

UNDERSTANDING SYSTEMS TRANSFORMATION

We cannot transform our businesses, economies and societies to achieve Vision 2050 without understanding what transformation truly means: root cause-level change that delivers fundamentally new outcomes.

For all the talk of transformation, there is relatively little clarity about what it means, let alone how it happens or the role companies can play to actually support it.

In recent years, more and more stakeholders have begun to use the terms “transformation” and “systems transformation” to describe what is needed to achieve sustainable development. These stakeholders include government policymakers, international organizations, civil society groups, academics, companies and their associations. All are realizing that our sustainable development challenges are complex, highly interconnected and systemic; no one actor or even group of actors, can address these challenges on their own. Many now recognize the extent of change required to achieve a truly sustainable future and that transformation will come with some initial costs.

WBCSD defines transformation as profound change in the systems that have created the social and environmental challenges we face – change that generates dramatically different, and more positive, outcomes and impacts for people and planet. Transformation tackles problems at the root cause level with completely new ways of thinking and acting, based on fundamentally new premises and sources of value.

Transformation stands in contrast to more ordinary, incremental change. Incremental change can occur more easily because it builds upon familiar concepts and doesn’t threaten vested interests too much. Incremental change has a role to play in enabling transformation – for example, by creating new business models without cannibalizing current ones. But it can also serve to protect the status quo by giving the impression that sufficient progress is being made.⁴⁵

Three common factors drive and shape systems transformation: macrotrends, innovations and enablers.⁴⁶ An overview of each follows.

MACROTRENDS

All systems operate in a broader context, and are subject to external pressures that can encourage change over time. Macrotrends are changes that are significant and sustained enough to have far-reaching impacts, such as aging populations, climate change, the rise of automation, a shift in the global economic center of gravity or retreat into more local trading blocks.



INNOVATIONS

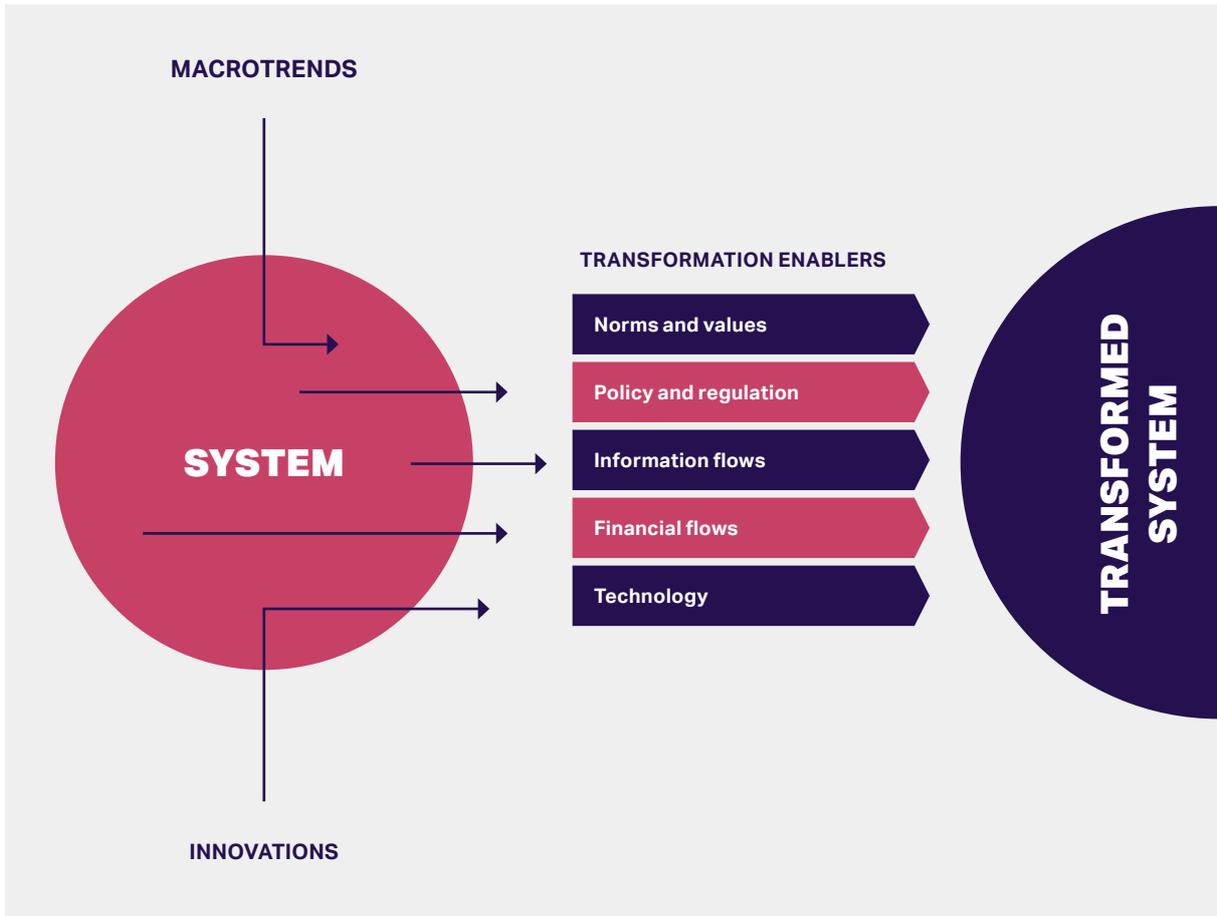
As actors within a system react to the way the context is evolving, they develop innovations they believe will offer better performance or new possibilities. These include new technologies, business models and ways of fulfilling social functions – for instance, the internet, the circular economy, a universal basic income. Very often, transformations occur when multiple innovations combine to offer something completely new.



