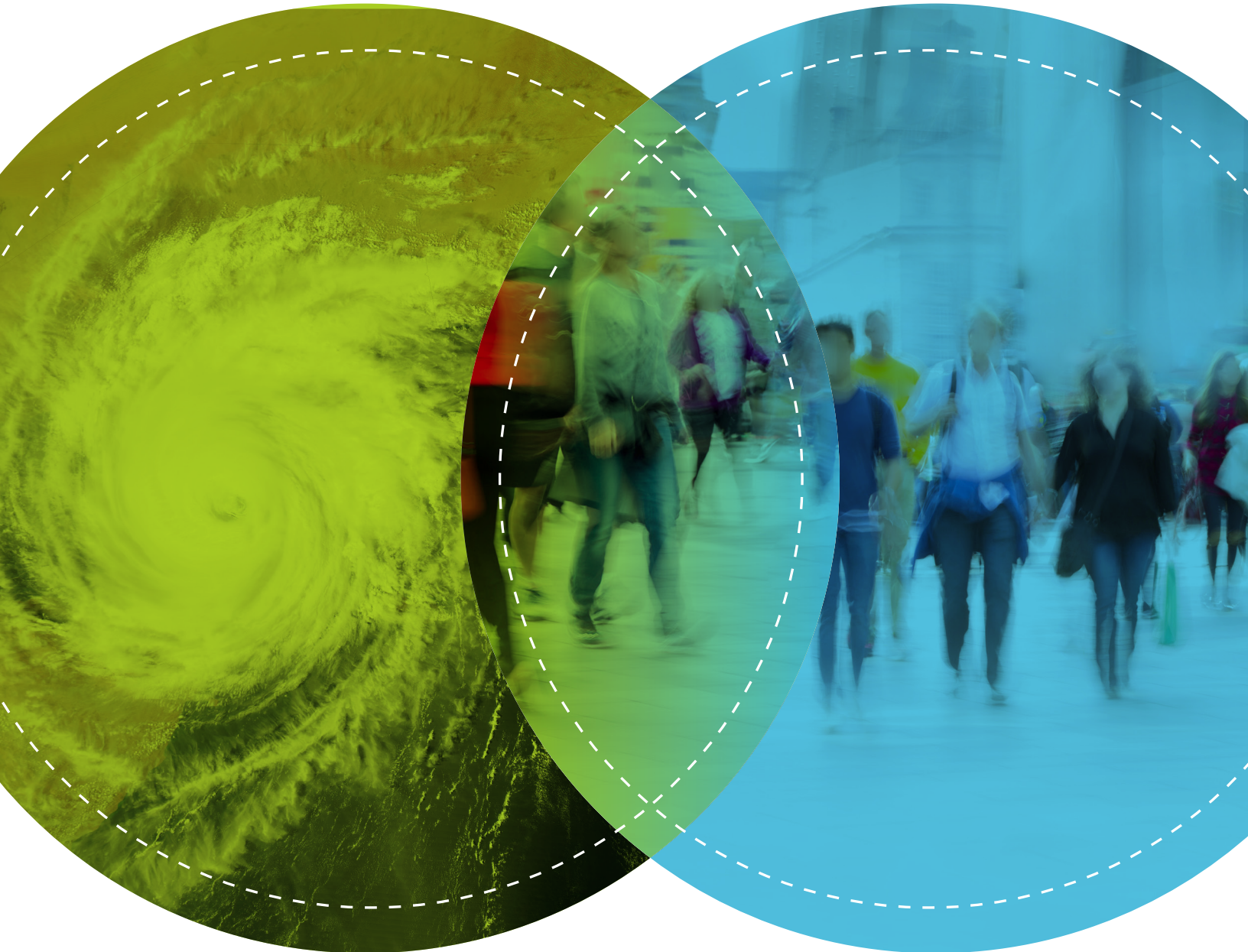
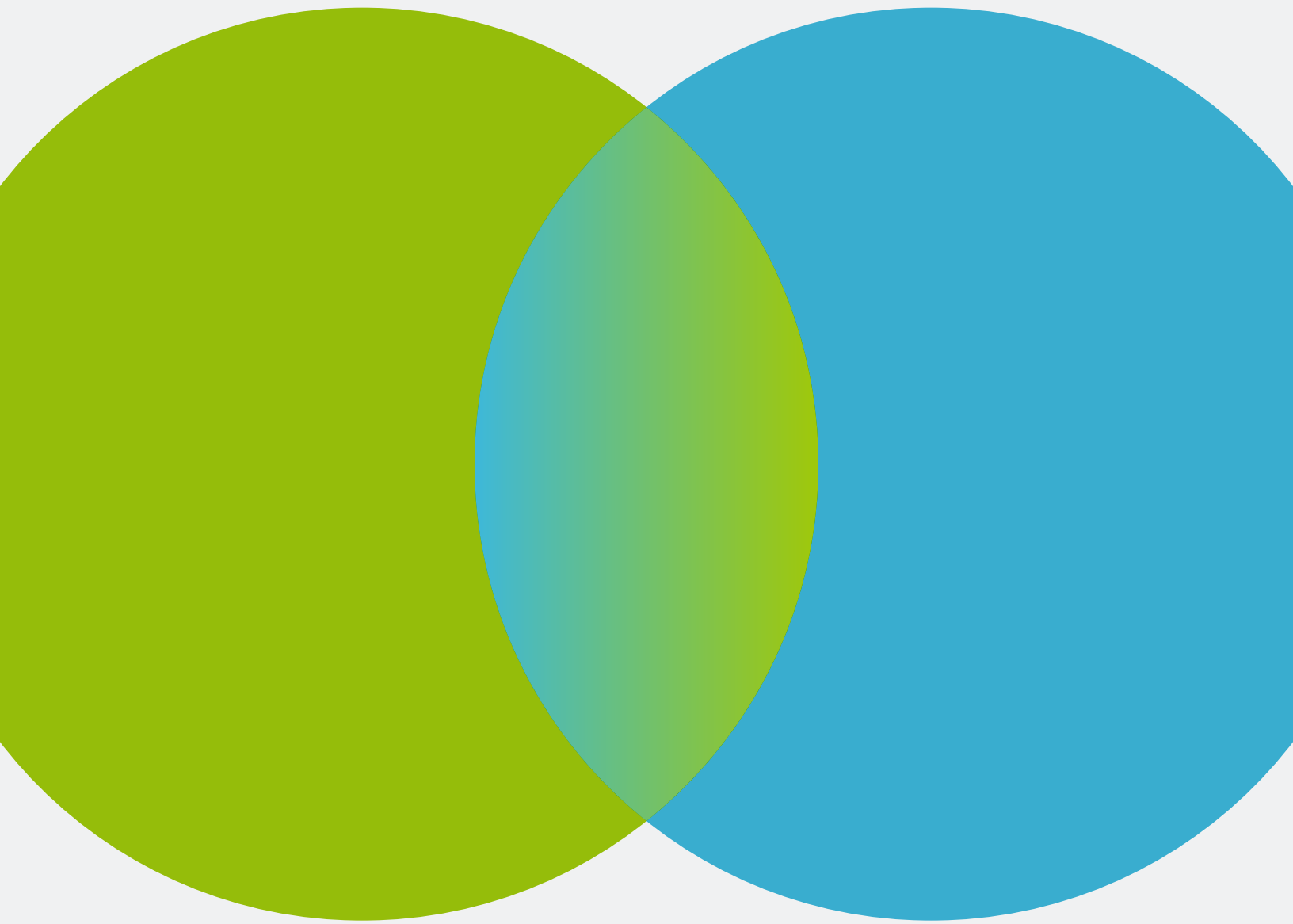


# Climate Change

# **Building Resilience While**

# **Protecting Human Rights**





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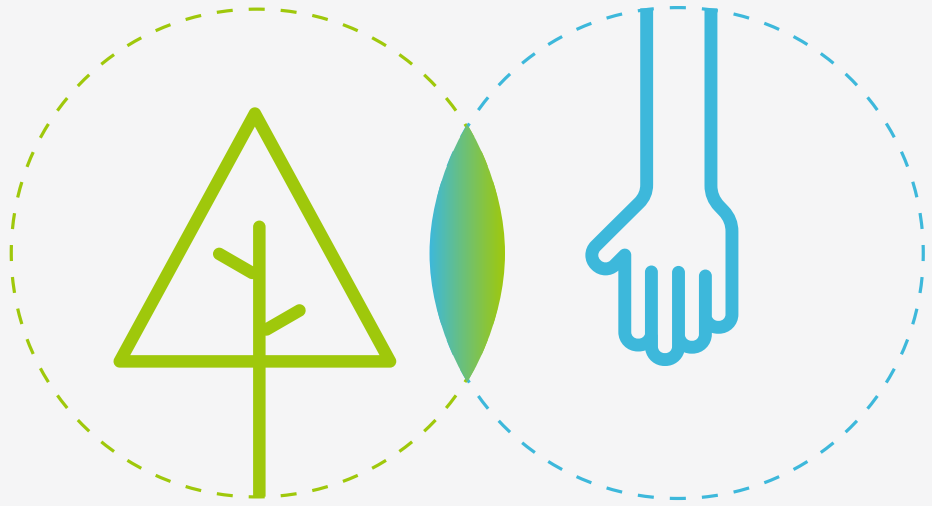
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## **ACKNOWLEDGEMENTS**

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Human rights and climate change are inextricably linked. The impacts of rising global temperatures — natural disasters, the proliferation of vector-borne diseases, climate migration, famine, and drought — negatively impact many human rights, such as rights to shelter, natural resources, mobility, health, employment, and livelihoods.

