



GHD Global Outlook

2024 GHD Global Outlook

Zoom to window width for the optimum viewing experience.

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Strategic opportunities ahead amidst decelerating growth

Global economy

Global growth prospects deteriorate amid escalating risks

Climate change

Embracing the climate imperative and safeguarding biodiversity

Generative Al

Transforming industries and shaping the future

Cybersecurity and new data privacy regulations

Safeguarding the digital landscape

Sustainability and resilience

Staying ahead of regulatory shifts and increasing stakeholder expectations

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Concerted multistakeholder action is needed to address the global water crisis

Resilient communities

Nurturing equity and resilience

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Navigating the dynamic landscape in uncertain times

At GHD, we are constantly thinking about new ways to support our clients in creating and maintaining a thriving, sustainable business. Our commitment to championing our clients is built into our DNA, and it's thanks to this long-standing commitment that both GHD and our clients have enjoyed shared success and made positive impacts on the world since 1928. It's also the cornerstone of our vision to make water, energy and communities sustainable for generations to come.

Mark Twain once astutely observed that "history doesn't repeat itself, but it often rhymes." In our nearly century-long journey, GHD has navigated depressions, economic booms, wars, globalization, and shifting business expectations. From our humble beginnings in Melbourne, Australia to our evolution into a global professional services firm spanning 135+ countries, we've monitored trends, technological shifts and geopolitical landscapes. Our deep experience with changes, great and small, has enabled us to build a company with long-term viability. Through rigorous preparedness and hard-won resiliency, we have stood the test of time, and now, we want to share this with our clients.

Becoming prepared to not only be resilient to change but take advantage of it requires a deep understanding of the business landscape. We continuously draw upon our global reach and technical authority to understand what we need to do today

to be ready for tomorrow. Our interpretation of 2024's economic and business trends is contained in this inaugural GHD Global Outlook. Consider it a tool to gauge your company's preparedness to navigate what's to come. Each of the key issues covered in this market snapshot is explored through the lens of business readiness, and as you move through the chapters, you'll be asked to assess your company's preparedness to confront these challenges in the months ahead.

By understanding your level of preparedness, you'll know where you need to focus and build resiliency, leading to the best possible decisions for your business. And, by taking action swiftly and smartly in the areas you need it most, you can not only mitigate risk but gain a competitive advantage over less-prepared industry peers.

Consider the GHD Global Outlook your guide for success, helping you better understand and ready your business for the year to come — because preparedness is crucial to staying ahead. As always, our global team of dedicated professionals is standing by to tackle these issues with you, shoulder-to-shoulder, helping you find success in 2024.

Yours sincerely,



Sonia Adams
Chief Client Officer

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The big picture

Strategic opportunities ahead amidst decelerating growth

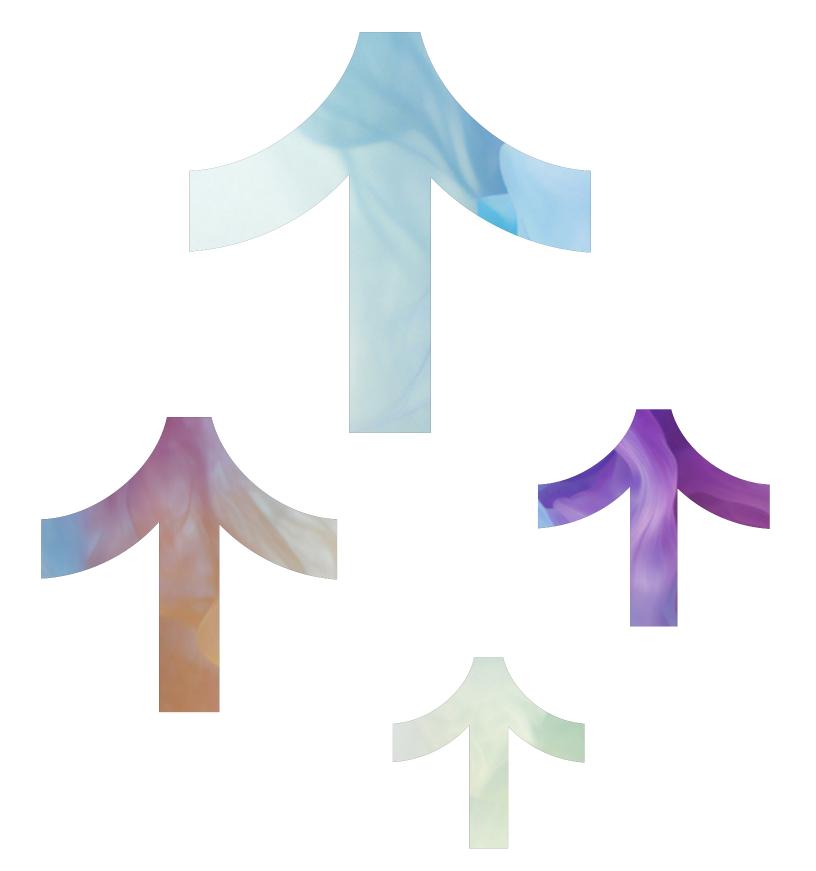
In 2023, businesses met several strong headwinds, including rising costs, labour shortages and runaway climate change. How can businesses navigate continuing volatility to thrive in a competitive market in 2024? The 2024 GHD Global Outlook dives into current economic and business trends to help your company map a route to success in the year ahead.

Businesses worldwide navigated a challenging landscape in 2023, characterised by ongoing geopolitical tensions, the devastating impact of climate change and persistent inflationary pressures. These influences set the stage for business in 2024, highlighting the growing awareness that these multifaceted challenges are inextricably linked with their strategies and day-to-day operations.

The global economic growth rate likely slowed to 2.7 per cent in 2023 from the 3.3 per cent observed in 2022.¹ It is expected to fall further to 2.4 per cent in 2024 due to persistently high inflation and the implementation of tight monetary policies aimed at containing this inflation.² The past year's rapid tightening of monetary policies has led to vulnerabilities in capital-intensive sectors, sensitive to changes in lending costs, including housing and industrials. Also, while headline inflation has peaked across most economies, core inflation (excluding volatile components like food and energy) has shown resilience and has yet to peak in many economies. While price pressures have eased globally in the industrial and goods sectors, historical patterns suggest service prices follow suit in the upcoming quarters.



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In the face of a polycrisis, where disparate crises interact in ways that the overall impact far exceeds the sum of each part, society's resilience and adaptability are put to the ultimate test. This reveals both our vulnerabilities and our capacity for innovative solutions.

Another concern is that over the past two years, the world's central banks have implemented the steepest series of interest rate increases in decades. This has elevated credit risk, which refers to the reduced ability of individual and business borrowers to meet their debt obligations. For instance, in the mortgage market, the rapid increase in interest rates has heightened homeowners' leverage compared to previous periods of higher interest rates.

In countries such as the US and Canada, the incometo-house price ratio is very high, with homeowners stretching their finances to afford housing. While many indicators suggest that global financial markets remain relatively stable, it's important to note that the delayed and varying effects of monetary policy changes could pose financial challenges in the future. Furthermore, over the past three years, the COVID-19 pandemic, disruption in the labour market, transportation bottlenecks and geopolitical uncertainties have highlighted weaknesses in global supply chains. Meanwhile, climate change remains an escalating peril to humanity and the planet, while also exerting profound pressure on the global economy. What was once considered a threat has evolved into an existential crisis, fuelling issues such as water scarcity, mass migration and displacement, and intensifying the demand on businesses and governments to expedite a just transition towards a sustainable green economy.

These persistent disruptions are anticipated to push organisations towards adopting new business models. These models will be backed by innovative ecosystems that introduce novel products and services tailored to the distinct needs of various end markets. We need to fundamentally rethink our energy systems and challenge our own assumptions.

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The global economy will likely sustain a relatively modest growth in 2024, reflecting an enduring shift towards a more restrained global GDP growth trajectory over the next ten years. Businesses should be prepared for a potentially slower global economic expansion phase in the coming decade. This contrasts with a solid average annual growth of 3.2 per cent observed in the pre-pandemic decade.3

Furthermore, over 60 countries, collectively accounting for half of the world's population — a staggering 4 billion people — are gearing up for what is being hailed as the most monumental election year in history. These elections, spanning regional, legislative and presidential contests, are poised to reshape political landscapes and intensify global geopolitical dynamics.