ENABLERS

Ultimately, a set of enablers react to trends and innovations, helping to change the way a system works. Enablers are forces that shape the incentives, power dynamics and capabilities of different actors in a system at scale – such as individual norms, values and behaviors, policy and regulation, information flows, financial flows and technology. Enablers propel change into the mainstream, thus transforming the system.

FIG. 12: MACROTRENDS, INNOVATIONS AND ENABLERS COMBINE TO BRING ABOUT TRANSFORMATION OF SYSTEMS



While this theory may be simple enough, the reality of systems transformation is complex, messy and unpredictable.

Because systems are made up of so many diverse, yet interconnected and interdependent actors, the process of systems transformation is distributed and adaptive. This means it is the product of many different actors experimenting, learning and adapting within parameters that are always changing as a result of one another's efforts. Over time, they develop new products, technologies, services, business models, public service delivery models, policy and regulatory innovations, voluntary standards, and cultural norms and behaviors, that together deliver new results. There is usually stiff resistance from groups with vested interests in the status quo. Systems transformation is organic and non-linear.⁴⁷ The process often defies advance planning and can be very hard to predict.

Nevertheless, a clear view of the macrotrends and innovations that can catalyze transformation, and the enablers that drive the process to fruition, helps business understand how, where, and when it can act to support change. Forward-looking businesses must collaborate, using insights, innovations and influence to steer the critical transformations outlined in the pathways toward Vision 2050.

UNDERSTANDING THE MACROTRENDS, INNOVATIONS AND ENABLERS THAT TOGETHER CATALYZE TRANSFORMATION, HELPS BUSINESS UNDERSTAND HOW, WHERE AND WHEN IT CAN ACT TO SUPPORT CHANGE AND PLAY A LEADERSHIP ROLE.

PAST BARRIERS TO SYSTEMS TRANSFORMATION

Our original Vision 2050 projected that 2011-2020 would be the turbulent teens. Indeed, they were. Many of the “must-haves” we set out were not achieved. Not enough of the progress that we said would set us up for the transformation times, was made. To succeed in our efforts to realize transformation in the decade ahead we must consider why.

Will a better understanding of how systems transform help us see why transformation has eluded us? Can we look at the last ten years and pinpoint the past failures that have prevented societies from building on the foundations that we have been able to put in place, such as the SDGs and the Paris Agreement? Does increased clarity of these barriers to transformation provide us with insights and lessons that we can apply to similar obstacles that we may well face over the next decade? We can't afford to lose another 10 years.

As part of our efforts to revisit Vision 2050 we have engaged members of the global business community to identify what they perceived as the most significant barriers to transformation over course of the last decade. Our review revealed a broad range of barriers spanning from policies, to innovation costs and consumer habits. A selection of these barriers are laid out in Fig. 13 below:

WHAT WERE THE MOST SIGNIFICANT CROSS-CUTTING BARRIERS TO TRANSFORMATION?