Whether caused by physical climate impacts (e.g., extreme weather events, flooding, heat stress, the spread of disease) or climate solutions themselves (e.g., communities excluded or left behind as companies install new infrastructure as part of their transition to a net-zero economy), climate change has disproportionate impacts on poor and marginalized communities, and it exacerbates the underlying systemic inequities that these communities already face.

As climate change magnifies inequalities and vulnerabilities, protection of human rights becomes even more urgent: where human rights protections are weak, individuals and communities are less able to adapt and build resilience to climate impacts.

## Why this matters for business

The UN Guiding Principles on Business and Human Rights (UNGPs) serve as the primary internationally accepted framework for standards and practice regarding human rights and business. According to the UNGPs, companies have a responsibility to respect human rights, which requires that companies (a) avoid causing or contributing to adverse human rights impacts through their own activities and

address such impacts when they occur and (b) seek to prevent or mitigate adverse human rights impacts that are directly linked to their operations, products, or services by their business relationships, even if they have not contributed to those impacts.

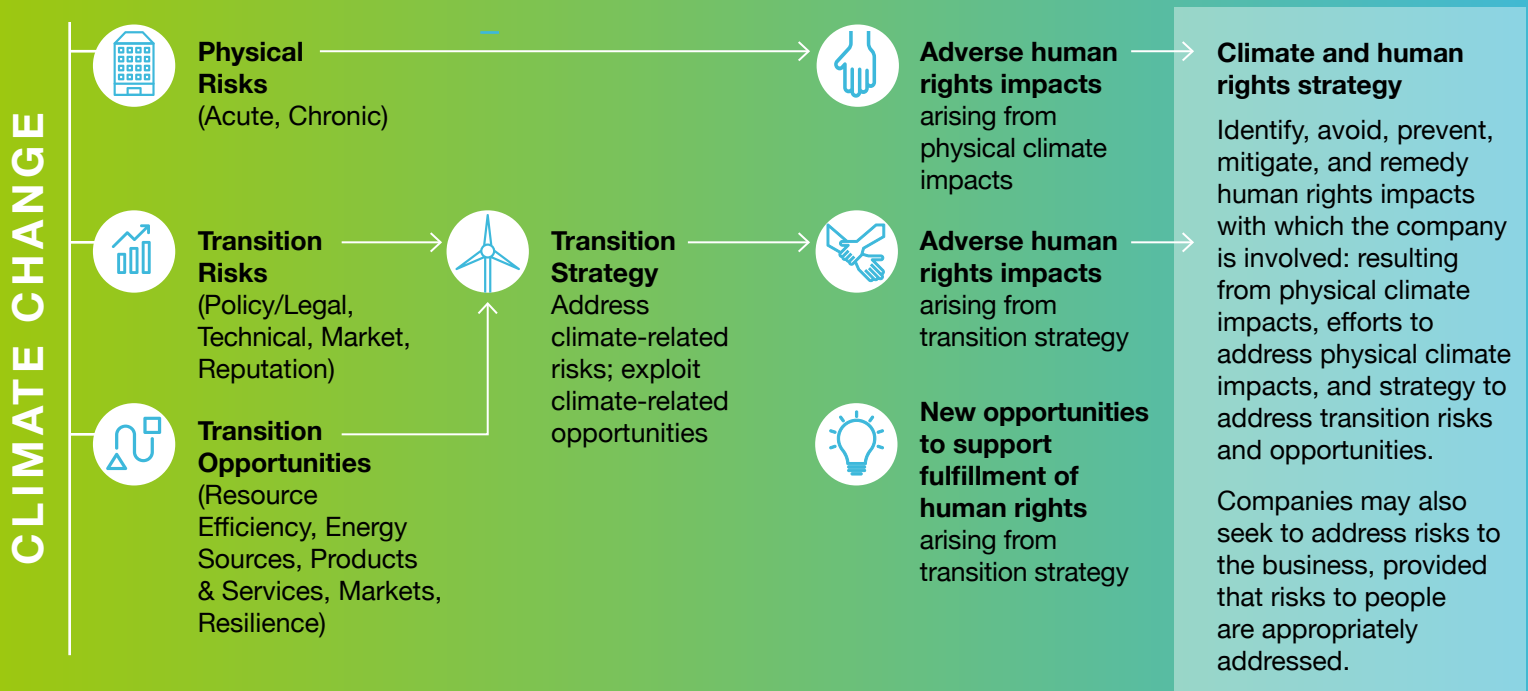
In the context of climate change, this means that companies have:

1. A responsibility to address human rights impacts related to their physical climate impacts;

2. A responsibility to address human rights impacts related to their transition to a low-carbon economy; and
3. An opportunity to promote the realization, fulfillment, and enjoyment of rights in a resilient world.

The table below illustrates how physical climate impacts, transition risks, and transition opportunities should be considered in the context of a company's climate and human rights strategy.

## Climate Change + Human Rights: Logic Flow







### **Risks related to Physical Climate**

**Impacts:** Physical climate impacts include “acute” shorter-term risks (such as extreme weather events, flooding, and drought) and “chronic” longer-term risks (such as changes in agricultural patterns and the spread of vector-borne diseases). Both types of physical impacts affect business operations and supply chains—such as damage to infrastructure, disruption of logistics and communications, and worker productivity and attendance. They also can affect the communities in which businesses operate, including damage to homes, schools, agriculture, and food sources, exacerbating vulnerabilities communities may already face. While there are similarities across different countries, underlying societal inequalities are often contextual and manifest differently across geographies.

### **Risks related to the transition**

**to a low-carbon economy:** To hold global warming to the agreed-upon warming level of 1.5 degrees Celsius and minimize climate impacts, the world must transition to a net-zero greenhouse gas (GHG) emissions economy by 2050. The systemic change necessary will require all stakeholders—governments and businesses alike—to contribute to a just transition. This transition has the potential to create 65 million new jobs and US\$26 trillion in economic opportunities in the next ten years. However, failure to consider human rights impacts of the transition could also add to significant job displacement and new migration patterns that bring novel human rights challenges.

Furthermore, the transition to renewable energy is already leading to an increase in demand for minerals, used to power everything from solar panels to ion batteries and electric vehicles. The extraction and sourcing of many of these minerals

are associated with armed conflict and human rights abuses as well as threats to human rights defenders.

Managing the human rights impacts as we transition away from using fossil fuels to low- or zero- emissions sources, such as renewable energy, will be critical as there is a risk that some workers and communities could be left behind or have their rights undermined.

As the connection between climate change and human rights impacts becomes more widely acknowledged, companies are increasingly being held accountable for failing to meet their human rights responsibilities. The responsibility to respect human rights pertains to every company, regardless of industry, size, or geographic location. However, the human rights impacts they will need to address will vary from industry to industry and company to company. Understanding how each company or industry is connected to human rights harms is essential to developing sustainable, rights-respecting transition plans.

# A Changing Landscape

While we know that climate impacts will increase, how and where climate impacts manifest is extremely uncertain. To adequately prepare for and address these impacts in an uncertain future, business should use a foresight-driven approach to factor the changing macro context into the design of robust policies, strategies, and programs. This includes considering early stage “signals of change,” which could mature in ways that will require rethinking approaches to address climate change and human rights challenges. For example:

- **Climate litigation targets business:** Between 2017 and 2020, climate litigation globally doubled. Cases are increasingly targeting corporate entities.
- **Climate refugees:** In January 2020, the United Nations Human Rights Committee ruled that it is unlawful for governments to return people to countries where their lives might be threatened by the climate crisis.
- **Growing vulnerabilities of the precariat:** COVID-19 has left gig economy workers and the informal labor sector highly vulnerable. These risks will be amplified with more frequent climate-related disruptions.
- **Emergency surveillance:** Vaccine certificates and tracking apps are being launched to host individuals’ health or vaccination status and permit access to everything, from international travel to their workplace. As governments struggle to contain COVID-19, many will face mounting pressure to bypass privacy and restrict civil liberties as they attempt to control and end the pandemic. Temporary abrogations may become permanent. Crises such as the COVID-19 pandemic will only become more frequent with climate change, and profound disruptions caused by climate impacts will intensify questions about the best balance between individual liberties and collective security.
- **The link between climate change and gender-based violence:** Climate-related disasters are exacerbating gender inequality and leading to increases in incidences of gender-based violence.
- **Dirty supply chains powering clean energy:** Infrastructure and technologies needed to power the transition to a low-carbon future depend on complex supply chains with problematic social and environmental impacts.
- **The data deficit for AI and climate change:** AI and big data will be essential to mitigate climate impacts and improve resilience. However, in developing countries, there is often a lack of data generation and poor data collection and/or management practices, resulting in a data deficit.
- **The Rights of Nature:** To protect their rivers from pollution, encroachment and illegal dredging, some countries have granted certain rivers the legal status of living entities. This has raised questions about how to balance human rights with environmental rights as the concept of “environmental personhood” gains traction, and rivers, lakes, mountains, etc., are granted the same rights as people.