Despite the expected disruptions and uncertainties in the business landscape, businesses have opportunities. As global growth embraces a decelerating trend, mature markets will contribute less significantly to global GDP. Businesses can seize opportunities by investing in mature markets, where innovation is needed to offset diminishing labour forces, and emerging markets, which require physical and digital infrastructure to support their sizeable and youthful workforce. Ensuring sustained growth in the long term involves forging new business avenues, fortifying corporate culture, embracing

digital transformation and automation, recruiting talent with novel skills not presently represented in the company and optimising the hybrid work model where applicable.

Businesses can thrive by identifying opportunities among obstacles and adopting a holistic approach to address competing priorities. This involves balancing stakeholder interests, closely monitoring regulatory shifts, accelerating the transition towards net-zero emissions, advocating for water security, enhancing strategic planning and governance, building resilience to business risks and championing a just and equitable society.

Preparedness is crucial to staying ahead

Businesses that take concrete steps to overcome potential headwinds and are prepared to capitalise on new and emerging opportunities are well-positioned to outperform their peers in 2024 and beyond. The following sections reveal GHD's detailed analysis of key issues from slowing economic growth to the potential of Generative Al and more, along with some practical recommendations for staying ahead.





The global economy likely grew 2.7 per cent in 2023, highlighting the unexpected economic resilience within the US, Japan and other emerging markets, excluding China.⁴ However, the forecast for global GDP growth in 2024 is concerning. A primary factor driving this prediction is the lingering effects of the monetary policy tightening from 2023 in the US, Europe and Australia. Also, the intensifying downturn in China's real estate sector poses a significant threat to global economic growth. Consequently, the global growth rate in 2024 is expected to decline to 2.4 per cent.⁵

In the US, consumer spending persistently surged in 2023, even amid policy tightening by the Federal Reserve. This surge was fuelled by a US\$1.2 trillion depletion of savings reserved during the COVID-19 pandemic and a substantial increase in household income — attributable to swift growth in employment and wages.⁶ However, a slowdown is observable in labour demand, and wage inflation is projected to moderate as the labour market loses momentum. Additionally, the emerging contraction in credit availability is evident, marked by the US credit impulse shifting to negative, indicating potential diminishing prospects in business investment due to declining profit growth.

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The anticipated stabilisation in China's real estate market remains unrealised, as property sales by floor area in China fell by 7.5 per cent in January-September 2023 compared to a year earlier. Given that housing contributes to a third of investment and about 12

per cent of China's GDP,8 this decline will likely have extensive repercussions on the broader economy. The implemented policy relaxations need to be increased, and there is a noticeable decline in export demand.

The economic rebound in the Eurozone has been hindered, initially by the energy crisis and now by new external pressures stemming from the global trade slowdown and the economic deceleration in China. Additionally, the policy tightening by the European Central Bank (ECB) is exerting pressure on credit expansion. Correspondingly, the Bank of England is predicted to maintain elevated rates for an extended period due to sustained wage inflation amid stagnant growth.

In 2023, oil prices have exhibited significantly reduced volatility compared to the turbulent fluctuations between 2020 and 2022.9 Crude oil prices could remain volatile in 2024, primarily due to continued, moderate inventory drawdowns and demand surpassing supply. This scenario is likely, given the propensity of Organization of the Petroleum Exporting Countries

(OPEC) members to implement production cuts, as corroborated by the agreement amongst OPEC+ members to extend reductions in crude oil production until the end of 2024. Saudi Arabia, which accounts for approximately 10 per cent of the global production of petroleum and other liquid fuels, declared a voluntary oil production cut of 1 million b/d in July/August 2023.¹⁰ As a result, the U.S. Energy Information Administration (EIA) forecasts a rise in Brent crude oil prices to the mid-\$80 per barrel range in 2024, increasing from an average of \$75 per barrel in 2023.¹¹ The price of West Texas Intermediate (WTI) crude oil is likely to sustain a \$5 per barrel discount relative to Brent.¹²

Global inflation decreased in 2023, compared to 2022 and 2021 levels. Global geopolitical conflicts led to increased food and energy costs. These rising costs, combined with high demand, limited supply and fewer available workers, pushed inflation up. By 2023, inflation started to slow down as these factors became less intense.¹³ In the US, the primary inflation measure used by the Federal Reserve (called the PCE price index) was about 3.2 per cent in 2023 and will likely drop to 2.5 per cent in 2024.14 Inflation will likely keep dropping and reach the Federal Reserve's target of 2 per cent by 2026. 15 However, a significant impediment to economic growth is the surge in oil and gas prices. It's evident from 2023 that escalating gasoline prices dampened consumer spending. If oil prices climb higher, there's a risk of renewed inflation, prompting central banks to implement stricter monetary policies than previously expected. Given the capital-intensive nature of infrastructurerelated sectors, such as engineering and construction, higher interest rates are likely to impact project economics significantly, turning many projects into a financial burden on developers' balance sheets. Also, elevated prices of commodities and the potential for food scarcities, coupled with the pandemic's lingering effects, have heightened global worries about consistent food supply. Substantial investment in food systems is essential to counter these increasing challenges to worldwide food stability.

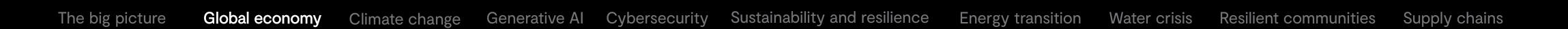
In 2024, geopolitical tensions will likely exert a profound influence on the world stage, shaping international relations, trade and security. For example, the ongoing Israel–Gaza conflict. These tensions, often driven by competing interests, territorial disputes and ideological conflicts, have the potential to disrupt global supply chains, hinder economic growth and strain diplomatic ties. The evolving dynamics of major powers, the emergence of new alliances and the resurgence of nationalism will likely contribute to an increasingly complex geopolitical landscape. Navigating these challenges demands astute diplomacy, multilateral cooperation and agile business strategies.

As the impact of geopolitical tensions reverberates across industries and regions, adaptability and foresight will be essential for organisations and nations alike in the years ahead.

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2024 is expected to experience subdued global economic growth due to the lingering effects of higher inflation and monetary policy tightening.



The forecast slowdown in economic growth in 2024 is driven primarily by the lingering effects of high inflation in major economies since 2022. Inflation is now falling but the threat has not yet passed. Central banks will be watching geopolitical tensions around the world closely and will be nervous about reducing interest rates until they are confident externally driven inflationary pressures will not return.

The era of cheap money driven by ultra-low interest rates is not expected to return soon."

Oscar Diamond, Investment, Policy & Economics Service Line Leader, EMEA

What does this mean for businesses?

Businesses should closely monitor the global economic landscape as it presents both opportunities and challenges. The expected slowdown in global GDP growth in 2024, driven by monetary policy tightening and economic slowdown in key regions such as China, suggests a potential shift in market dynamics. In the US, the potential easing of consumer spending and tightening credit availability could impact business investment. In Australia, indicators suggest inflation and interest rates could fall meaningfully without impacting growth or employment. In Europe, energy crises and central bank policies create uncertainties. Fluctuating oil prices and global inflation trends can affect production costs and consumer spending. Geopolitical tensions add another layer of uncertainty, necessitating agile strategies and international cooperation. To thrive in this evolving landscape, businesses should diversify, invest strategically and prioritise adaptability.

How prepared are you to navigate the deteriorating global economic growth?

1 Not prepared

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Extremely prepared

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Parties to deliver a new era of climate action.¹⁶ The Parties agreed on a landmark text named "The UAE Consensus", which sets out an ambitious climate agenda to keep 1.5°C within reach. The UAE Consensus calls on Parties to transition away from fossil fuels to reach net zero, encourages them to submit economy-wide Nationally Determined Contributions (NDCs), includes a new specific target to triple renewables and double energy efficiency

by 2030, and builds momentum towards a new

disruptions caused by climate change.

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architecture for climate finance.