Short-termism

A line could be drawn from a majority of the barriers identified back to the dominant norms and values that guide our decision-making – in business, in politics, in society – amplified by the specific circumstances of the last decade. An already-entrenched short-termism, on the part of companies, investors, policymakers and individuals, exacerbated by the need to recover from the 2008 financial crisis and return to the status quo, was (and likely still is) the primary barrier to transformation.

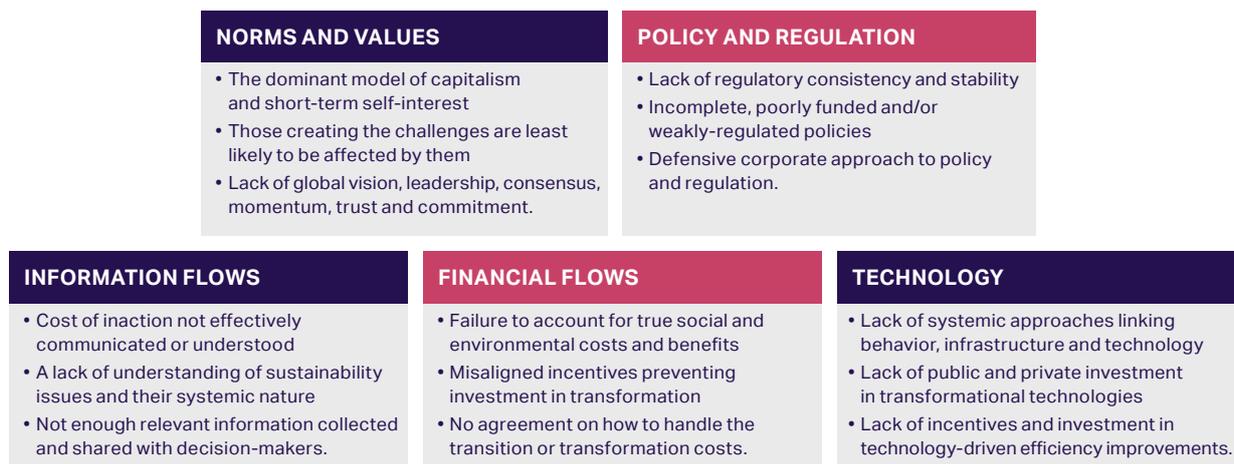
Alignment and ambition

In addition to the constraints that short-termism imposes, our collective mindsets weren't yet sufficiently aligned on the need for action. Absent a critical mass of public and institutional opinion in support of action, policy efforts such as the push for an effective price on carbon, or a shift in our measures (and timeframes) of success, were unable to advance, stalled by the supposed safety of status quo.

Transition costs

We have not been sufficiently transparent about the costs of transition or its likely effects on a range of different stakeholders. Amongst both policymakers and the business community, short-termism has also affected the way we have

FIG. 13 BARRIERS TO TRANSFORMATION



been thinking about unlocking transformation. The dominant entry point for addressing sustainable development challenges is the (financial or growth) opportunities that will flow from taking action. Yet the transition costs of the transformations we seek will be significant – enormous in fact – as will the costs of inaction. New infrastructure and networks need to be built, business models need to be reinvented, and whole industries (and the jobs that they provide) need to be reimagined and repurposed to serve society more sustainably. Acknowledging the true transition costs is an essential part of planning how we will approach transformation, and critical to working transparently and effectively with the strongest supporters of the status quo so that we can reverse their opposition to the progress our vision demands.

LESSONS WE CAN LEARN FROM THE LAST DECADE

Perhaps the most important lesson from the last 10 years is that how we respond to a crisis has profound effects on how we recover from it in the long term. The priorities embedded within the response determine the outcomes of the recovery. It is encouraging that, in the wake of the COVID-19 pandemic, so many governments around the world are talking in terms of “building back better, aligning rescue and recovery packages with a broader agenda of transformational goals.

However, just pumping money into the existing system, albeit toward societally positive purposes, will not be enough. Short-termism is an inevitable outcome of our current organizing models: without changes to our political and economic incentives, we will continue to face crippling tension between long-term requirements and short-term gains. A reinvention of capitalism, by both forward-looking business and policy leaders, will have the most tangible impact on shifting the rules of the game and overcoming one of the most significant barriers to change.