# Developing A Resilient Response

The emerging issues above could manifest in a variety of ways, depending on the industry and how the global economy and geopolitical environment evolve over time. To build resilient strategies that address and mitigate the human rights harms associated with the climate impacts of business operations and strategic climate initiatives, companies will need to embed responses to key risks and opportunities that consider the emerging future. BSR's research

identified five strategic “hotspots” with the potential to create adverse human rights impacts that companies should consider as they build out their strategies.

- Disruption and shifts in the value chain will lead to new vulnerabilities for business and workers.
- Automation will lead to efficiency gains as well as questions around the future of work.
- Data collection will become increasingly widespread.
- Precarious employment situations will lead to considerable risks related to the rights of workers and worker protection.
- Shifts in the reporting landscape will lead to new and/or evolving regulations and standards on human rights reporting practices and policies.





# Recommendations

By taking these signals of change and strategic “hotspots” into consideration, companies can begin to prepare for adverse climate and human rights impacts across their value chains. To create long-term, resilient business strategies, companies should:

## **1. Take a human rights-based approach to climate change responses:**

Companies have a responsibility to identify and address the adverse human rights impacts arising from the physical climate impacts of their business operations and the impacts associated with their transition plans. To appropriately fulfill this responsibility, companies should integrate a human rights-based approach to their climate work by consulting with impacted rightsholders, identifying potential adverse human rights impacts arising from their business operations and climate strategies, and taking action to address these impacts. This may require changes to individual company approaches, along with collaborative, industry-based initiatives that put human rights at the center of climate strategy. The following recommendations lay out the first step to tangibly making those shifts.

## **2. Identify and understand rightsholders and communities most affected by the climate crisis:**

In order to build effective resilience strategies that take into account both climate change and human rights, companies must understand how climate vulnerabilities manifest across their value chains—both in terms of those directly impacted by the company’s response to climate change as well as how certain populations may be independently affected by climate change in the areas or industry in which they work. This can be done by assessing the human rights impacts of climate change as part of existing risk assessment processes or through targeted risk assessments that evaluate specific aspects of the value chain (e.g., certain commodities or geographies). Integrating these considerations into existing processes can serve as a low-lift, first step to identifying risks at this intersection while building internal understanding on the relevance of climate and human rights impacts across teams.

## **3. Engage individuals and populations most affected by the climate crisis:**

While identifying the communities most affected by the climate crisis is the first step, engaging these communities in the identification, development, and implementation of solutions to build resilience to climate impacts is crucial. Affected communities need to be at the center of the conversations and solutions to both physical and transition impacts.

## **4. Manage supply chain risk from the top down and bottom up to enable resilient suppliers:**

Risks must be managed both from the top and bottom of the value chain. At the top, solutions can involve Enterprise Risk Management (ERM) systems and secure buy-in from C-suite leadership and decision-makers in regional/local offices. Simultaneously, at the bottom of the value chain, perhaps at the farm or factory level, resilience programs and risk assessments can be deployed in a way that can reach those most affected on the ground.

## 5. Build awareness of climate and human rights impacts and advocate for action at all levels:

The intersection of climate change and human rights is still a nascent concept for business. As advocates continue to integrate this concept into their approaches, companies can help build awareness and provide space for those most affected by the climate crisis to contribute to the conversation. Furthermore, companies can use their influence to call on all levels of government to integrate a human rights and equity lens into their climate solutions, and vice versa.

## 6. Collaborate internally and externally:

Internally, teams spearheading the consideration of climate and human rights can host workshops and trainings to convene colleagues and explore synergies between departments. Externally, collaboration may involve establishing partnerships with experts and civil society organizations to create holistic strategies that tackle the human rights impacts of climate change. Companies can also participate in collective commitments, such as the Business Pledge for Just Transition and Decent Green Jobs.

## 7. Use future scenarios to plan for the long term:

To understand how a business and its stakeholders may be affected, companies should develop an understanding of a myriad of future scenarios, influenced by climate change, human rights, and other social, economic, and political dimensions. Companies can test the resilience of their strategies or approaches against these scenarios and ensure that they are appropriately addressing the climate and human rights impacts that may arise. This can be done as part of a climate scenario analysis exercise in line with the TCFD Recommendations.

## 8. Learn how to gather data and measure resilience for business and the communities they affect:

Identifying common metrics to measure the impacts and outcomes of climate change programs and activities on both business and society is helpful to drive action and obtain buy in on the work at this intersection.





# INTRODUCTION

Human rights and climate change are inextricably linked. The impacts of rising global temperatures—natural disasters, the proliferation of vector-borne diseases, climate migration, famine, and drought—are felt disproportionately by at-risk communities around the world.

Companies have a responsibility to uphold human rights and build resilience in communities affected by the climate crisis. However, the intersection between climate change and human rights is complex, and it is playing out in a dynamic global system that is changing in rapid and unpredictable ways. Climate policy, the geopolitical landscape, the global economy, technological innovation, and other issues will significantly impact how society and business respond to climate and human rights risks.

The COVID-19 pandemic has further highlighted the importance of strong business support for social resilience, while social justice efforts more broadly have made clear the risks businesses and society face if human rights issues are left unaddressed. We can be certain that climate change is already fueling future global crises; now is the time to prepare and make investments that consider the impact of these climate crises on human rights.



# The connection between climate change and human rights

Climate change negatively impacts rights related to shelter, natural resources, mobility, health, employment, and livelihoods, amongst others. Whether caused by physical climate impacts (e.g., extreme weather events, flooding, heat stress, the spread or severity of disease), or climate solutions (e.g., communities excluded or left behind as companies install new infrastructure as part of their transition to a net-zero economy), climate change has disproportionate impacts on poor, marginalized, or otherwise disadvantaged communities and exacerbates the underlying systemic inequities they already face.

As climate change magnifies inequalities and vulnerabilities, protecting human rights becomes even more urgent. Where human rights protection is weak, individuals and communities are less able to adapt and build resilience to climate impacts. Strong protection of human rights helps to build societal resilience and the ability to anticipate and respond to climate-related disruption.

This is critical to building resilient businesses capable of both weathering climate crises and operating in a rights-respecting way that minimizes harm to people.

Climate change impacts human rights in two ways: (1) physical impacts and (2) transition impacts. These impacts are experienced differently by communities around the world.





## Human rights and the physical impacts of climate change

Physical climate impacts include both “acute,” shorter-term risks, such as extreme weather events, flooding, and drought, as well as “chronic,” longer-term risks, such as changes in agricultural patterns and the spread of vector-borne diseases. Both types of physical impacts affect business operations and the communities in which they work, exacerbating community vulnerabilities. While we see similarities across different countries, underlying societal inequalities are often contextual and manifest differently across geographies.

In the United States, race and poverty are salient factors. Black, Indigenous, and People of Color (BIPOC) communities historically have had less access to healthcare, financial services, and other basic needs, making it more difficult for them to respond to crises, like climate change and the current COVID-19 pandemic.

When Hurricane Katrina hit New Orleans in 2005, low-income people and women of color and their children bore the brunt of the disaster, forced to flee their homes to often unsafe, temporary living situations and exposing themselves to increased gender-based violence.

In Bangladesh, gender and poverty are also salient factors. Women account for most of the country’s low-income population, and many depend on natural resources threatened by climate change. With fewer resources to secure their safety in the

face of a flood or extreme weather event, or in response to chronic climate impacts such as sea-level rise and vector-borne diseases, these women are much more likely to negatively experience physical climate impacts.

## Human rights and the transition to a net-zero GHG emissions economy

To hold global warming to the agreed-upon warming level of 1.5 degrees Celsius and minimize climate impacts, the world must transition to a net-zero greenhouse gas (GHG) emissions economy by 2050. The systemic change necessary will require all stakeholders—governments and businesses alike—to contribute to a just transition that enables economic vitality, ensures adherence to global labor standards, and cultivates effective participation by all stakeholders.

