serves as a fundamental mechanism for guiding the behavior of societal and economic entities towards sustainability. This process involves the establishment of rules and standards by governmental bodies, aimed at ensuring compliance with societal goals in critical areas such as environmental protection, health, and safety. These regulations are essential for fostering an environment where both ecological preservation and social well-being are prioritized.

However, feedback provided by the study's participants suggests the journey toward effective sustainability regulation faces significant barriers. The current regulatory landscape is often spoiled by a lack of comprehensive incentives and enforceable frameworks that can encourage individuals and businesses to prioritize environmental positive impact and social equity. This shortfall manifests in insufficient negative incentives, such as penalties for non-compliance, and a scarcity of positive incentives, like rewards for sustainable practices. Furthermore, the absence of a cohesive international legal framework complicates the enforcement of global sustainability agreements, highlighting a disconnection between objectives and regulations among countries. Indeed, the issue of global harmonization of standards raises questions regarding importations of products from other countries that don't have the same regulations.

Top 3 Practical Recommendations for Action and Solution

ACTION 1 Design Policies with the Impact and Donut Economics Principles in Mind

According to insights from the participants, there is a pivotal call for action to reimagine policy formulation through the perspective of the Donut Economics (K. Raworth), a concept that defends a balance between human prosperity and planetary health. This approach urges both national and local governance structures to innovate and adopt economic models that inherently prioritize sustainability. By integrating Donut Economics principles, policymakers are encouraged to craft strategies that transcend traditional economic frameworks, emphasizing the critical need to safeguard environmental resources while promoting social equity.

ACTION 2 Step up Dissuasive Regulations

> We need to act on incentives but also on constraints: we no longer have the time to work solely on the incentive aspect. We also need to make people understand that it is better to act quickly before it becomes compulsory".
>
> **BARBARA TRACHTE**
> Secretary of State for Economic Transition of the Brussels Government

Participants emphasize the need to initiate a thorough work on tax reform: The tax system dates back to World War II. It coincides today with the financial system as it is organized now, with the prisoner's dilemma and the resulting tragedy of the horizons, that is to say the tendency for decision-makers to prioritize short-term gains over long-term sustainability. Main suggestions focus on ending tax breaks in the most emitting activities and taxing carbon imports, developing a carbon tax at the borders.

Toxic substances and non-compliant products from a social or environmental perspective should no longer be granted access to markets: this type of regulation can discourage companies from producing polluting or environmentally harmful goods. Moreover, according to participants' inputs, accountability and consequences should be reinforced to hold economic actors responsible for their social and environmental impacts (e.g., through fines or suspending their operating licenses).

ACTION 3 Scale up Incentive Regulations

Drawing from participants' observations, incentives regulations could combine tax credits for green investments (reinforcing tax incentives to encourage the adoption of environmentally friendly behaviors); subsidies for renewable energies and other sustainable solutions (solar, wind, or hydroelectric installations, energy renovation such as cool roofing, financial incentive for farmers to adopt pollution reduction measures through programs like agri-environment initiatives) and more robust, science-based ecological certification systems.

Contributors also suggest reinforcing those incentive regulations with reactive policies, such as establishing a fund for environmental damage repairs (an equivalent of loss and damage funds) to react quickly in case of environmental damage.

IF I HAD A MAGIC WAND, I WOULD...

"... implement taxes indexed on impact Key Performance Indicators (KPIs)"

"... change the way money flows: reworking all subsidiaries to reflect nature-positive aims"

STEPPING STONE 3

Reforming Global, Political and Corporate Governance

Drawing from the insights shared by participants, the way our political systems are organized significantly obstructs the path towards ecological transition. This obstruction is multifaceted, rooted in a culture of short-termism and electoral priorities. Additionally, at the international stage, the relentless competition for material production and power exacerbates pressure on natural resources, often to the detriment of environmental sustainability and the well-being of vulnerable communities. As mentioned by different experts interviewed for the study, we are heading towards a geopolitical fragmentation: energy and resource access issues are increasingly leading to confrontations.