Any change to the policy landscape needs to reach beyond a single country or regional block in order for it to have truly transformational effect. Yet over the last 10 years we have seen international cooperation repeatedly attacked and sometimes subverted. Business has looked on as multilateralism has broken down, despite the negative effects this has had on investment opportunities, stability and security, as well as on the spread of innovation and the alignment of the global regulatory environment. As the world has retreated into more regional spheres of interest and influence, the incentives for more short-term zero-sum gain approaches increase. We must reverse these trends. None are beneficial to the future success of multinational corporations. Business cannot take national and international political stability for granted and must work to defend and promote it wherever it can.

The same is true of the information landscape. The last 10 years have seen a fragmentation of people’s information ecosystems, with polarization and insulation providing fertile

ground for dangerous misinformation to spread unchecked. The difficulty some governments have had in public acceptance of measures taken to control the COVID-19 pandemic demonstrates the real danger that fractured information realities pose. The erosion of a common set of societal facts is threatening the positive shifts that have occurred toward greater public understanding and support for action on sustainable development challenges. Efforts to improve public trust in the media, experts and institutions will be central to societally-supported transformations. At the same time, we must acknowledge that the appetite for misinformation is in part driven by the difficulties and discontent felt by many around the world, and addressing the ever-increasing levels of global inequality are central to efforts to improve the public’s trust.

WHAT CAN WE DO DIFFERENTLY?

In this report, WBCSD has proposed three strategic business mindset shifts that we believe are precursors to the business community collaborating to overcome these kinds of barriers in the next 10 years. These mindset shifts lie at the heart of how business will make decisions. A model of capitalism that rewards true value generation in the long term will demand a change to the rules of the game, moving us away from short-term decision-making. A better understanding of true resilience will drive companies to more broadly consider the different factors that their long-term success depends on, and push them to address societal trends, developments and behaviors that threaten their long-term success. A more regenerative approach to business will shift the way in which companies value and nurture the ecosystems and communities that their success and stability depend on. These mindset shifts are what will move companies to take action in support of real transformation.

The rest of this chapter is dedicated to outlining what it takes to succeed once companies have decided to act. We show how exploring macro trends, potential disruptions and maturing innovations help us to understand the world we will be taking action in. And we provide an overview of the various different factors that determine whether or not actions are able to succeed and scale – the key enablers of transformation that business must interact with more effectively going forward: innovation, investment, individuals and policy.

The biggest change in approach has already happened. The zeitgeist has finally caught up with the urgency of the challenges that we face. And while not everyone is aligned on the need for transformation, those who are not find themselves in a weaker position every day. Business can shift its approach and embrace these enablers of transformation, driving for wider collaboration, greater ambition and faster action in its efforts to build a better world.

UNLOCKING SYSTEMS TRANSFORMATION

Business has a crucial role to play in systems transformation. Our understanding of the way systems transformation happens, depicted in Fig. 12, offers a guide to where action is needed, revealing opportunities for business to drive transformations more deliberately and effectively in support of Vision 2050.

First, companies can ground their efforts to support sustainable development in a solid understanding of the way the world is changing and could change further. Exploring key macrotrends, plausible disruptions and emerging innovations allows companies to anticipate where their efforts could face headwinds or tailwinds, where better investments could be made, and where risks might need to be more carefully managed.

Second, companies can use their core competencies and influence with other stakeholders to leverage key internal and external enablers of transformation. These include innovation and technology, finance and investment, individuals and consumption, and policy and regulation.

If the last 10 years have taught us anything, it is that the world is becoming increasingly volatile, and that corporate, government or public ambition on sustainability challenges cannot unlock transformation on their own. Progress demands shared facts that drive the combined and aligned will and actions of all three groups.

GROUNDING OUR TRANSFORMATION EFFORTS IN REALITY

The world is always changing. To succeed as businesses seeking to make the world a more sustainable place, we must understand the forces driving these changes and the effects that we should expect to result from them. For our transformation strategies and solutions to succeed, we must ground them in the technological, economic, political and cultural realities that will influence their implementation – and progress toward Vision 2050.