This transition has the potential to create 65 million new jobs and US\$26 trillion in economic opportunities in the next ten years. However, failure to

consider human rights impacts of the transition could also add to significant job displacement and new migration patterns that bring novel human rights challenges. In the UK alone, more than 2.2 million workers may need retraining and/or reskilling in order to meet the Paris Agreement goals.

Furthermore, the transition to renewable energy is already leading to an increase in demand for minerals, used to power everything from solar panels to ion batteries, and electric vehicles. The extraction and sourcing of many of these minerals are associated with armed conflict, human rights abuses, and threats to human rights defenders.

Managing the human rights impacts as we move from a fossil fuel economy to a net-zero economy will be critical as there is a risk that some workers and communities could be left behind or have their rights undermined during this transition. A just transition to the low-carbon economy will require strong human rights protections and fair labor practices to ensure all workers can benefit from these changes.



# What does this mean for business?

Businesses across sectors will face material risks to their operations and supply chains, in addition to risks within the communities and markets that their businesses depend on for raw materials, labor forces, etc. This includes risks related to both physical climate impacts as well as the transition to a low-carbon economy. These climate impacts will challenge businesses and result in downstream human rights impacts across a wide range of individuals and communities.

According to the UNGPs—the primary internationally accepted framework for standards and practice regarding human rights and business—companies have a responsibility to respect human rights, which requires that companies (a) avoid causing or contributing to adverse human rights impacts through their

*In 2013, Typhoon Haiyan’s severe weather and flooding wreaked havoc on businesses and communities in Thailand, and nearly 15,000 businesses reliant on Thai suppliers suffered disruptions. Western Digital lost 45 percent of its shipments, and HP reported losses totaling US\$2 billion.*

own activities and address such impacts when they occur and (b) seek to prevent or mitigate adverse human rights impacts that are directly linked to their operations, products, or services by their business relationships, even if they have not contributed to those impacts.

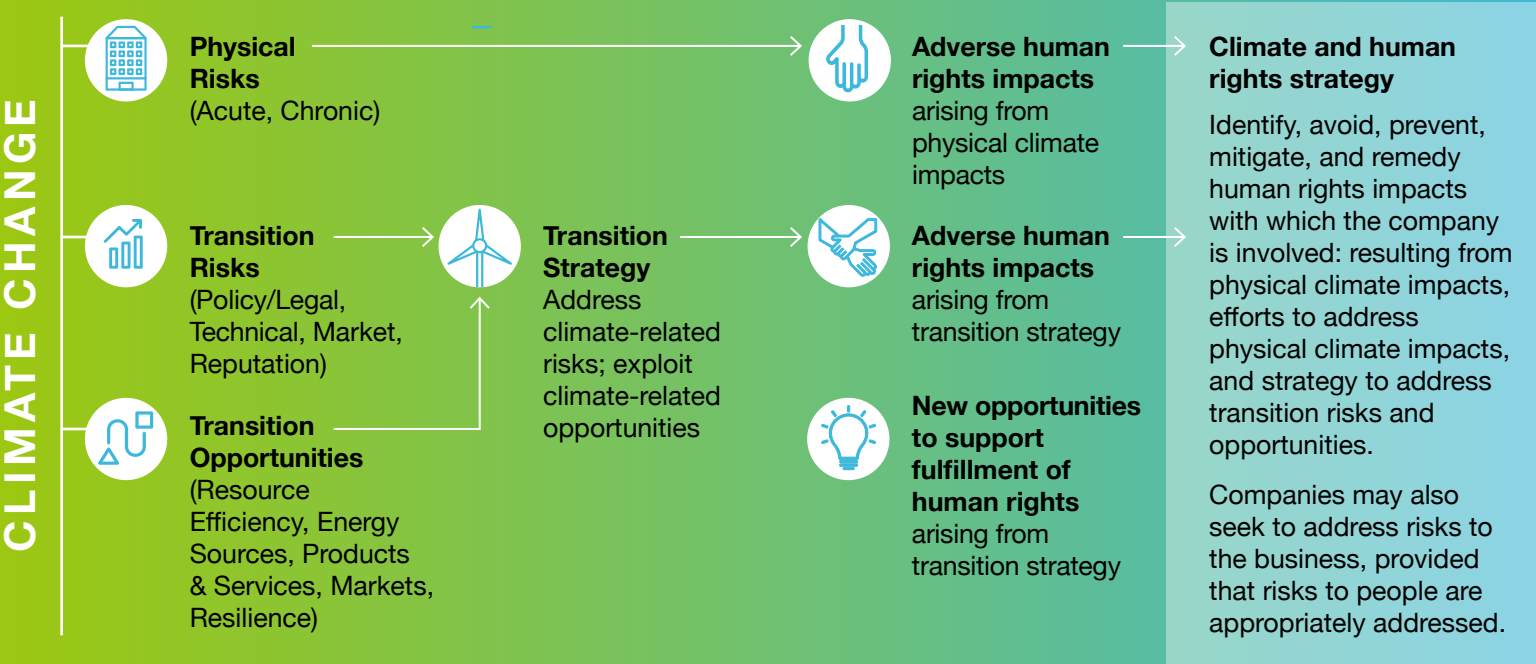
In the context of climate change, this means that companies have:

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The table below visualizes how physical climate impacts, transition risks, and transition opportunities should be considered in the context of a company’s climate and human rights strategy.

## Climate Change + Human Rights: Logic Flow







## Signals of Change

As the connection between climate change and human rights impacts becomes more widely acknowledged, companies are increasingly being held accountable for failing to meet their human rights responsibilities. This includes facing legal risks for the human rights impacts caused by climate change. For example, the Philippines Commission on Human Rights issued a landmark decision in 2019 that fossil fuel companies could be held legally responsible for human rights harms linked to climate change, signaling a trend that companies can be held liable for human rights violations if they fail to adhere to the goals adopted in the Paris Agreement. Such emerging norms and legislations may impact companies' finances as well as their reputation.

To adequately prepare for and address these impacts, business must work to identify emerging issues at the intersection of climate and human rights. By taking a foresight-driven approach, companies can look beyond the present to consider how the macro context could potentially change in the future and factor these prospective scenarios into the design of robust policies, strategies, and programs to address the climate and human rights nexus.

To assist with the identification of such trends, in 2020 BSR undertook a horizon-scanning exercise to identify emerging issues—also known as “signals of change”—at the intersection of climate change and human rights. We identified the following eight early-stage issues that could mature in ways that will require rethinking approaches to climate change and human rights.

## 1. Climate litigation targets business

Between 2017 and 2020, the number of climate litigations has nearly doubled around the world, increasing from 884 to 1,550 cases filed in 38 countries. In the 2019 Urgenda case, the Supreme Court of the Netherlands ordered the government to cut the nation's greenhouse gas emissions by 25 percent by the end of 2020 in line with its human rights obligations. It was the first time a nation has been required by its courts to take action against climate change on the basis of human rights.

Since the Urgenda case, human rights-based cases are emerging as a dominant approach in climate litigation. In 2021, a Dutch court ordered Royal Dutch Shell Plc to compensate two Nigerian villages for oil spills that took place more than 13 years prior, marking the first time a company and its foreign subsidiary were tried in the Netherlands for breaching duty of care abroad. This sets a precedent for where cases can be heard and may increase the number of cases in companies' home countries.

A recent report from the UN Environment Programme (UNEP) on the status of global climate litigation highlighted the increasing number of cases relying on human rights enshrined in international law and national constitutions as a key trend within climate litigation. Cases have been filed in Norway, India, Colombia, the US, Australia, Canada, and Brazil, amongst other countries. This includes a number of cases brought by youth plaintiffs, alleging that their





human rights to a healthy environment, life, health, food, and water, along with the international rights of the child, have been threatened by climate change. While most climate lawsuits seek to hold governments accountable, climate litigation is increasingly targeting corporate entities such as fossil fuel producers. Attribution science is an essential part of new litigation cases, substantiating that defendants' actions have caused the plaintiffs' harm. Cases are often based on public nuisance, corporate negligence, and human rights. As referenced above, in 2019, following a petition from environmental organizations and Filipino citizens, the Philippine Commission on Human Rights announced that major fossil fuel companies have obligations under domestic human rights law to address climate change impacts. In the future, a growing range of businesses could face charges of human rights violations based on their contributions to climate change.

## 2. Climate refugees: Whose responsibility?

According to a ruling by the United Nations Human Rights Committee in January 2020, it is unlawful for governments to return people to countries where their lives might be threatened by the climate crisis. The Committee ruled that “the effects of climate change in receiving states may expose individuals to a violation of their rights...thereby triggering the non-refoulement obligations of sending states.” The judgment opens the door to future protection claims for people whose lives and well-being have been threatened due to climate change.