Amidst these imperatives, it's notable that numerous in decarbonisation, underscored by the renewed Historically, biodiversity loss has been a net negative outcome, with the benefits reaped primarily by enterprises often underestimate or inadequately urgency arising from the energy predicament, it is anticipated that companies will strive to quantify manufacturers and users of nature-based products report climate-related risks and opportunities, many of which could be substantial and crucial the transition risks they face and ultimately chart while the broader society bears the costs. However, for communicating to stakeholders.¹⁷ Nonetheless, out strategies to navigate through them. Although this dynamic might shift in the long run with emerging markets (EMs) disproportionately grapple consumers and businesses being more cognisant there is an expectation that the breadth and quality of disclosures will continue to enhance throughout with physical risks like heatwaves, droughts and of the impacts on the biodiversity of certain goods 2024. This progress can be seen not only through the floods, developed markets (DMs) shoulder more and services. For instance, biodiversity net gain California Climate Policies and tightening legislation substantial exposure to transition risks due to (BNG) is becoming mandatory in the UK. Developers within Europe but also through the Securities and heightened policy activities and their enhanced must deliver a biodiversity net gain of 10 per cent, Exchange Commission (SEC)'s proposition of a meaning that development should result in more or financial capabilities for supporting the low-carbon fresh regulation in March 2022 pending climate better-quality natural habitats than existed before transition. regulation, outlining the necessity for public firms the development.¹⁹ Numerous sectors, including consumer goods, utilities and construction firms, to detail pertinent climate-related risks, greenhouse Parallel to the climate-focused efforts, there is gas emissions and initiatives towards achieving neta growing focus on biodiversity preservation, already exhibit significant direct gross value added zero targets.¹⁸ Furthermore, this rule would require (GVA) closely linked to natural systems. Additionally, encompassing its causes, repercussions and potential remedies to safeguard natural capital other sectors possess "hidden dependencies" on private entities within the value chains of public firms and alleviate biodiversity loss. Climate change is natural ecosystems throughout their supply networks. to share their emissions data for public company reporting. Companies should divulge information anticipated to become an increasingly significant Although comprehensive data remains limited, regarding location data (about physical risks), factor in biodiversity preservation. Increasing metrics associated with land-use transformation, climate challenges could threaten the Earth's natural transition risks, mitigation approaches, and metrics mainly deforestation for logging and agriculture, are resources, leading to uncertain and significant risks involving emissions, energy consumption and water presently accessible. for different parts of the economy. usage, among other factors. Simultaneously, transitioning to a low-carbon landscape is perceived as a substantial economic transformation. Given the global advancements akidden X. Which Lackberry

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2024 will likely see a strong focus on climate change with the introduction of global climate-related regulations that are expected to enhance disclosure quality.

What does this mean for businesses?

Businesses must understand and assess their impact on biodiversity and the associated risks in this context. As more comprehensive data emerges, businesses should enhance their comprehension of biodiversity impact, the actions they're undertaking to mitigate these impacts and how these actions, or the absence thereof, might influence their future valuation, reputation and ability to operate.



How prepared are you to tackle the challenges related to climate change?

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Not prepared Extremely prepared

Generative Al

Transforming industries and shaping the future

Generative AI is not a mere technological trend; it is a seismic shift that is reshaping industries, sparking innovation, and altering the way we live and work in 2024. Generative Al systems, like OpenAl's GPT-3, have emerged as powerful tools for unleashing creativity and driving innovation. These systems are designed to generate content, from text to images and even music, with remarkable human-like quality. GHD Digital's Beyond AI estimates that advancements in Generative AI have the potential to revolutionise the global economy, potentially driving a five to six per cent increase in global GDP over the next 10 years.

In 2024, businesses will harness the creative potential of Generative AI to generate content and design products. This not only accelerates the creative process but also democratises access to creative tools, levelling the playing field for startups and smaller businesses. One of the most tangible impacts of Generative Al is its ability to enhance productivity and efficiency across various sectors. 2024 will likely see this technology being employed in areas like content generation, data analysis and customer support. For instance, customer service chatbots powered by Generative AI will handle complex queries, freeing up human agents for more strategic tasks. In data-driven industries, Generative AI will assist in generating reports and insights, significantly reducing the time and effort required for analysis.



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Source: <u>Beyond AI</u>, GHD.

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Generative AI will help transform industries and drive innovation in 2024, potentially leading to significant improvements in productivity.

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In an increasingly competitive landscape, businesses will likely focus on delivering personalised experiences to customers. Generative Al could play a pivotal role in achieving this goal. Through its ability to analyse and interpret large datasets, it could help companies tailor their products and services to individual preferences. Whether it's suggesting personalised recommendations for e-commerce customers or curating content for media platforms, Generative Al will likely reshape how businesses interact with their audiences.

Generative Al's impact will likely extend far beyond the realms of business. In the healthcare and research sectors, it could revolutionise the way we approach diagnosis, drug discovery and patient care. 2024 could experience Generative Al assisting medical professionals in analysing complex medical data, making accurate diagnoses and even predicting disease outbreaks. Drug discovery, typically a time-consuming and costly endeavour, will be accelerated through Al-driven simulations and molecular design. As a result, medical advancements should occur at an unprecedented pace, ultimately benefitting patients worldwide.

While the impact of Generative AI is undeniably transformative, it also raises ethical considerations and challenges that must be addressed. Issues related to bias in AI-generated content, deepfakes and the potential misuse of this technology will remain prominent concerns in 2024 and beyond. As Generative AI becomes more integrated into our lives, policymakers, businesses and society at large must collaborate to establish robust ethical frameworks and regulations to ensure responsible use.

Moreover, as Generative AI automates tasks and augments human capabilities, it has implications for the future of work. In 2024, businesses could witness a shift in job roles and skills required across industries. While some routine tasks may be automated, there is an increased demand for individuals skilled in AI management, data analysis and ethical oversight. Nurturing a workforce that can collaborate seamlessly with AI systems becomes imperative for organisations to thrive in this new era.

What does this mean for businesses?
As we peer into the future, one thing is clear:
Generative Al is a force that cannot be ignored.
Businesses and policymakers must adapt to its presence, harness its potential and ensure its responsible use. In doing so, we can usher in a new era of innovation, efficiency and progress, where Generative Al plays a central role in shaping the global landscape of 2024 and beyond.

How prepared are you to leverage the Generative Al opportunity?

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The General Data Protection Regulation (GDPR) in Europe and the California Consumer Privacy Act (CCPA) in the US set the stage for this global shift towards data protection. In 2024, we anticipate an expansion of these regulations and the emergence of new ones as governments grapple with the increasing digitalisation of society. For businesses, the challenge lies in striking a delicate balance between innovation and compliance. Embracing cutting-edge technologies while ensuring they do not compromise data privacy, is no small feat. Compliance with evolving regulations often necessitates extensive data governance measures, encryption protocols and transparent data handling practices.

Moreover, as the digital landscape continues to blur the lines between national borders, businesses operating on a global scale must navigate a patchwork of international regulations. This requires a deep understanding of regional nuances and a commitment to ensuring data privacy regardless of where an organisation operates. Ultimately, the convergence of cybersecurity and IP/data privacy regulations presents an opportunity for organisations to differentiate themselves in the digital marketplace. Those who invest in comprehensive cybersecurity measures and demonstrate rigorous adherence to data protection regulations will protect sensitive information and earn the trust of their customers and partners.

Customer trust will become an increasingly valuable currency in 2024. Consumers are more informed about their data rights and are willing to reward companies that respect those rights with their loyalty. Businesses that prioritise data privacy and security are not only mitigating risks but also gaining a competitive edge in an environment where trust is a precious commodity.

As we look ahead to 2024 and beyond, the intertwined themes of cybersecurity and evolving IP/data privacy regulations will continue to shape the digital landscape. Organisations that proactively embrace these challenges, view them as opportunities and commit to responsible digital practices will thrive. Those that lag, however, risk not only reputational damage but also legal and financial repercussions.

What does this mean for businesses? The path forward is clear. Prioritise cybersecurity as a strategic imperative, adhere to evolving IP/ data privacy regulations, and foster a culture of responsibility and trust. Only then can businesses and governments collectively safeguard the digital realm, ensuring a secure and prosperous future for all in the digital age of 2024 and beyond.