Even at the best of times, we cannot predict the future. But even in today's more volatile world, we can identify the forces that are shaping our communities, cultures, economies and societies, and anticipate how they may act as

headwinds or tailwinds to our efforts to realize Vision 2050. Transformation will depend on us finding ways of countering the headwinds and leveraging the tailwinds to drive progress.

Taking a clear-eyed view of how the 2020s might evolve is central to our ability to develop effective strategies over the coming decade. Part of companies' future resilience will depend on their skill in anticipating potential changes in the business landscape and adapting to them, while also incorporating them into their risk management, R&D and strategy processes.

To support members' efforts to plan for an uncertain and unfolding future, this Vision 2050 update includes an investigation into the most powerful political, environmental, social, technological, economic and regulatory forces that could influence the next 10 years and that business will need to take into account.

MACROTRENDS & DISRUPTIONS

As per our understanding of systems transformation, two of the strongest pressures exerted on systems are macrotrends and innovations. Macrotrends can be further divided into two categories: macrotrends (trends that are already unfolding and can be foreseen with a relatively high degree of certainty, even if their implications are more ambiguous); and disruptions (events that are less certain to occur, but that would have significant impacts if they do e.g. pandemics, popular revolts, transformative technologies).

Some macrotrends, such as demographic change, are locked into our future already today. Others, for instance societal reactions to ongoing or increasing inequality, are less certain and can be influenced by powerful societal actors including governments and business. It is critical that business sees itself as an influential and active actor, with both agency and interest in future outcomes, not a passenger whose role is simply to react and adapt to events. This is also true of disruptions, the impacts of which can be mitigated.

Not all shocks are Black Swans – some can be predicted, including for instance a pandemic, or climate breakdown. In these cases, careful advance planning can greatly diminish the impact that a disruption might cause. Other disruptions, such as transformational technologies or game-changing legislation, can be actively pursued by business.

Through our investigations, we identified 12 macrotrends that most likely will, and 10 plausible disruptions that could, determine the global operating environment for business over the next decade. COVID-19 powerfully demonstrated that wildcard disruptions do happen – and have profound and likely long-lasting consequences, interacting with (and often accelerating) existing trends.

Our work on macrotrends, disruptions and the long-term impacts of COVID-19 can be explored in detail in two Vision 2050 issue briefs, issued in May 2020: [Macrotrends & Disruptions Shaping 2020-2030](#) (and its [supporting research document](#)) and [The Consequences of COVID-19 for the Decade Ahead](#). The 12 macrotrends and 10 disruptions identified are summarized in Figs. 14 and 15.

FIG. 14 MACROTRENDS EMERGING OVER THE NEXT DECADE

DEMOGRAPHICS	ENVIRONMENT	ECONOMY
<p>GENERATIONAL HANDOVER Political, economic, cultural and innovation power will shift from the Boomers to Generations X, Y and Z.</p> <p>POPULATION GROWTH IN ASIA & AFRICA Sustaining rising prosperity and huge megacities will strain scarce resources. Migration will create political challenges.</p>	<p>WORSENING CLIMATE IMPACTS More frequent and more severe weather does more damage to more people and becomes harder to ignore.</p> <p>LOCAL POLLUTION, ENVIRONMENTAL DEGRADATION & SCARCITY CREATE IMPETUS FOR INNOVATION People will suffer losses, instability and even displacement, driving innovation.</p>	<p>SHORT-TERM CRISIS, LONG-TERM SLOWDOWN Prior under-investment, weak demand, low productivity, and now COVID-19, will shape a shakey global economy.</p> <p>PEAK GLOBALIZATION & THE RISE OF ASIA Rival blocs and resource nationalism build as demand and power pivots east.</p>
TECHNOLOGY	POLITICS	CULTURE
<p>AUTOMATION IMPACTS EVERY INDUSTRY & COUNTRY Automation will change lives, industries, economies: growth and disruption await.</p> <p>DATAFICATION, FOR BETTER & WORSE We will be smarter, more efficient and more surveilled. Datafication's efficiency and productivity gains come at a price.</p>	<p>POLARIZATION & RADICALISM ON THE RISE High dissatisfaction feeds appetite for radical alternatives, serving up more nationalism but also Green New Dealism.</p> <p>GEOPOLITICAL INSTABILITY Weakened multilateralism and nations in decline contribute to the ongoing erosion of incentives for stability.</p>	<p>POST-MATERIALISM: ATTITUDES AND LIFESTYLES DIVERGE Changing aspirations and habits born in the pandemic help on-demand service models to spread globally.</p> <p>CULTURE WARS ESCALATE Cultural clashes (young-old, rural-urban, rich-poor) contribute to polarization and in turn feed off it.</p>