Despite this ruling, Germany has stated it will not grant asylum to climate refugees, stating that “the federal government does not plan to recognise the ‘flight from climatic conditions and changes’ as a reason for asylum.” The International Organization for Migration has warned that opening the 1951 Refugee Convention to include climate change-related reasons could weaken refugee

status and lead to the exclusion of categories of people in need of protection. In January 2021, France took the opposite approach, overturning the expulsion order of a Bangladeshi man on the grounds that his respiratory condition would worsen due to the air pollution in Bangladesh. This was the first case in which the environment was cited by a court in an extradition hearing, setting precedent for the use of environmental factors and climate change in future deportation cases. It is also leading to increased calls for governments to establish parameters for climate migration in the legal system.

The pandemic has worsened the plight for climate refugees, facing closed borders, international travel restrictions, and unequal access to health care and economic relief during the crisis. As the physical impacts of climate change displace more and more people, the question of the rights and status of climate refugees will become increasingly urgent and thorny.

## 3. Growing vulnerabilities of the precariat

The global coronavirus pandemic has left gig economy workers and the informal labor sector highly vulnerable. In the US, the demand for gig economy services, such as ridesharing, decreased by as much as 50 percent in some cities, directly impacting workers' income. Other services, such as grocery delivery, are facing increasing demand, but the workers performing these services are anxious about their level of exposure to COVID-19. In most countries, gig and informal economy workers

do not enjoy the social protections offered to those employed in the formal economy, such as unemployment insurance, paid sick leave, and job security.

The California Assembly Bill 5 (AB 5) came into effect in January 2020 and requires companies that hire independent contractors to reclassify them as employees, with some exceptions. While AB 5 originally was intended to target gig economy companies, in November 2020, California State passed Proposition 22, backed by companies such as Uber and DoorDash. Proposition 22 legally designated gig economy drivers as contractors thereby excluding them from basic labor rights and benefits.

The global coronavirus pandemic has exposed the inequality and inherent vulnerability of the gig and informal economy. As the climate crisis causes increasingly frequent and widespread disruption, the risks to these workers—and the need for attendant protections—will be amplified.

#### 4. Emergency surveillance

Thus far, efforts to contain the coronavirus pandemic have been particularly successful in countries that have deployed highly intrusive approaches to disease surveillance and quarantine. China, Singapore, and South Korea have variously employed CCTV footage, cell phone data, credit card data, and mandatory tracing apps to identify those who may have been infected and isolate them from others. Other countries, such as Australia, have made use of open-source code for tracing apps and followed suit. Australia also used a little-known biosecurity law

to restrict the movements of people potentially infected with the coronavirus. Israel has passed an emergency law to use mobile phone data to track people infected with COVID-19 and to identify and quarantine others with whom they may have come into contact. However, in countries such as Singapore, the police are using data designated for COVID-19 tracking and tracing for criminal investigations. In South Korea, mobile phone tracking and tracing have proven problematic for the country's LGBTQ+ community, who are at risk of being forcibly outed to their families and communities if traced to LGBTQ+ venues. Queer Action Against COVID-19 has emerged as a platform for LGBTQ+ organizations to call for the respect of human rights and privacy during the pandemic.

As vaccine programs begin globally, vaccine certificates and tracking apps, such as CommonPass, are being launched to host individuals' health or vaccination status and permit access to everything from international travel to their workplace. A new Vaccination Credential Initiative has been formed to standardize the model for organizations administering COVID-19 vaccines and enable a universally recognized digital record of vaccination status. Estonia is experimenting with a blockchain-enabled decentralized database for vaccination certificates to protect privacy. Meanwhile, entities such as universities, nursing homes, and factories are experimenting with COVID-tracking wearables that monitor users' temperatures. The devices are seen as a way to enable safe, large-scale events, such as conferences and sporting events.

As the struggle to contain the pandemic causes widening disruption around the world, many democratic countries will face mounting pressure to bypass privacy and restrict civil liberties to get the pandemic under control. Temporary abrogations may become permanent. The slower moving, but ultimately more profound, disruption caused by the climate crisis will intensify questions about the best balance between individual liberties and collective security.

#### 5. The link between climate change and violence against women

Climate-related disasters and chronic climate impacts, such as heat stress and drought, increase migration, displacement, resource scarcity, and desperation, which, in turn, have been proven to exacerbate gender inequality and lead to increases in incidences of gender-based violence. The UN Development Programme (UNDP) has found that in periods of drought, women are more vulnerable to gender-based violence as they must make increasingly lengthy journeys to find water. Water and food stress have led to increases in child marriage, child begging, and human trafficking, along with higher levels of vulnerability to exploitation more broadly as families work to secure resources and provide for their families.

COVID-19 has also highlighted the increased risks that women and girls face during health crises. The pandemic has reversed much of the progress made on issues like gender-based violence and child marriage. Women's economic inequality during the pandemic has increased





their risk of trafficking and sexual violence. The economic impact of the pandemic has also resulted in up to 2.5 million more girls being at risk of child marriage in the next five years. Furthermore, access to psychological support, healthcare, and shelter have been limited during the pandemic. As climate impacts increase and compound existing vulnerabilities, such as those exacerbated by COVID-19, not only will this violate the rights of women and girls globally, it also places the entire Sustainable Development Goals agenda at risk as gender equality, beyond being a distinct goal of its own, is also recognized as fundamental to achieving the other goals.

## 6. Dirty supply chains powering clean energy

Solar panels, wind turbines, batteries, and other technologies needed to power the transition to a low-carbon future depend on complex supply chains with often problematic social and environmental impacts.

As decarbonization accelerates, a surge in demand for components for renewable technologies such as electric vehicles (EV) and solar panels is expected. EV producers like Tesla already have flagged the increased demand for inputs such as cobalt and nickel.

Furthermore, many minerals used in renewable energy—such as cobalt, aluminum, copper, manganese, molybdenum, and nickel—are associated with armed conflict in countries like the Democratic Republic of Congo (DRC). In 2019, several Congolese families whose children were killed or maimed while mining for cobalt used to power smartphones, laptops, and electric cars launched a landmark legal case against the world's largest tech companies. Promisingly, the DRC recently joined the Cobalt Action Partnership, an initiative focused on ending human rights abuses in the supply chain, including child and forced labor.

Human rights are also coming to the fore in US-China trade relations, resulting in pressure on US-based companies to end ties with suppliers based in China. The US renewable energy market may face challenges given the dominance of China, particularly the Xinjiang region, in the supply of polysilicon to make solar panels. Solar Energy Industries Association, America's top solar trade group, has urged US companies to move their supply chains out of Xinjiang.

As the world accelerates its transition to a low-carbon future and many governments fast-track investments in renewable energy as part of their COVID-19 recovery plans, urgent attention must be paid to the supply chains of associated inputs to ensure that clean technologies can be deployed without causing additional harm to human rights and the environment.

## 7. The data deficit for AI and climate change

AI is being deployed to solve some of our world's most complex problems, including climate change. For example, Google's flood alerts initiative uses data, such as river level readings and information about terrain and topography, to run simulations and create river flood forecasting models that can more accurately predict not only when and where a flood might occur but the severity of the event as well. In developing countries, there is often a lack of data generation and poor data collection and/or management practices, resulting in a data deficit. As a result, data may be incomplete, inaccurate, or insufficient to develop

AI solutions that are appropriate to the local context. These issues may be exacerbated by algorithmic bias within the AI models deployed.

Several initiatives have recently been launched that are building datasets for climate action in developing countries. One such initiative is Digital Earth Africa, which is building data infrastructure for all of Africa, including detailed tracking of water, land, construction, and vegetation changes across countries that can be used in decision-making. The Lacuna Fund provides funding to agricultural AI projects across Africa to develop labeled training datasets for machine learning. Another recent project by international scientists uses high-resolution imagery, previously only available for commercial entities, and AI to count the number of trees across the Sahara.

Artificial intelligence and big data will be essential tools in the effort to

mitigate climate impacts and improve resilience. However, close attention must be paid to questions of inequitable data collection practices as well as algorithmic bias.

## 8. The rights of nature

Over the last decade, the idea of environmental personhood has gained currency. To protect its rivers from pollution, encroachment, and illegal dredging, Bangladesh has granted its rivers the legal status of living entities, providing them with the same rights as people. In 2017, a New Zealand ruling gave the same legal rights as human beings to the Whanganui River, which is considered an ancestor by the local Māori tribe. However, enforcement of these rights in practice is difficult and requires a legal guardian, e.g., a court-appointed body, the government, or nongovernmental organizations. In 2011, the Global Alliance for the Rights of Nature and others sued

a construction company trying to build a road across the Vilcabamba River in Ecuador and initially won in court. However, the plaintiffs could not afford a second court case when the construction company acted against the ruling. Also in Ecuador, a constitutional court case is currently underway defending the Los Cedros Reserve from mining on the basis of the Rights of Nature, which are constitutionally enshrined. The outcome of the case could provide legal precedence for the Rights of Nature globally.