As Generative AI continues to revolutionize industries with its potential, 2024 will see businesses increasingly leverage its power to drive innovation, optimize operations, and enhance customer experiences. However, this growth is accompanied by an intensified focus on cybersecurity. As the threat landscape evolves, organizations will need to prioritize investing in robust cyber defences, leveraging Al-driven solutions to proactively detect and mitigate potential risks, ensuring a secure digital future."

Kumar Parakala, President, GHD Digital

2024 could continue to see a relentless wave of cyber threats, advancing in both complexity and magnitude.



1 Solution 2 Solution 2 Solution 2 Solution 3 Solution



Sustainability and resilience

Staying ahead of regulatory shifts and increasing stakeholder expectations

In the coming year, sustainability and resilience will continue to gain precedence as core elements of business strategy. GHD's <u>Sustainability Monitor 2024</u> finds that 97 per cent of executives believe their sustainability agenda adds commercial value to their organisation.²⁰ Moreover, 59 per cent of executives said sustainability is central to their organisation's vision and strategy, with 0 per cent indicating it as "not at all central."²¹

of executives believe their sustainability

their sustainability agenda adds commercial value to their organisation.

59%

of executives said sustainability is central to their organisation's vision and strategy. indicating it as "not at all central."

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However, progress from all actors — public, private and nongovernmental — has not met the pace and scale needed to support the achievement of global sustainability agendas, including the UN Sustainable Development Goals (SDGs) and Paris Climate Agreement. In response to lagging progress, each sector is undergoing a recalibration, with governments worldwide recognising their responsibility to develop standardised and comprehensive due diligence and reporting requirements for business. This "mandatory wave" serves a dual purpose of increasing transparency and accountability while also striving to create a level playing field, enabling companies that take substantial sustainability measures to maintain a competitive edge in the market.

From the Corporate Sustainability Reporting Directive (CSRD) in the EU to the SEC in the US, the rapidly shifting regulatory landscape demands that businesses stay on top of new reporting and disclosure requirements. This marks a seismic shift in how companies approach sustainability as the traditional separation between environmental, social and financial factors gradually dissolves. The renewed emphasis on financial materiality underscores the inextricable link between sustainability and financial value creation. As a result, businesses are compelled to integrate sustainability into their core strategies, ensuring that the impact on the bottom line is understood and optimised.

Indeed, the era of shareholder supremacy has passed, and the time of stakeholder supremacy appears to be here to stay. Businesses today face increasing expectations from a diverse set of stakeholders, and leaders will need to demonstrate how to be both sustainable and profitable. To be successful, chief executives and boards must delve into the key trends and drivers shaping this landscape and understand the strategic imperatives that will define the future.

In terms of corporate sustainability priorities, climate change mitigation and adaptation continue to be at the forefront. Protecting the environment, assets and communities from the worst impacts of climate change is no longer a distant concern but an urgent necessity. Simultaneously, the momentum behind carbon reduction efforts is growing stronger, with an increasing number of businesses committing to ambitious targets aligned with net-zero pathways. The transition from goal setting to goal getting is underway, emphasising the importance of practical strategies and the operationalisation of commitments. And although most voluntary corporate climate reports to-date have yet to tackle Scope 3 emissions, companies in 2024 will not be able to avoid scrutiny of their supply chain. Businesses will likely be held accountable not only for their direct emissions but also for those of their suppliers. This shift requires reevaluating supply chain practices, fostering collaboration and setting ambitious targets to reduce the carbon footprint throughout the value chain i.e., moving from a do no harm to a restorative approach.

Mitigation is no longer enough to sustain our communities against the effects of climate change, and signficant effort and investment must also be made in adaptation and resilience. Nations and corporations have pledged change for a number of years, but the urgency for tangible action has increased.

Governments cannot do this alone; the transition away from fossil fuels across all economies and supply chains now relies on impetus and action from both the the private sector and the communities where we all live and work. It is a shared responsibility that every politician, executive and global citizen must take action on."

Richard Fechner, Executive General Manager, GHD Advisory

In 2024, sustainability and resilience will likely become central to business strategies, with most organisations acknowledging their commercial value.

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In addition to the understandable focus on the 'E' (environment) in ESG, the 'S' (social), which refers to human rights, including inclusion, diversity and equity as well as other social considerations, is becoming an equally critical driver of an integrated sustainability strategy. Social impact and other stakeholder engagement specialists are key to achieving success. The 'S' represents collaboration, offering an opportunity for the humanities, engineering and technology to come together to help decide what is of importance to each community. As we continue to evolve in this space, social and behavioural scientists will be more involved in 'S' evaluation, alongside environmental scientists, governance advisors, scientists and economists.²²

Businesses that not only centre sustainability in their core strategy but integrate it across all operations and transparently monitor and report on their progress will be well-positioned for long-term success.

What does this mean for businesses? For businesses, sustainability and resilience represent a compelling imperative and opportunity. Identifying opportunities that arise from challenges and adopting a holistic approach to address competing priorities is critical to driving genuine leadership in sustainability and resilience. This means compliance with evolving regulations and gaining a competitive advantage.

How prepared are you to adapt to the evolving corporate sustainability landscape?

1 Not prepared 3

Energy transition

A multifaceted approach is needed to achieve net-zero ambitions

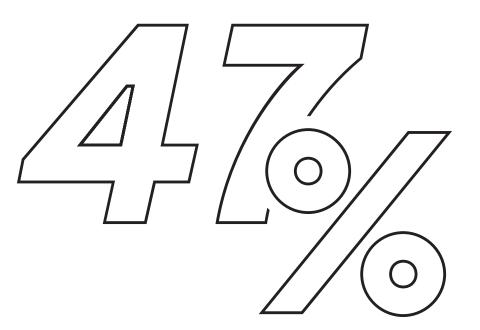
Amidst the growing concerns surrounding climate change, the transition towards renewable energy is in progress. However, it's not unfolding at the required pace or scale to meet societal goals for achieving net-zero emissions. GHD's <u>SHOCKED</u> study found that nearly half (47 per cent) of the 450 senior decision-makers in the energy sector reported that the energy crisis of the past two years has set back their net-zero plans by an average of six years.²³ Simultaneously, during the latter half of 2023, we have observed a shift in funding allocation among oil and gas companies. They are reallocating resources from the transition phase to the reinforcement of traditional energy sources and diligently optimising their existing assets, in response to the tightening conditions of the capital markets.

Global spending on the clean-energy transition, including investments in installing renewable energy, purchasing electric vehicles, constructing hydrogen production systems and deploying other technologies, surged by 17 per cent in 2023, reaching \$1.8 trillion.²⁴ However, total spending on the energy transition in 2023 fell well short of the estimated \$4.8 trillion needed annually from 2024 to 2030 to put the world on a net-zero pathway.²⁵

Typically, reductions in fossil-fuel energy consumption occurred only after major global economic and energy disruptions that decreased global demand. The acceleration of this transition is contingent upon three critical levers, each necessitating widespread cooperation between governments, corporations, academic institutions and other entities.

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of energy sector leaders delayed net-zero plans by six years due to the recent energy crisis.

At the same time, 42% said the current energy crisis has accelerated their organisation's net-zero plans — by an average of five years.