The barriers identified by study participants shed light on the specific dynamics at play within national political systems that prevent ecological progress. Economic interests delay the adoption of crucial environmental policies, particularly because of lobbyists and traditional industries relying heavily on non-renewable resources which have considerable influence over policy-making processes. Moreover, a lack of political will, often driven by economic concerns or electoral ambitions, coupled with bureaucratic inertia, creates a stagnation for the promulgation of significant environmental measures. The prioritization of other issues such as economic growth or national security over ecological considerations further complicates the progression of environmental agendas. The problem lies in particular in the confrontation of those issues when they should be treated jointly.

> With current geopolitics, there is a backlash against ESG issues because the focus is to keep the governance in place. On the one hand, politicians are not acting fast enough as they are operating on the basis of incentives. However, as the frequency and intensity of climate events increase, people experience the consequences of climate change, such as extreme weather and heat. As the world grapples with the worsening effects of climate change, impacting quality of life, governments' attitudes are likely to shift due to public pressure."
>
> **HAKAN BULGURLU**
> CEO of Arçelik

Top 3 Practical Recommendations for Action and Solutions

ACTION 1 Reinforce Global Collaboration and Commitment

Study contributors advocate for strengthened worldwide collaboration and a unified strategy to address challenges in sustainability. Some call for the creation of a "Ministry for the Future" (inspired by Kim Stanley Robinson's novel), a global entity overseeing (climate) actions to ensure cohesive and coordinated efforts worldwide. Others suggest the creation of coordination platforms where different stakeholders (governments, NGOs, private sector, local communities) can meet, discuss and coordinate their efforts.

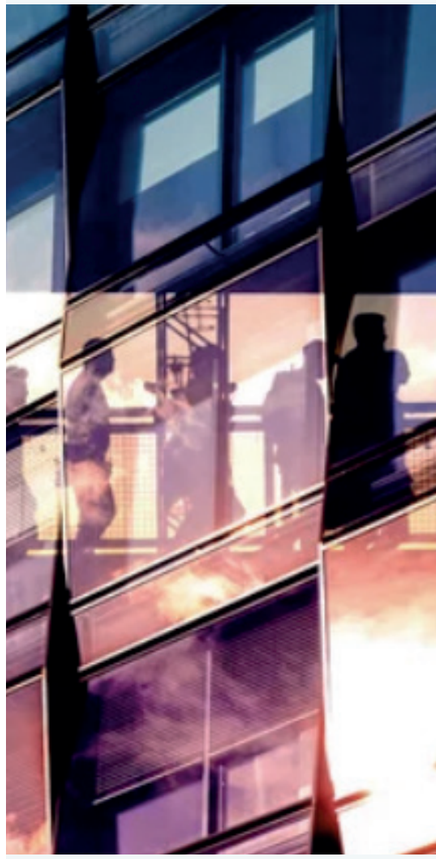
Solutions shared by participants underscore the need to reinforce a Global Treaty similar to the Montreal Protocol to mandate a firm timeline for phasing out fossil fuels. Several suggest the development of a coordinated "Marshall Plan" to accelerate the energy and agricultural transition, scale up circular economy strategies, in particular to tackle microplastics pollution and design out waste.

To foster sustainable transitions in developing countries, a blend of financial instruments and international solidarity is essential. Innovative financial tools (supported by The World Bank and similar stakeholders) need to be implemented to "de-risk" investments and make financial resources available, supporting the shift towards renewable energy for example.

ACTION 2 Strengthen Democracy by fostering Citizen Engagement, Transparency and Accountability

Contributors to the study emphasize the urgent need for legal reforms to enhance transparency and accountability in political processes. They advocate for laws that make decision-making more open to "public scrutiny" and establish firm mechanisms to hold officials accountable for their environmental commitments. The goal is to create a transparent legal framework that not only addresses violations effectively but also diminishes the influence of economic interests by regulating campaign financing and lobbying. Promoting public funding for electoral campaigns is highlighted as a strategy to reduce dependence on private contributions, ensuring that political decisions prioritize public interest, especially in environmental and social matters.