In November 2020, Orange County, Florida became the largest municipality in the United States to adopt a “Rights of Nature” law following a public vote. The measure, known as the “Rights to Clean Water Initiative,” recognizes the rights of Orange County rivers and streams and the right of residents to clean water. Also in 2020, The Stop Ecocide Foundation, with support from European countries and island nations, launched a project that involves drawing up a legal definition of “ecocide.” The aim is to have ecocide criminalized within the International Criminal Court (ICC), making it legally comparable to other international offences such as crimes against humanity, war crimes, and genocide.

Should environmental personhood gain traction, it will raise questions about how to balance human rights with environmental rights. Immediately following the Bangladesh ruling, authorities started evicting communities from informal settlements along riverbanks in Dhaka, violating the rights of one group of rightsholders to protect those of another.





## How to respond: key questions for companies to address

The emerging issues above could manifest in a variety of ways, depending on the industry and how the global economy and international geopolitical environment evolve over time. To build resilient strategies that address and mitigate the human rights harms associated with the climate impacts of companies' business operations and their strategic climate initiatives, companies will need to embed responses to key risks and opportunities that consider the emerging future.

BSR's research has identified five strategic "hotspot" considerations that should be considered to identify adverse human rights impacts as companies build out their strategies.



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**Disruption and shifts in the value chain will lead to new vulnerabilities for business and workers.** The instinct may be to shorten the supply chain to reduce touchpoints and vulnerabilities, but how can companies do this in a way that doesn't negatively impact thousands of workers? How can companies and communities work together to build their resilience to climate impacts?

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**Automation will lead to efficiency gains as well as questions around the future of work.** Who is being left behind during the transition to automation and a net-zero economy? How can companies identify at-risk populations who may be affected by these impacts and support them through these transitions?

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**Data collection will become increasingly widespread.** This will result in both risks and opportunities around data privacy, protection, and ownership as well as the potential for greater transparency and insights across the value chain. How can companies ensure they are responsibly collecting, sharing, storing, and using data?

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**Precarious employment situations will lead to considerable risks related to the rights of workers and worker protection.** How can companies provide support to workers across the value chain and take the necessary measures, including skills training and development, health and safety precautions, etc., to mitigate adverse human rights impacts and build community resilience to climate impacts?

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**Shifts in the reporting landscape** will lead to new and/or evolving regulations and standards on human rights reporting practices and policies. How can companies integrate the human rights impacts arising from climate change into existing reporting mechanisms? How can teams focused on human rights come together with those focused on climate change to consider impacts at the nexus of these two issue areas and advance reporting on risks and opportunities at the intersection of human rights and climate?

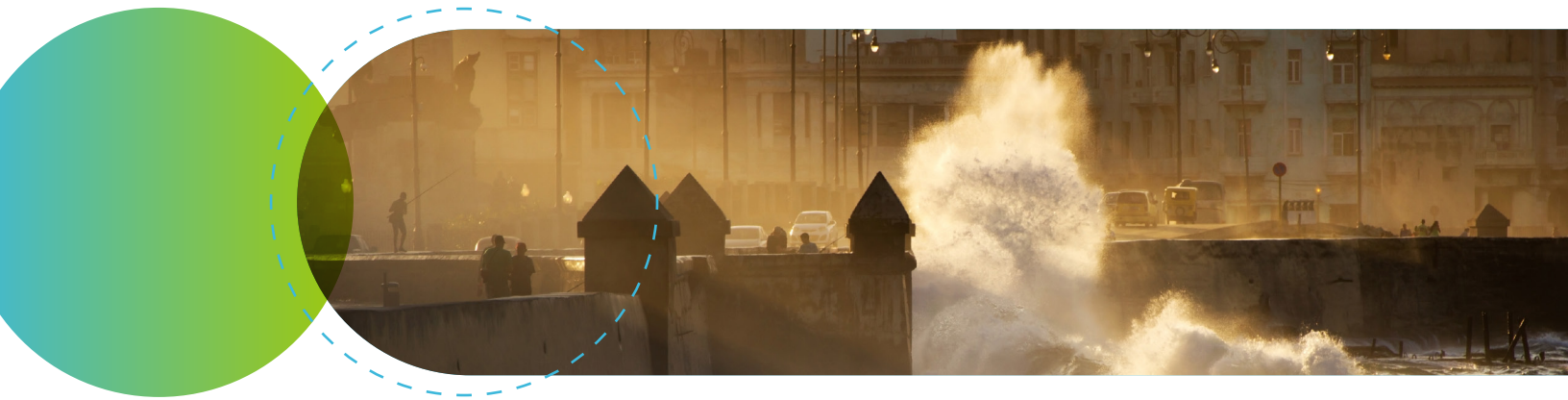
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## A human rights-based approach to climate change responses

In the blink of an eye, the COVID-19 pandemic dismantled our daily lives, the economy, and the way we do business. Disruptions from COVID-19 surfaced many of the same vulnerabilities we see with climate impacts, creating situations in which systemic socioeconomic inequality further exacerbates the dangers posed to those populations most affected by climate change. It quickly became clear that we weren't prepared for a pandemic; we are equally unprepared for the climate impacts occurring today. These will only become more frequent and more intense in the future. Learning from the pandemic, as well as our responses to previous climate-related crises, is key to building long-term resilience plans.

By taking these signals of change and strategic “hotspots” into consideration, companies can begin to prepare for adverse climate and human rights impacts across their value chains. To create long-term, resilient business strategies, companies should take a human rights-based approach to climate change responses. Companies have a responsibility to identify and address the adverse human rights impacts arising from the physical climate impacts of their business operations and the impacts associated with their transition plans. To appropriately fulfill this responsibility, companies should integrate a human rights-based approach to their climate work by consulting with impacted rightsholders, identifying potential adverse human rights impacts arising from their business operations and climate strategies, and taking action to address these impacts. This may require changes to individual company approaches, along with collaborative, industry-based initiatives that put human rights at the center of climate strategy. The following recommendations lay out the first step to tangibly making those shifts.



## 1. Understand and identify rightsholders and communities most affected by the climate crisis

Physical climate impacts, as well as climate solutions designed and deployed without input from relevant rightsholders, exacerbate existing inequalities and vulnerabilities of certain communities, resulting in disproportionate impacts to those populations. In order to build effective resilience strategies that take into account both climate resilience and human rights, businesses must understand how these vulnerabilities manifest across their value chains. This can be done by assessing the human rights impacts of climate change as part of existing risk assessment processes or through targeted human rights impact assessments or climate risk assessments.

**In Healthcare:** Researchers have found that the global increases in temperature and a rise in CO2 levels will likely lead to faster rates of evolution for mosquitoes, bringing with it new, diversified breeds and the proliferation of mosquito-borne diseases, such as Zika and malaria,

in previously unaffected communities. Treatments are being developed and becoming increasingly available for the growing middle class; however, the spread and increase of disease, particularly in previously unexposed areas, could result in the need for exponentially more medicine than has been developed and new ways to distribute treatments to those in need. This presents both a risk and opportunity for healthcare companies who will need to identify at-risk communities and build in responses to future planning.

**Across Industries:** During Typhoon Haiyan in 2013, companies experienced both operational and supply chain challenges. Not only was production halted for many companies due to infrastructure damage, but the physical climate impact on local communities further exacerbated the business impacts. Even in instances where companies were prepared for flooding and had implemented flood barriers, many of the workers in surrounding communities could not get to work and business could not move forward. Building the resilience of surrounding communities to climate impacts, in this case, becomes fundamental.

## 2. Engage individuals and populations most affected by the climate crisis

While identifying the communities most affected by the climate crisis is the first step, engaging these communities in the identification, development, and implementation of solutions to build resilience to climate impacts is crucial. Affected communities need to be at the center of the conversations and solutions to both physical and transition impacts.

**In the Energy Industry:** As companies producing or procuring fossil fuels begin to transition to renewable energy, the engagement of workers and communities, including their representative bodies, is crucial to ensure they are not left behind. Engaging them at the start of a transition is essential. For example, as part of its decarbonization plan, Enel closed numerous thermal power stations across Italy in 2016 and expanded its focus on renewable energy. In an effort to ensure a sustainable transition, Enel engaged its Italian union partners and established an agreement and accompanying framework for a just transition.



The framework covers retention, redeployment, reskilling, and early retirement for elderly workers.

#### **In Food, Beverage, and Agriculture:**

Tazo worked with the organization Intersectional Environmentalist to launch a new, paid internship program intended to bring new perspectives and experience to the fight for climate justice. The voices of Black, Indigenous, and People of Color (BIPOC) have been largely absent from the climate sector, and this internship program was created specifically to promote BIPOC-led climate solutions.