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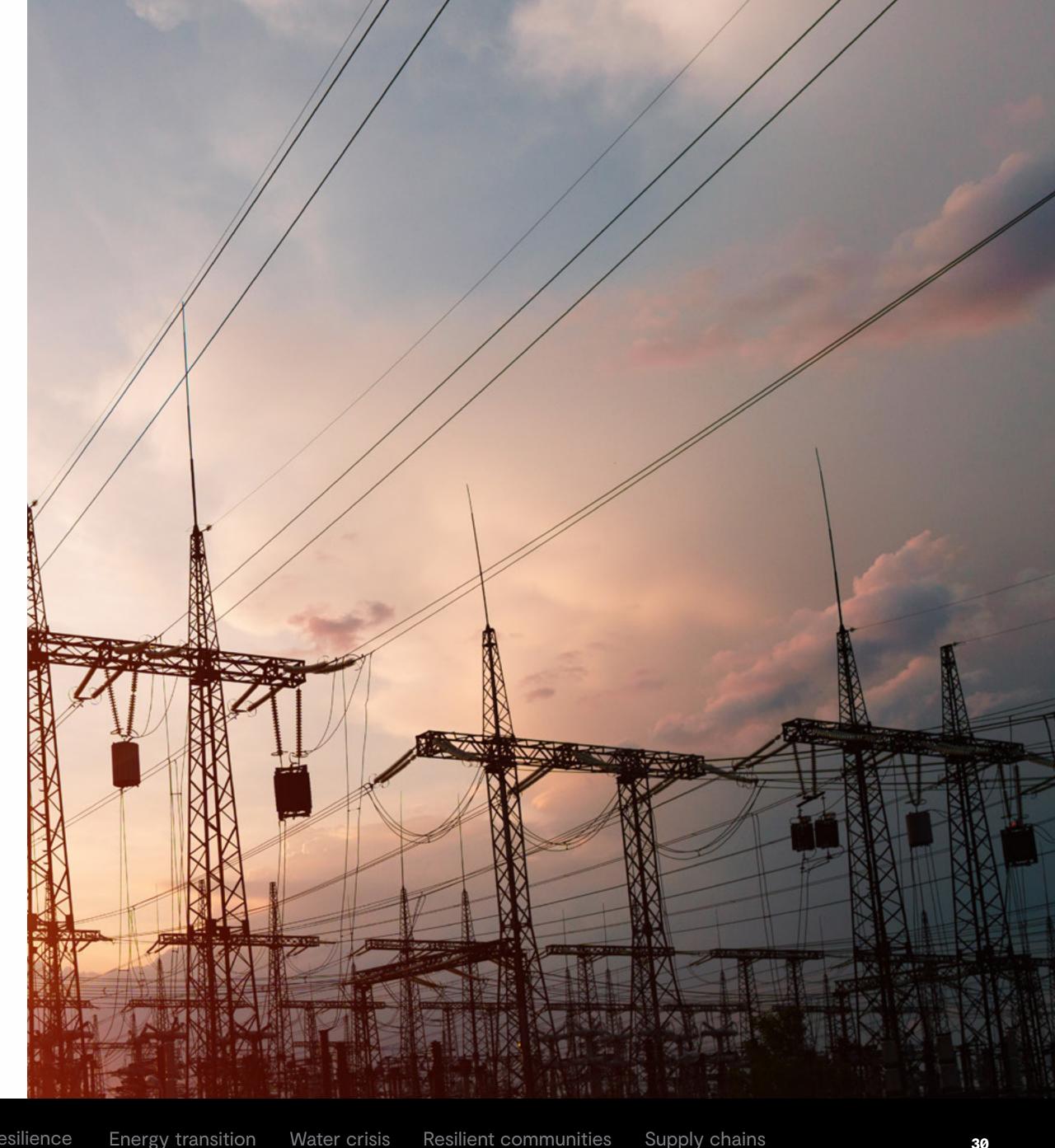
2024 is likely to experience a continued increase in investment in renewable energy as businesses work to achieve global net-zero carbon emissions by 2050.

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The energy sector is responsible for the largest share of greenhouse gas emissions. As we saw at COP28, this has led to disproportionate impacts on communities, especially those that are unable to afford the consequences of these impacts. We are now seeing, post COP, a shift towards a phase down and phase out of fossil fuels, which will be key, but the energy transition is just that — a shift over time in technology, capital deployment, asset development and societal change.

This is a pressing issue facing our world, and there will be no one easy solution to such a challenging problem — a multifaceted approach bringing, at times, non-traditional partners together is required."

Tej Gidda, Global Leader, Future Energy, GHD



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Firstly, sustained support from public policy is essential. Initiatives like the US Inflation Reduction Act can be the impetus for enhancing low-carbon alternatives. There's a pressing need for reform in implementing these green solutions, as acknowledged in the EU's Net-Zero Industry Act. Furthermore, policy imperatives should encompass heightened transparency to allow market actors to adequately adjust to transitions, and an understanding of maintaining a balance between supply and demand to avoid undue economic strain on consumers.

Secondly, advancements in technology are crucial. As per the International Energy Agency, only two of the 55 essential technologies for achieving netzero emissions by 2050 are progressing as needed.²⁶ A comprehensive approach to technological development, where governmental entities abstain from favouring specific solutions, is pivotal for the timely and cost-effective realisation of optimal solutions.

Thirdly, solutions driven by market mechanisms are indispensable. It's unsustainable for governments worldwide to subsidise emission reductions indefinitely. To fulfil international goals for reducing emissions, there is a need for broad-based adoption of markets that universally incentivise emission reductions.

Significant strides have been made globally, with the emission intensity of the world's energy supply witnessing a reduction since the ratification of the Paris Agreement in 2016.²⁷ In the policy realm, incentives have spurred fast-paced development and cost decrement in wind and solar energy. Innovations in shale have allowed natural gas to supersede coal, and new markets for solar energy have emerged on residential and utility scales. However, to intensify the momentum and ensure cost-effectiveness. simultaneous progress across different facets is imperative, backed by technology-neutral policies encouraging diverse solutions. A combination of strategies, fortified by collaborations between public and private sectors, and across industries, is essential to meet the climate goals.

What does this mean for businesses?

The energy transition's continued acceleration in 2024 and beyond depends on a comprehensive approach that addresses critical areas, such as, fostering investments in renewable infrastructure, shaping conducive policy and regulation, driving engineered solutions and ensuring a just transition.

Critical to this endeavour will be the integration of cutting-edge technologies, the implementation of robust policies, and the fostering of public-private partnerships to facilitate the shift toward a clean energy economy.

5

Extremely prepared

How prepared are you for the energy transition?

1 — 3 — 4 — Not prepared

Water crisis

Concerted multistakeholder action is needed to address the global water crisis

Water, the lifeblood of our planet, is facing a crisis of unprecedented proportions. The Intergovernmental Panel on Climate Change (IPCC) recently revealed that over half of all natural disasters since the 1970s have involved water. As the climate crisis intensifies, the threat posed to people by changes in water systems will only grow. GHD's <u>Aquanomics</u> reveals that the future economic impact of water risk in seven countries representing a diverse range of climates (Australia, Canada, China, Philippines, United Arab Emirates, UK and US) could result in a total loss of \$5.6 trillion to the GDP across these countries between 2022 and 2050. Securing a sustainable and equitable water future has never been more critical.

Water scarcity is no longer a distant threat; it's a harsh reality for millions worldwide. As the global population surges towards 8.5 billion in 2030,28 the demand for water is increasing exponentially. Climate change exacerbates the problem, causing erratic weather patterns, prolonged droughts and extreme floods. These events disrupt water availability and quality,

affecting vulnerable communities disproportionately. Nearly 700 million people could be displaced by intense water scarcity by 2030.29

One of the most pressing issues in the global water crisis is the inequity of access, millions still lack access to safe drinking water and sanitation facilities. Around 2 billion or 1 in 4 people worldwide don't have access to safe drinking water.³⁰ This imbalance perpetuates poverty, hinders economic development and fuels conflicts over water resources. Bridging this gap is not just a moral imperative; it's essential for global stability and justice.



Water risk may cost over

trillion to GDP in 7 countries* through 2050.

*Australia, Canada, China, Philippines, United Arab Emirates, the UK and the US.



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Water connects our natural world with the human experience and with our economies and food systems globally, but water is hyper-local and therefore understanding and managing water is nuanced and must be discrete and sensitive at the local and community level to achieve and maintain sustainable outcomes for all."

Rod Naylor, Global Leader, Future of Water, GHD

Urbanisation is another pivotal factor shaping the future of water. As more people move to cities, the pressure on urban water systems intensifies. Rapid urbanisation can outstrip infrastructure development, leading to water scarcity and sanitation challenges. By 2040, global water demand will likely exceed sustainable water supplies by 40 per cent, leading to increased competition for water resources.³¹

While the outlook is challenging, it's not without hope. We are at a pivotal historical moment where concerted global action can make a profound difference. It starts with acknowledging that water is a shared resource, transcending borders and ideologies. Collaborative efforts are needed to ensure that the human right to clean water and sanitation becomes a reality for all.³²

Innovation offers hope in our quest for water security. Technologies such as desalination, wastewater treatment and precision agriculture hold promise in augmenting water supplies and reducing waste.

Additionally, data-driven solutions, such as smart water grids and predictive analytics, can enhance water management and mitigate crises.