Participants to the study also push toward broadening the democratic landscape to inclusively engage citizens in shaping policies that are sustainable, both socially and environmentally. This vision advocates for the creation of accessible platforms for citizen consultation, ensuring active participation in the



development of policies that harmonize social equity with environmental stewardship. Furthermore, it calls for the implementation of participatory democracy mechanisms, such as citizen juries, to guarantee that the collective decision-making process authentically represents the aspirations of the people. These measures aim to foster a deeper connection between policymakers and the broader community.

ACTION 3 Drive Corporate Governance towards short and long term Sustainable Performance

The need for a paradigm shift in our approach to business is critical.

> We need a number of actors to become aware of their political role. We can all play a role for the common good. I engage in politics when I do business. That's how I've conceived Mirova for the past 10 years."
>
> **PHILIPPE ZAOUATI**
> the CEO of Mirova

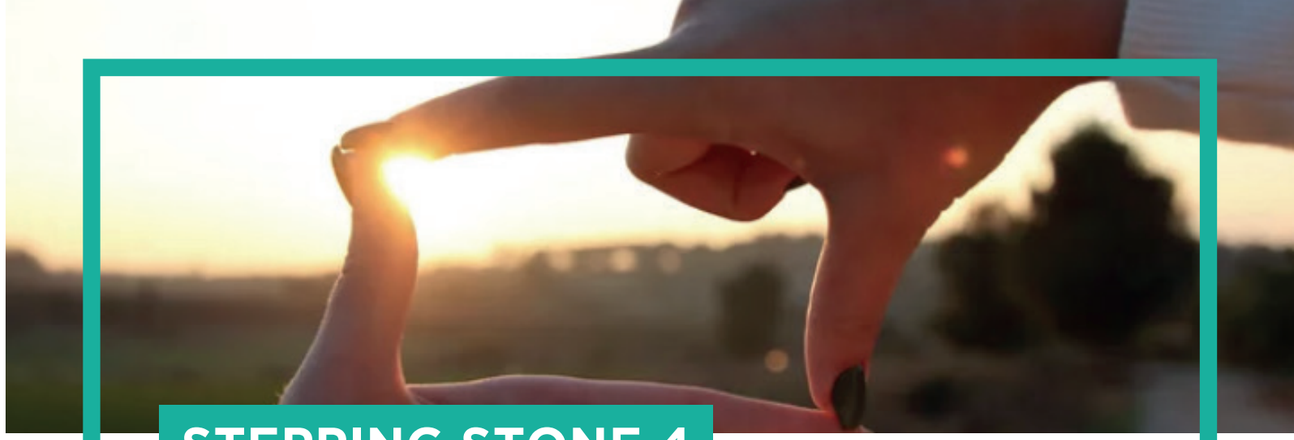
The challenge lies in navigating the complex landscape of contradictory demands, striving to maintain a strategic and political vision amidst a predominant focus on short-term gains and economic concerns.

In the vast majority of companies, the prevailing model focuses on measuring financial materiality for ESG performance. However, embracing the concept of double materiality can shift the governance and management compass of organizations by highlighting both the negative and positive impacts they have on stakeholders. This implies that management teams need to grasp this concept, incorporating it into both the performance management and the strategic planning of the company. Such strategies, typically devised with a three-year outlook, must also account for long-term parameters that only non-financial criteria can capture, including climate change, planetary boundaries, geopolitical shifts, and societal changes.

This means, as several contributors argued, to build bridges between the financial and extra-financial departments and the necessary onboarding of boards in taking their responsibility and challenging business on the need to adopt a broad and long-term approach to their performance.

IF I HAD A MAGIC WAND, I WOULD...

"... engage young people in decision-making processes at different levels to support policy design."



STEPPING STONE 4

Redefining Value

The reluctance to envision a new approach to growth and the deep-rooted reliance on GDP-centric thinking pose significant obstacles to the crucial paradigm shift towards sustainability. According to several participants, we are operating on a 40-year model of infinite growth that nobody wants to question. This obsolete model doesn't question the very definition of growth, whether in terms of value, volume or regeneration. This echoes the findings and concerns expressed by the Club of Rome, an influential think tank known for its groundbreaking report 'The Limits to Growth' published in 1972, which warned about the unsustainable trajectory of global economic growth and resource consumption.