FIG. 15 POTENTIAL 'WILDCARD' DISRUPTIONS

<p>FINANCIAL CRISIS</p>  <p>How much will COVID-19 cost... can we recover wisely... how will we pay when the next crisis comes?</p>	<p>GLOBAL PANDEMIC</p>  <p>Health systems are not prepared to handle a pandemic, and it seems neither are most economies.</p>	<p>MAJOR CONFLICT</p>  <p>Serious conflict is still a threat. Cyber-attacks e.g. on infrastructure would touch ordinary citizens in a conflict.</p>	<p>AN ECONOMIC 'SINGULARITY'</p>  <p>What happens when new jobs cannot be created in the same places where jobs have been destroyed?</p>	<p>SOCIETAL 'TECH LASH'</p>  <p>Society soured on the real costs of free tech, while treasuries tire of lost taxes and a lack of competition.</p>
<p>POPULAR REVOLTS & REGIME CHANGE</p>  <p>Inequality continues to rise, making more frequent and severe protests likely. How effective will they be?</p>	<p>A CLIMATE 'MINSKY MOMENT'</p>  <p>Climate risks, costs, disclosures and social pressures all combine to reorient financial flows – but how fast?</p>	<p>ENERGY TRANSITION TIPPING POINT</p>  <p>Will market forces lead to fossil fuel demand peaking and a marked acceleration in the energy transition?</p>	<p>BIOTECH BOOM</p>  <p>Disruption comes to food, medicine and materials as synthetic biology's massive potential emerges.</p>	<p>GLOBAL GREEN (NEW) DEAL</p>  <p>Momentum builds as citizens demand we seize this chance to rebuild economies and ecosystems, climate and communities.</p>



INNOVATIONS

Innovations are an important source of pressure capable of initiating systems transformation – and an essential one too. This is highlighted in our Vision 2050 pathways, with progress in each dependent on transformational innovations.

Beyond the crucial importance of innovations to progress within our transformation pathways, innovations, just like macro trends and disruptions, will shape the wider systems in which we have to work toward Vision 2050. Innovation is taking place all around the world every day. Today, there are a number of innovations that have reached a level of maturity that suggest they will almost certainly shape the next decade.

We have explored these influential innovations in our Vision 2050 issue brief [Innovations That Could Shape and Transform 2020-2030](#), highlighting 25 innovations in three categories: technological innovations; business model innovations; and social innovations.

Transformation is rarely the result of a single innovation. More often, it happens when multiple innovations align and combine with social conditions to change the way we live. In this way, innovations have cascading effects that are hard to imagine when they are first introduced. Not all of these innovations are directed toward solving sustainability challenges. In fact, at this stage, many could have positive or negative impacts on our efforts to realize Vision 2050. Furthermore, they do not cover all the innovation gaps that exist within our transformation pathways. Nonetheless, identifying the innovations that are reaching maturity is critical to exploring the combinations that might be possible and the previously unsolvable challenges that they could help us to address.

FACTORING MACROTRENDS, DISRUPTIONS AND INNOVATIONS INTO OUR STRATEGIES

Progress within our Vision 2050 transformation pathways will depend on multiple different systems inputs. The macro trends, disruptions and innovations investigated in our Vision 2050 issue briefs provide business and WBCSD with an overview of some of the most systemically significant pressures that will shape how the next 10 years unfold. We have taken these into account when defining our new Vision 2050 pathways; however regular reviews of how these and other macro trends and innovations are evolving within society are essential if we are to keep our efforts to progress the pathways on track.

Forward-scanning is an increasingly important part of companies' ability to generate long-term value. For instance, taking a view of the effect of outside factors on business goals and offerings is a critical activity in support of corporate resilience, helping to improve risk management processes, leveraging scenario planning and strengthening materiality assessments. However, forward-scanning also helps to reveal what role business can play in supporting societally positive trends, opposing those that stand in the way of our vision and directing collaboration and investment toward the innovations that our Vision requires.