The intricate web connecting climate change to water scarcity, food security, nutrition and public health underscores the urgency of addressing environmental challenges. Rising temperatures and shifting precipitation patterns contribute to desertification, rendering once-fertile lands barren. As arable lands shrink, the ripple effect on food production disrupts the delicate balance of nutrition and jeopardises the health and wellbeing of communities worldwide.

Effective water governance ensures equitable access and sustainable management. In collaboration with international organisations, governments must formulate and implement policies that prioritise water conservation, protect ecosystems and promote international cooperation on shared water resources.

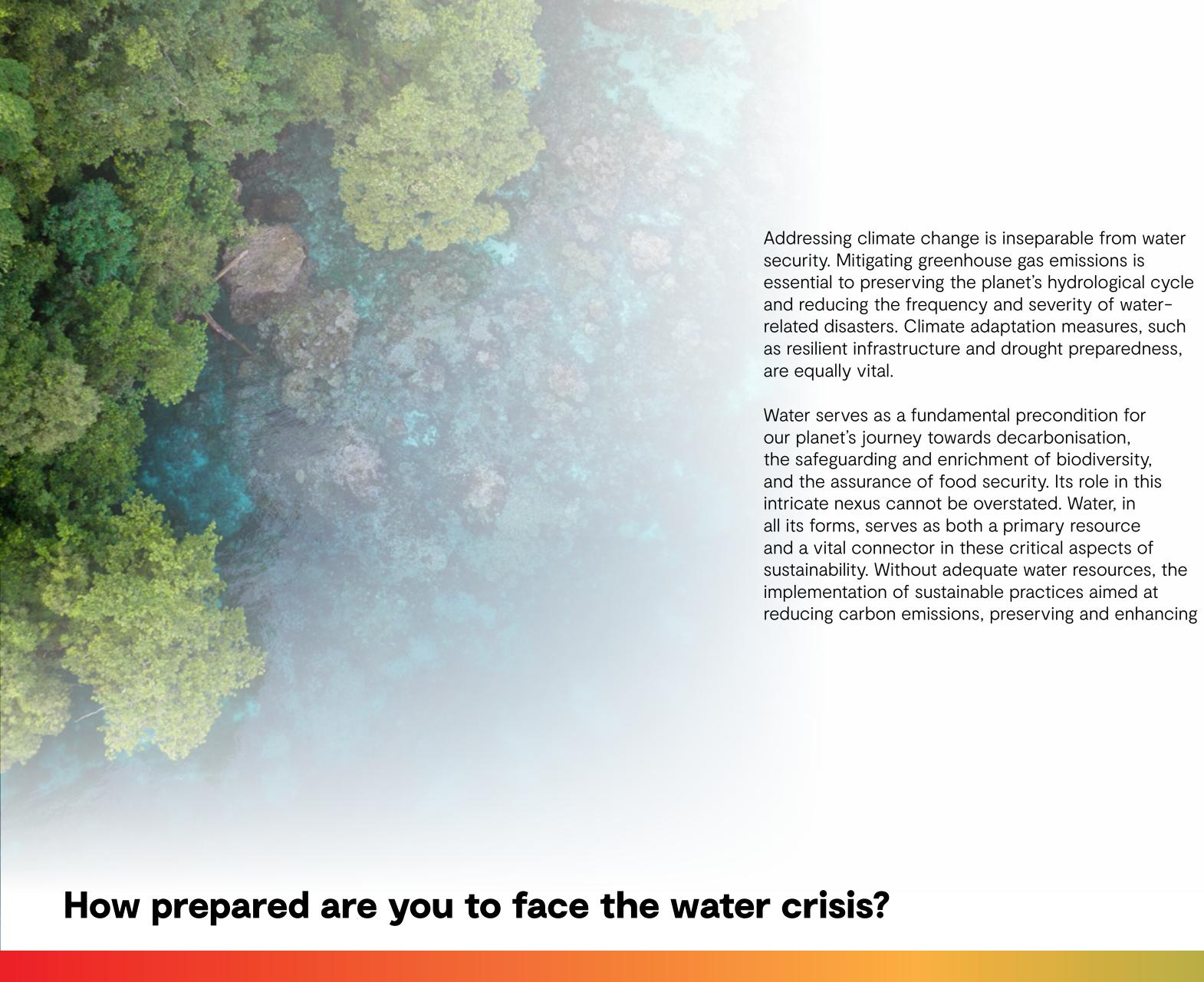
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As the climate crisis intensifies, the threat posed by changes in water systems will likely continue to grow in 2024.

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our rich biodiversity, and ensuring food security becomes an insurmountable challenge. Recognising and addressing these intricate connections of water is not just an environmental imperative, but a moral one, for it signifies our commitment to safeguarding the delicate balance of our planet's ecosystems while securing the wellbeing of current and future generations.

What does this mean for businesses? In 2024 and beyond, businesses can leverage many current and emerging technologies from around the world to become more agile and resilient as they address the water crisis. This should help the water industry deliver positive outcomes that respect nature and nurture communities.

1 Section 2 Section 2 Section 2 Section 3 Section 2 Section 3 Sect

Resilient communities

Nurturing equity and resilience

Communities serve as the bedrock of society, embodying shared values, fostering relationships and offering a sense of belonging. Today, over 50 per cent of the world's population resides in urban areas, and projections suggest that by 2050, this figure will rise to two-thirds.³³ According to UN-Habitat, cities consume 78 per cent of the world's energy and produce over 60 per cent of greenhouse gas emissions, despite accounting for less than 2 per cent of the Earth's surface. These urban centres represent the epicentres of our potential to effect significant positive environmental and social change.³⁴

At the same time, communities come in diverse forms, from small rural villages to sprawling urban neighbourhoods. At their core, communities are built on human connections.

They provide emotional support, foster a sense of identity and offer a platform for collaboration. In a rapidly changing world, these connections are more crucial than ever. They enable individuals to navigate challenges, share resources and build a sense of purpose.



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In 2024, as we navigate an ever-changing and complex world, communities will likely encounter various challenges, prominently:



Economic disparities

Today, communities are experiencing increasing economic disparities. While some thrive with access to resources and opportunities, others struggle with limited access to housing, education, employment, healthcare, telecom infrastructure and other 'life basics' such as shelter, clean water and sanitation.



Social cohesion

Building social cohesion within diverse communities is becoming challenging. Cultural, generational or ideological divides are straining relationships and hindering cooperation and, in many cases, regrettably resulting in protracted conflict.



Environmental concerns

Communities are facing environmental challenges, including loss of biodiversity, pollution, climate change and natural disasters, necessitating resilience and sustainable practices to be developed, implemented and refined to ensure long-term survival.

The challenge for policymakers is to address these issues at a time when the budgets of many OECD countries are fiscally constrained, limiting the public sector's ability to invest in significant projects. They must also address profound scepticism in their communities about the power and capability of elected officials and public bureaucrats to tackle the systemic issues at hand.

Leadership will play a pivotal role in building equitable and resilient communities in 2024. Effective leaders promote inclusivity, mediate conflicts and facilitate dialogue. They also advocate for their community's needs, ensuring that voices are heard at higher levels of governance. Equitable and resilient communities can withstand shocks and adapt to changing circumstances. Below are some key strategies to build equity and resilience:

Inclusivity

Inclusive communities that welcome diversity ensure all members have a voice. They actively engage marginalised groups and strive for equitable representation.

Education and skills development

Empowering community members with education and skills will enhance their economic opportunities and wellbeing.