Starbucks is working with several partners to build a post-COVID-19 economy that is more socially and environmentally sustainable and puts justice at the heart of climate action. They are working to add a climate justice lens to their renewable energy procurement and infrastructure as well as throughout their business.

### **3. Manage supply chain risk from the top down and bottom up to enable resilient suppliers**

To ensure that the intersection of climate change and human rights is addressed thoroughly across the value chain, risks must be managed both at the top and bottom of the supply chain. At the top, solutions must involve Enterprise Risk Management (ERM) systems and secure buy-in from C-suite leadership and decision-makers in regional/local offices. Simultaneously, at the bottom of the value chain, perhaps at the farm or factory level, resilience programs and risk assessments must be deployed in a way that can reach those most affected on the ground.

If a supplier is identified to be “vulnerable to climate shocks” in a supply chain risk assessment, there are many ways a company can help them build resilience. To prevent shocks that negatively impact sourcing networks—including workers and communities—companies can adopt

a “reverse sourcing” approach, one that starts by implementing climate resilience programs at the entities in the value chain most vulnerable to climate shocks first. This may involve working with smallholder producers, upstream producers, or manufacturers to build out resilience programs rather than the traditional approach of engaging Tier 1 suppliers first and waiting for the program to trickle down from the top of the supply chain to those at the bottom.

#### **In Beauty and Personal Care:**

In 2019, L’Oréal used the equivalent of 70,000 tons of palm oil and palm oil derivatives (in compliance with Roundtable on Sustainable Palm Oil standards.) Back in 2014, L’Oréal decided to begin tracing derivatives all the way back to their source. In 2018, they published a list of 1,355 mills indirectly connected to their derivatives supply chain as well as the direct palm oil derivative suppliers. Transparency in the supply chain has allowed them to identify risks and vulnerabilities while also allowing them to begin supporting independent smallholders and transforming purchasing policies through the L’Oréal Sustainable Palm Index.

#### **Across Industries:** BSR’s Value Chain Risk to Resilience initiative

is developing common frameworks and methodologies that can be implemented across the company to assess climate risk. Implementing these systems throughout the business will help ensure that risks are identified by those setting company strategy at the highest level, while also identifying opportunities to build resilience amongst communities at the ground level.



## 4. Build awareness of climate and human rights impacts and advocate for action at all levels

While momentum is gaining, the intersection of climate change and human rights is still a nascent concept for business, and even for many individuals within the human rights and climate change fields. As advocates continue to integrate this concept into their approaches, companies can help build awareness by hosting events, developing thought leadership, or simply providing a convening space for others to share their voice, particularly those most affected by climate change.

Equally, governments must consider the intersection of climate change and human rights, including how to retrofit existing legislation to address emerging issues at this intersection and create new regulations. Companies can call on all levels of government to integrate a human rights and equity lens into their climate solutions, and vice versa. The climate action plans developed by the cities of Portland and Oakland in the US are great examples of how to integrate racial equity into governments' climate plans.

## 5. Collaborate internally and externally

The climate crisis is too big for individual actors to tackle alone; stakeholders must act together to address the human rights impacts of climate change. This requires internal coordination between teams as well as external collaboration across industries, government, and civil society.

Internally, teams spearheading the consideration of climate and human rights can host workshops and trainings to bring people together and explore synergies between departments. Externally, collaboration may involve making commitments through the Business Pledge for Just Transition and Decent Green Jobs, an initiative to support a just transition by ensuring the creation of decent jobs, or establishing partnerships with experts and civil society organizations to create holistic

strategies that tackle the human rights impacts of climate change.

Partnerships are key when building resilience to shocks. Many of the essential resilience-building activities will only be possible when companies, governments, and civil society come together. For example, a company can reinforce flood barriers around its own infrastructure, but a partnership with local government can further extend the resilience-building into the local community infrastructure, helping to ensure that workers can get to work and that their communities are protected, ultimately safeguarding both the business and the community.

**Across industries:** The Transform to Net Zero initiative is a group of companies that have come together to address collective challenges and accelerate the transition to a net-zero GHG emissions economy by 2050. Its core principles recognize that marginalized groups and



low-income communities bear the greatest impacts of climate change. The principles aim to help enable conditions needed to achieve effective, just, and sustainable climate solutions for people of all gender, race, or skills.

## 6. Conduct and disclose risk assessments at the intersection of human rights and climate

Many companies already conduct human rights due diligence and undertake human rights impact assessments (HRIAs) to identify risks across the business. Companies also carry out risk assessments on the business's exposure to climate-related risks in accordance with the Task Force on Climate-Related Financial Disclosures (TCFD) requirements.

To better understand and address risks at the intersection of climate

and human rights, companies can begin assessing the human rights impacts of climate change as part of existing risk assessment processes or through targeted risk assessments that evaluate specific aspects of the value chain (e.g., certain commodities or geographies). Integrating these considerations into existing processes can serve as a low-lift, first step to identifying risks at this intersection and build internal understanding on the relevance of climate and human rights across teams.

These assessments should include consultation with affected stakeholders and communities. Given that climate and human rights impacts look different across the globe, it is crucial to include perspectives that provide insight into physical impacts and the socioeconomic factors at play throughout the assessment. As an example, applying a gender-focused lens could include working with female workers at factories or farms in high-risk geographies to identify

current gender-related barriers that may hinder factory and/or community resilience to climate and human rights impacts. Findings can then be used to create effective, more robust company resilience strategies.

As companies continue to conduct climate risk assessments, they can include human rights risks of climate impacts as part of their report to the Task Force on Climate-Related Financial Disclosures. Companies can also opt to disclose climate change-related human rights risks within their human rights or sustainability reports or by sharing full or abridged results of their human rights due diligence efforts, including relevant HRIAs.

## 7. Use foresight methodologies to plan for the long term and increase strategic resilience

While human rights risk assessments can identify current vulnerabilities or crisis hotspots, they do not thoroughly examine the uncertainties of the future and the long-term impacts that may come with it. To understand how a business and its stakeholders may be affected, companies should develop an understanding of a myriad of potential future scenarios, influenced by climate change, human rights, and other social, economic, and political dimensions. Companies can test the resilience of their strategies or approaches against these scenarios and ensure that they are appropriately addressing the climate and human rights impacts that may arise.

Beyond supporting the creation of resilient strategies, the process





of developing scenarios creates an opportunity to bring together decision-makers addressing climate and human rights risks throughout the company, providing the added benefit of promoting cross-department collaboration.

The Recommendations of the Task Force on Climate-Related Financial Disclosures, published in 2017, explicitly call for the use of scenario analysis to assess the potential business implications of climate-related risks and opportunities, and it is increasingly becoming a standard practice. However, the use of scenarios for the consideration of human rights is not yet mainstream, nor is it referenced in key frameworks, such as the UNGPs.

**In Healthcare:** BD (Becton, Dickinson and Company) created their own set of scenarios in 2019 as part of their broader sustainability work, and as part of their preparations to report on TCFD and climate risks and opportunities. The four scenarios corresponded to warming by 2100 and explored climate-related risks and opportunities, and other key uncertainties for BD's business. Through the process, they identified

four distinct 'hot spot' issues that would be relevant for the company across the scenarios created. They then identified ways to address these hotspots that would work across the entire scenario set and, in so doing, made their strategy more resilient and futureproof. The process engaged over 30 leaders across the company, involving them more fully in BD's sustainability work, and pushed for the consideration of issues they might not normally consider, including those at the nexus of climate and human rights.

## **8. Learn how to gather data and measure resilience for business and other important communities**

Measuring resilience in relation to both climate and human rights is not as straightforward as quantifiable evaluations of emissions reductions, but it is just as important. Identifying common metrics to measure the impacts and outcomes of climate resilience programs and activities on both business and society is helpful to driving action and obtaining buy-in for work at this intersection.

**In Retail:** COVID-19 highlighted several existing issues within retail supply chains. Many companies noted that it was difficult to pull data on the status of materials, orders, shipping, and inventory as quickly as needed. As they attempted to change orders and respond to the shifting landscape, companies realized that not only were they lacking timely information on orders, but they also had little information on how suppliers and partners were faring, including which partners had been impacted by COVID-19 and who was still operating. Over the course of the pandemic, several BSR member companies mentioned that they built out their data collection systems and worked with suppliers and partners to begin to build resilience to climate impacts. As part of this process, companies are also starting to capture information on the resilience levels of their partners, noting where and how they can make changes to build resilience and flexibility and where support may still be needed to both mitigate adverse human rights impacts and create adaptable and resilient value chains.

# Project Methodology

## Overview

Over the course of 2020, BSR's Climate Change and Human Rights teams partnered with BSR's Human Rights Working Group (HRWG) to identify and explore impacts at the intersection of human rights and climate change through the lens of strategic foresight.