Participants to the study highlight that this resistance manifests itself in tangible barriers that prioritize short-term economic gains, often at the expense of long-term ecological well-being. Some comment that growth isn't inherently bad, but today, it's not just growth; it's a frenzy in pursuit of profit. The financial system's reluctance, particularly in the face of economic concerns and the fear of recession, amplifies the issue. "Back to basics, back to profit" as some have heard recently from their investors.

However, participants insist that, within these challenges lies an opportunity for transformative change. Overcoming these barriers demands a collective openness to explore and demonstrate the tangible benefits of alternative economic models that cultivate long-term well-being for all.

Top 3 Practical Recommendations for Action and Solutions

ACTION 1 Promote Sobriety

> As business people, we do not know how to run and operate a business that sells fewer washing machines. But we also have to understand that it has to happen."
>
> **HAKAN BULGURLU**
> CEO of Arçelik

Government support and budget prioritization should promote sobriety through discouraging the promotion of unnecessary goods and advocating for a simpler lifestyle. As multiple participants

suggested, we need to call everything into question, to rethink the era of abundance in favor of one of scarcity. Global economic transition needs to be portrayed as an opportunity with benefits for players engaging in socially and environmentally exemplary business models.

ACTION 2 Implement New Financial Standards

In the words of various contributors, the “right” mindset is to consider that there are no taboos. We take each financial instrument and try to reinvent them to serve the common good.

New standards for finance with other KPIs should be set up (building on the EU taxonomy, Corporate Sustainability Reporting Directive (CSRD) and Sustainable Finance Disclosure Regulation (SFDR)). This includes true cost accounting that incorporates the true environmental and social costs of products and services, as suggested by Elizabeth Whitlow, Regenerative Director at Regenerative Organic Alliance. For example, revenues from circular activities can be specifically monitored. However, achieving this transformation within a single company presents challenges.

> We need to redefine the notion of value and transform the international financial system accordingly with two aspects: reforming accounting standards and overhauling the mechanisms of financial markets, carrying out a redesign of the public development aid system"
>
> **BRUNE POIRSON**
> Former Secretary of State at the French Ministry of Ecological Transition and Director of Sustainable Development at Accor

Moreover, robust carbon or biodiversity markets are needed to incentivize conservation efforts. Finally, participants underscore the importance of encouraging investment in sustainable and resilient activities, for example by mitigating the risk for investors through public-private partnerships for adaptation to climate change.

ACTION 3 Reinvent Growth Definition

Insights gathered from participants highlight the need to embrace new growth definitions, for example those inspired by the wellbeing movement in countries such as Finland, Scotland, Iceland or New Zealand. Academic work is needed to redefine what growth is and how to measure it while adopting alternative economic indicators like happiness that account for environmental and social well-being. The “social and environmental equation” needs to be explored and solved. The key challenge is how nations can enable a balanced model of people and the planet, in other words squaring the circle of the triple bottom line.It could start by encouraging smaller groups to test new models or implement community empowerment programs for enhancing economic self-sufficiency.

IF I HAD A MAGIC WAND, I WOULD...

“...change financial models, because they are the cause of many problems. "People do not work like you expect but like you inspect". In other words, the way performance is assessed influences performance itself. If it wasn't just profit that was considered, a lot would change.”

CHRISTOPHER GUÉRIN
CEO of Nexans

Food for Thoughts: Best Practices implemented at Nexans

1. Reducing the Number of Customers

In the context of the Covid years, and in order to maximize environmental footprint, this strategic decision to drastically reduce the number of clients so as to focus on the most virtuous ones was carried out by the top management. To conduct this analysis, a customer scoring system was created to evaluate their return in relation to the capital employed, and in relation to the amount of carbon employed.

2. Achieving a Dual Financial and Environmental Target

Business units are expected to increase profitability (and not growth), while reducing their carbon footprint. Growth is permitted if, and only if, they adopt a circular economy approach (e.g., polymers and recycled metal).

3. Allocation of Investor Time based on Impact Scoring

Like customers, investors are scored on the basis of impact criteria, and the score makes it possible to allocate more time to the most virtuous with the CEO, and vice versa.

4. Implementation of an Internal Carbon Tax

Beyond certain thresholds (e.g., geographical perimeter of production for factories) an internal carbon tax is applied.