Sustainable practices

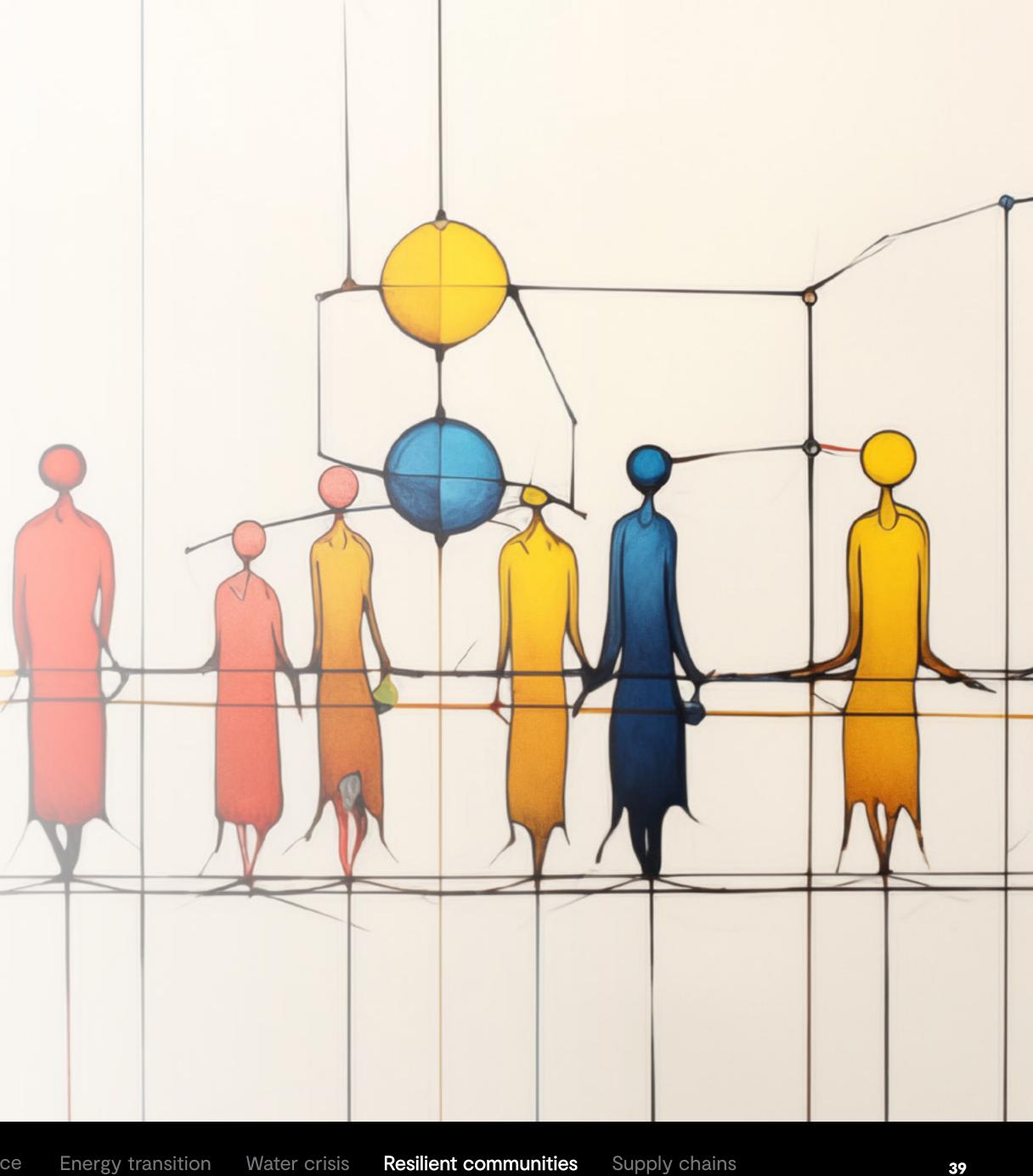
Communities should adopt sustainable practices to reduce their environmental footprint and combat the threat of increased environmental challenges such as extreme weather.

Community engagement

Encouraging community engagement through civic participation, volunteering and cultural activities will strengthen the social fabric.

Disaster preparedness

Communities should have plans to respond effectively to emergencies, including prediction, response and rebuilding.



The big picture

Global economy

Climate change Generative Al Cybersecurity Sustainability and resilience

The global housing crisis and policy solutions Policymakers are under increasing pressure to find In much of the developed world, the number one solutions to this growing problem. These solutions policy issue is housing affordability and accessibility. In major cities across Australia, Europe, the UK and include traditional methods, such as intervening in the US, housing markets are becoming increasingly the market to formulate new regulations, su unaffordable for most citizens, whether they want to inclusionary zoning or reducing red tape to expedite the planning and building process. On the other rent or buy. Homeownership is becoming a possibility only for the wealthy. Cities that fail to provide housing hand, new methods in public-private partnerships for housing delivery through institutional investments are for their residents will not prosper and may become stagnant, lacking the ability to spur innovation and also being explored. The challenge for policymakers is to intervene in a way that boosts dwelling supply, nurture diversity. promotes sustainability, and enhances the quality of The 'housing crisis' has been caused by rapid local neighbourhoods. population growth, the market's failure to provide The public sector is looking to businesses to partner enough new dwellings to meet demand, regulatory on new housing opportunities. For example, publicred tape that restricts development, and a tax system in many countries that encourages speculation. The private partnerships are being considered to deliver impact of this crisis is the increasing segregation regeneration projects, or innovative ways to improve of cities, where key workers and low-income the efficiency of building materials and construction communities are priced out of urban regions. are being explored to reduce the cost and time Increasingly, this crisis is affecting the middle class, required to develop new dwellings. who cannot enter the property ladder and achieve the dream of homeownership, causing much frustration within communities. Climate change Generative Al Cybersecurity Sustainability and resilience Energy transition



Nevertheless, implementing these strategies in every community is challenging, as they demand considerable time, effort and financial resources. Decision-makers may need to prioritise shelter and essential services over long-term sustainability practices.

What does this mean for businesses?

To build resilient communities, businesses should expand their focus beyond economic growth and consider the wellbeing of the environment and the overall quality of life for citizens. Without a thriving ecosystem that prioritises the planet's wellbeing and provides inclusive opportunities for everyone, no community can establish a sustainable foundation for lasting success. However, given the current focus of policymakers across the globe on addressing housing, it is crucial to acknowledge this critical challenge and emphasise the need to address it.

Communities are at their best when they are connected, resilient, productive and inspired. Businesses should commit to helping deliver thriving places and spaces that prioritise people. Through this commitment, they can explore solutions to promote equity and decarbonisation in built environments while navigating the pressures of an everchanging world."

Andrew Porter, Global Leader, Future Communities, GHD

How prepared are you to foster resilient communities?

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4 — 5

Extremely prepared

Supply chains

Navigating the dynamic landscape in uncertain times

Although global supply chains have been gradually recovering from the unprecedented disruptions caused by the COVID-19 pandemic in 2022 and 2023, businesses will likely face increased supply chain management challenges in 2024. Geopolitical tensions, a potential resurgence in protectionism and climate change are the key supply chain risks for the year ahead. These complex, interrelated issues demand immediate attention and strategic foresight as businesses navigate an ever-shifting landscape. Adaptability, collaboration and sustainable practices will be the cornerstones of resilience in an uncertain world.

Geopolitical tensions, exemplified by the Russia– Ukraine conflict and the recent Red Sea crisis, are casting long shadows over global supply chains. The protracted Russia–Ukraine war has keep energy prices high, reduced the global food supply and heightened uncertainty, while the Red Sea crisis compounds the challenges with potential disruptions to one of the world's most vital maritime arteries. Disruptions to shipping caused by the Red Sea crisis could have an impact on the global supply chain, as ships are forced to divert around the Cape of Good Hope in South Africa. This would considerably extend transit times, thereby increasing the end cost of goods for businesses. The significant delay could also pose issues for Just-In-Time practices, necessitating businesses to increase their stockpiles, resulting in associated cost increases.

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The tug-of-war between localisation and globalisation has intensified in the wake of escalating geopolitical tensions. Governments and businesses, once reliant on offshore manufacturing, are now reevaluating their global supply chains. The pandemic exposed vulnerabilities in lengthy and complex global supply networks, prompting a shift towards localisation for increased resilience. Substantial evidence indicates that reshoring is already underway. As these geopolitical issues unfold, supply chain resilience faces an uphill battle. Businesses must adapt, diversify and fortify their strategies to navigate the tumultuous geopolitical landscape and safeguard the uninterrupted flow of goods.

The potential resurgence in protectionism in 2024 could have profound and far-reaching impacts on global supply chains. Protectionist measures, such as tariffs and trade barriers, can lead to delays in the movement of goods, increased transportation costs and a heightened risk of supply chain bottlenecks. For instance, in October 2023, the US tightened its restrictions on exporting Al chips and manufacturing equipment to China to limit China's access to sophisticated semiconductors that could drive advancements in Al.³⁵

Furthermore, the complexity of supply chains today, with components and materials sourced from various countries, makes them particularly vulnerable to protectionism. Businesses may find themselves grappling with supply chain dependencies that are now subject to trade restrictions, forcing them to seek alternative sources or redesign their supply networks entirely.

In 2024, businesses will likely focus on building supply chain resilience and leveraging lessons learned from the disruptions caused by COVID-19 to shape their supply chain management strategies.

Organisations that cultivate technical excellence also nurture an embedded innovation mindset, providing them with a competitive advantage in discovering opportunities to develop sustainable solutions and thrive amidst challenges in an ever-changing global landscape."

Jill Hannaford, Executive General Manager, Technical Services, GHD

Supply chains worldwide also face significant climate change-related challenges, such as rising temperatures, extreme weather events, and shifting climate patterns. Supply chain disruptions caused by these factors will likely lead to delays in production and transportation, increased costs and heightened risks to business continuity. These impacts include both the immediate losses in inventory and revenue resulting from a production site's shutdown and the subsequent costs incurred by manufacturers when the outputs of that facility become unavailable as inputs for other products. For instance, a drought significantly reduced the number of ships that could navigate the Panama Canal in 2023 due to insufficient water for the locks, causing increased costs and shipment delays.³⁶

Businesses should step up their efforts to identify and address these challenges. Business leaders must focus on strengthening their supply chains against climate-related threats through strategic investments in network mapping, fostering collaborative relationships with suppliers and conducting comprehensive assessments and risk mitigation at individual sites. Businesses can also enhance their supply chain resiliency through integration into their climate action strategies.

This involves proactively mitigating climate risks at pivotal points within the supply chain while also fostering climate resilience in local communities. Recognising and acting upon this interconnection not only fortifies companies against environmental challenges but also amplifies their capacity to achieve their supply chain objectives.³⁷

What does this mean for businesses?
Businesses should recognise that their ability to thrive in 2024 and beyond hinges on their adaptability and foresight, including carefully evaluating supply chain strategies. They must diversify their sources and strengthen their supply chain management to ensure the uninterrupted flow of goods. Businesses should also proactively invest in resilience, including network mapping, supplier collaboration and risk assessment.

They can leverage the lessons learned from the disruptions caused by COVID-19 to shape their 2024 supply chain strategies, emphasising flexibility and the adoption of digital technologies to better adapt to unforeseen challenges. Businesses that prioritise adaptability, collaboration and sustainability will emerge as resilient leaders.

How prepared are you to navigate the disruptions to global supply chains?

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Preparedness is crucial to staying ahead

Macroeconomic indicators such as slower global growth, volatile energy prices, rising costs, historically high interest rates and the fracturing of trading patterns due to geopolitical tensions signal uncertainty in the global economy. Businesses should brace themselves for this increasingly uncertain and challenging operating environment. In the coming year, businesses should prioritise:



Achieving business agility to navigate turbulence and position for the next growth phase. In a year marked by quick and unexpected changes, business agility becomes crucial. It allows businesses to quickly adjust to new challenges and take advantage of new opportunities. When companies nurture a culture that values adaptability, they can stay ahead of the game and stay competitive even when things are uncertain.



Localising supply chains to enhance resiliency. The recent global disruptions have exposed the vulnerabilities of extensive and intricate global supply chains. By localising or diversifying suppliers, businesses reduce potential logistical hitches and contribute to local economies, building goodwill and fostering community relationships.



Ramping up digital technologies to bolster visibility and efficiency. Digital transformation is no longer a luxury; it's a necessity. Businesses that leverage technology to streamline operations, improve customer experiences and offer innovative solutions are more likely to thrive. Moreover, having real-time data and analytics at one's fingertips ensures informed decision-making, minimising risks and maximising returns.



Investing in emerging technologies and solutions to achieve climate change targets. As global conversations continue to centre more on sustainability, businesses that prioritise this focus will find themselves better positioned in the marketplace. Investing in green technologies or sustainable solutions reduces a company's carbon footprint. It paves the way for innovative products and services catering to the demands of more eco-conscious customers and aligns with policy



Proactively identifying and mitigating potential risks and disruptions. In an increasingly volatile global landscape, businesses should invest in robust risk assessment and management strategies. This includes scenario planning, supply chain resilience testing and financial contingency planning. By preemptively addressing potential risks, companies can better safeguard their operations and minimise the impact of unforeseen challenges, ensuring longterm sustainability and resilience in a dynamic business environment.



The big picture

requirements.

Global economy Climate change Generative Al Cybersecurity Sustainability and resilience

Energy transition Water crisis Resilient communities Supply chains

Where companies decide to invest, how they approach projects and how they differentiate themselves in the market will be crucial as the operating environment turns more competitive in 2024.

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How prepared are you to face 2024?

Please add your totals from each sections' assessment and see where you score on the spectrum below.





Uncover what your preparedness score says about you

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Endnotes

- 1 GHD computation based on the average growth estimates sourced from the World Bank, International Monetary Fund (IMF), Organisation for Economic Co-operation and Development (OECD), United Nations Statistics Division (UNSD) and the World Economic Forum (WEF).
- 2 Ibid.
- 3 World Bank.
- 4 Data from the World Bank, International Monetary Fund (IMF), Organisation for Economic Co-operation and Development (OECD), United Nations Statistics Division (UNSD) and the World Economic Forum (WEF).
- 5 Ibid.
- 6 US Bureau of Economic Analysis (BEA), "Personal Income by State, 2nd Quarter 2023", 29 September, 2023.
- 7 Reuters, "China's falling property sales, investment weigh on recovery", 18 October, 2023.
- 8 South China Morning Post, "<u>Moody's downgrades China property sector outlook, Fitch trims GDP forecast</u>", 15 September, 2023..
- 9 US EIA, "Global oil markets".
- 10 US EIA, "OPEC+ production cuts drive up sour crude oil price around the world", 25 September, 2023
- 11 US EIA, "EIA forecasts crude oil prices will increase through 2024 as demand rises above supply", 19 July, 2023.
- 12 Ibid.
- 13 IMF, "Inflation rate, average consumer prices".
- 14 US Bureau of Labor Statistics, "Consumer Price Index".
- 15 Ibid.
- 16 COP28, "COP28 delivers historic consensus in Dubai to accelerate climate action".
- 17 Carbon Disclosure Project (CDP), "Global Climate Change Analysis".
- 18 US Securities and Exchange Commission (SEC), "<u>SEC Proposes</u>
 <u>Rules to Enhance and Standardize Climate-Related Disclosures</u>
 <u>for Investors</u>", 21 March, 2022.
- 19 Gov.UK, "Biodiversity net gain".
- **20** GHD, "<u>GHD Sustainability Monitor 2024: From ambition to action</u>".

- 21 Ibid.
- 22 Ibid.
- 23 GHD, "SHOCKED: De-risking the energy transition".
- 24 BloombergNEF, "<u>Global Clean Energy Investment Jumps 17%,</u> <u>Hits \$1.8 Trillion in 2023</u>", January 30, 2024.
- 25 Ibid.
- 26 IEA, "Tracking Clean Energy Progress 2023".
- 27 IEA, "CO2 Emissions in 2022".
- 28 United Nations, "Global Issues Population".
- 29 United Nations Children's Fund (UNICEF), "Water Scarcity".
- 30 United Nations, "Ensure Availability and Sustainable Management of Water and Sanitation for All".
- 31 United Nations, "<u>Sustainable Development Goals: Clean Water</u> <u>and Sanitation</u>". United Nations, "Sustainable Development Goals: Clean Water and Sanitation".
- 32 United Nations, "<u>Ensure availability and sustainable management of water and sanitation for all</u>".
- 33 United Nations, "Around 2.5 billion more people will be living in cities by 2050, projects new UN report".
- 34 United Nations, "Generating Power".
- 35 Axios, "<u>Biden administration announces new restrictions on exporting AI chips to China</u>," October 17, 2023.
- 36 The New York Times, "<u>Drought Saps the Panama Canal,</u>
 <u>Disrupting Global Trade</u>," November 1, 2023.
- 37 Business for Social Responsibility (BSR), "Climate + Supply Chain: The Business Case for Action".

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