5. Allocation of Carbon Quotas

Carbon quotas with an allocation by entity, and taxation in the event of overruns, have been introduced.

IF I HAD A MAGIC WAND, I WOULD...

"... dream of giving a new meaning to the purely financial "ROI" (return on investment), so that it becomes a "return on impact". We need to invent a different kind of payback."

SANDRINE SOMMER
Chief Sustainability Officer of Moët Hennessy

Conclusion

Earth Action Report: the Path Forward

Dear executives, directors, opinion leaders, investors, media, policymakers and citizens,

This first edition of our Earth Action Report, engaging with over 100 stakeholders and experts within the ChangeNOW community, aims to provide you with insights, spark discussions and inform decisions.

It identifies **protection of biodiversity & ecosystems and the energy transition** as top priorities for 2024 for over 43% of respondents. One of the key learnings that stands out is the **interconnection of all issues** - biodiversity, energy transition, climate change adaptation, social inequalities, and water resources - and the need for cross-sector collaboration to stop looking at those challenges in silos. We have also identified several issues that are likely to take on greater importance in the near future, such as ocean protection, resource depletion, and women empowerment. While it is clear climate change represents our biggest existential threat, many other challenges intersect with it: from poverty to inequality and peace. Everything is interconnected.

The good news is that through the study, contributors highlighted some **existing viable solutions and innovative initiatives,** demonstrating the **feasibility of concrete actions**. What emerges is that urgency lies in **rapidly scaling these solutions in a concerted effort,** overcoming systemic barriers across critical areas: closing the education divide, strengthening the regulatory framework, reforming governance, and redefining value.

2024 appears as a critical moment for action between emerging positive and negative signals concerning sustainability. It's our collective responsibility to make sure that it turns out for the better. However, a concerning trend is the rise of political polarization around ecological issues, threatening progress.

The final learning underscores the need for a shift in narrative and the imperative to transcend fear, fostering an environment where **inspiring futures can be envisioned and achieved.** It is essential to acknowledge that although catastrophic future scenarios and discourses are absolutely necessary, they must be mixed with a **concrete and actionable** view of the ways to turn these scenarios around to **mobilize and inspire action** among you, leaders and citizens of the world.

By engaging in **reconsidering value and resources**, you, leaders and citizens, have the opportunity to truly reverse systemic challenges and empower entire communities to create positive change and shape a better tomorrow.

About

ChangeNOW

ChangeNOW's mission is to accelerate the ecological and social transition through the implementation of concrete actions that address major environmental and social urgencies.

Every year, ChangeNOW organizes the largest event for solutions for the planet. The summit brings together entrepreneurs, investors, change leaders, policymakers, and the general public from around the world in an inspiring and action-oriented format. As a key facilitator of the ecological and social transition, ChangeNOW federates a global ecosystem of change actors.

Additionally, ChangeNOW carries out influential actions aimed at promoting systemic changes in various areas, such as impact-driven recruitment, supporting major educational institutions on ecological and social transition issues, empowering women engaged in the transition, and activating sports as a catalyst for change.

KPMG in France

KPMG is France's leading audit and advisory firm, bringing together 11,000 professionals committed to creating a new prosperity for companies of all sizes. 100 years after its creation, KPMG has become a mission-driven company in France, whose raison d'être is to work and innovate with passion to build trust, combine performance and responsibility, and develop talent at the heart of the economy, territories and society.

Backed by its multidisciplinary model, KPMG combines sectoral, ESG and digital expertise, drawing on its ESG Center of Excellence and its 1,000 digital experts in France to support its clients' growth and transformation projects throughout the country. KPMG brings its clients the power of a multi-disciplinary global network in 143 countries and stands out for its territorial coverage thanks to its 200 offices in France

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ESG Center of Excellence

KPMG France's ESG Center of Excellence is made up of more than 120 consultants who support companies across their entire value chain to meet all their strategic and operational needs in terms of ESG transformation, reporting and verification in a positive impact approach.

The strength of the ESG Center of Excellence lies in its ability to guide customers in defining their objectives and ambitions, and to secure the execution of their ESG trajectory in line with evolving regulations, using adapted and proven tools and methodologies.

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