A foresight lens is necessary as climate change is not unfolding in a vacuum but within a volatile global context being reshaped by disruptive macro forces such as rising geopolitical tensions, accelerating technological change, and burgeoning movements for social change. These forces will strongly shape what climate action looks like and how the world responds to the unfolding impacts of climate change. Given the high degree of uncertainty as to how these forces will play out, BSR grounded the project in a set of future scenarios depicting plausible alternative futures for climate action, impacts, and responses. These scenarios further depict what the cascading implications of some of these changes might be. For example, what might be the political fall-out from efforts to transition to a low-carbon economy, or how will automation and artificial intelligence intersect with climate action and human rights?

The project had three stages:

1. BSR first developed a human rights and climate primer to increase understanding of the context and emerging trends, with a specific focus on how climate change and human rights impacts affect business. This included desk research and the identification of emerging trends, or signals of change, as well as interactive workshops to glean insights from companies on the business implications of these changes.
2. For the second stage, BSR utilized research findings from stage one to develop three human rights and climate change scenarios. Building off scenarios created for the We Mean Business Coalition, each scenario describes alternate pathways the world could take and specifically focuses on climate change and human rights. Based on these scenarios, BSR worked with HRWG members to identify key business risks and opportunities within and across the scenarios.
3. Finally, in the third stage, BSR worked closely with HRWG members to explore strategic responses to the risks and opportunities identified in the second stage and to develop recommendations on how business could address these impacts.

## Developing scenarios at the intersection of climate change and human rights

In addition to thinking through how future disruptions might impact the intersection of climate change and human rights, business strategies also need to consider the profound, yet uncertain, ways in which the broader macro context is changing.

Over the next ten years, we can expect to see significant changes in the world related to technological innovation, geopolitics, and the global economy. It is impossible to predict what shape these will take with certainty. Yet it would be a mistake to simply dismiss these changes as unknowable—or to forecast a single version of the future and design company strategies or approaches based on that single version.

Scenario planning offers a methodology to simultaneously consider multiple plausible versions of the future and identify actions we can take today that will position us to thrive in all or most scenarios. Scenarios are not predictions but rather a tool to ask “what if,” stress test our thinking, and develop more robust strategies.

As mentioned, for this study, we leveraged a set of scenarios that BSR recently developed for the We Mean Business Coalition. These scenarios were structured around a set of three big questions for the next decade.

1. Would we see the political pendulum shift more toward global cooperation and coordination or toward greater fragmentation and polarization?

2. Would the physical impacts of climate change be perceived as “eco-shocks,” powerful enough to galvanize transformative action, or would they fail to hold the world’s attention?
3. Would the global economy continue a trajectory of growth more or less similar to the previous decade, or would it enter a period of crisis and decline?

Different permutations of answers to these questions produced three scenarios—three distinct but plausible accounts of what the world might look like in 2030. These scenarios—Automation Acceleration, Walled World, and Resilient Rebirth—are summarized below.

Using futures wheels, a collaborative foresight exercise to creatively extrapolate the implications of individual disruptors, members of the HRWG explored how the signals of change discussed above could play out over the coming decade. Insights from this exercise were then used to augment the three existing scenarios, tailoring them to be salient to the question of how the nexus of climate change and human rights might evolve over the coming decade.

A summary of each scenario, along with its human rights implications, is provided below.

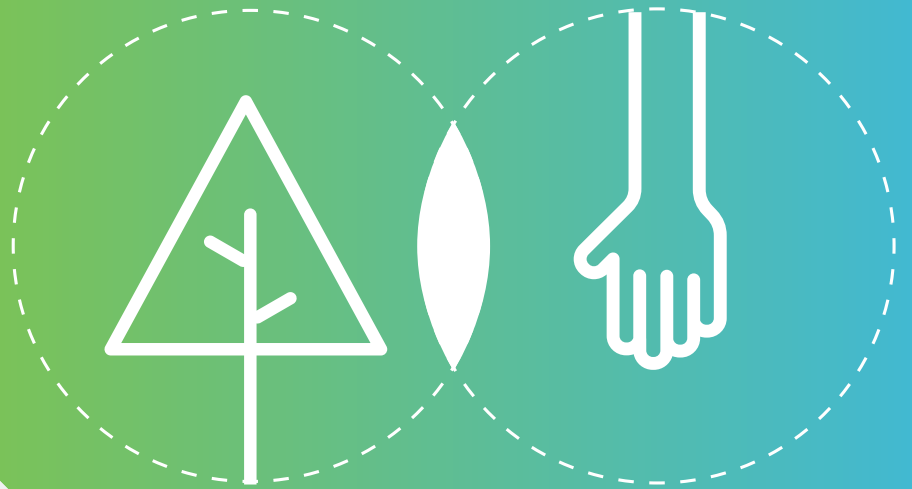


## Assessing human rights impacts

Each scenario was assessed against the following human rights categories:

- **Civil Rights:** Right to life, liberty, and security of the person, and rights which offer protection from physical violence against the person, torture and inhuman treatment, arbitrary arrest, detention, exile, slavery and servitude, interference with one's privacy and right of ownership, restriction of one's freedom of movement, and the freedom of thought, conscience, and religion.
- **Political Rights:** Freedom of expression, freedom of association and assembly, the right to take part in the government of one's country, and the right to vote.
- **Economic Rights:** Right to an adequate standard of living, right to own property, the right to work, the right to a fair wage, a reasonable limitation of working hours, and trade union rights.
- **Social and Cultural Rights:** The right to food, clothing, and housing (part of the right to an adequate standard of living), the right to physical and mental health, the right to social security, and the right to education. The right to participate freely in the cultural life of the community, the right to share in scientific advancement.
- **Environmental Rights:** The right to a healthy environment and the right to water.





# Future scenarios and corresponding human rights impacts

**01** Automation Acceleration

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**02** Walled World

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**03** Resilient Rebirth

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# 01

## Automation

## Acceleration

# SCENARIO

In the absence of a collaborative global response to the COVID-19 crisis, nations chose to try to prevent crippling outbreaks by massively scaling up automation and personal data analytics. Prolonged periods of social distancing resulting from slow vaccine rollouts and persistent new virus strains forced business to adapt to a virtual model wherever possible—stalling, and in some cases even reversing, urban growth. Global trade and travel have slowed, and employment levels have declined due to automation. The global commercial real estate market is significantly smaller.

As Big Tech gained an ever-larger share of the virtual economy and as many routine jobs disappeared, the social contract evolved. Many nations now provide some form of universal basic income, largely funded through taxes on automation. Personal data has become an even more valuable commodity, and people must share intimate details of their daily lives to participate in social and economic life. For those at the top, this brings increased leisure, safety, and mobility. For the many tiers below, it means trading privacy for livelihoods. Inequality has intensified despite expanded social safety net policies.

Climate concerns have been largely crowded out by more immediately visible economic challenges. Economic and technological factors continue to drive decarbonization as new technologies are launched and the cost of renewable energy declines, although the rate of change is moderated by the absence of a supportive global policy framework. Global emissions have started to decline, though not nearly enough to meet the goals of the Paris Agreement.

Now, in 2030, it's unclear what comes next. It's evident that major reforms are needed to the economic system—but no approach has emerged as a new dominant paradigm. And cooperative action is clearly needed to address global challenges, including climate change, but politicians and corporations have little appetite for anything that doesn't address the pressing economic and political issues at home.





## Human Rights Implications

### *of Automation Acceleration*

#### Civil Rights

Government response to the pandemic early in the decade severely restricted freedom of movement, while widespread personal data collection led to significant and irremediable privacy violations, with downstream impacts on freedom from discrimination and freedom of religion.

#### Political Rights

Pervasive surveillance had a chilling effect on civic participation, limiting rightsholders' freedom of expression, freedom of association and assembly, and desire/ability to partake in political discourse, including elections.

#### Economic Rights

Government provisions for universal basic income helped to protect rightsholders' right to an adequate standard of living. However, most other economic rights have been forgotten in the wake of automation. Economic inequality has been exacerbated.

#### Social and Cultural Rights

The social contract passed toward the middle of the decade began to introduce widespread protection of basic rights, including the right to food, clothing, and housing as well as the right to education. However, this often required conceding other rights, including the right to privacy.

#### Environmental Rights

Decarbonization continued as new technologies were launched and the cost of renewable energy declined, resulting in ever-improving air quality. However, governments' failures to address or respond to climate change had severe negative impacts on state of the environment and access to water at a local level.

Political divides have been exacerbated by COVID-19 and the climate crisis. Governments have resorted to building walls, hoarding resources, and zero-sum competition amongst themselves. People identify less with nation-states and more with their own increasingly insular enclaves.

Disinformation is endemic and has hindered pandemic response efforts, polarized populations, and undermined democracy. The world is marked by a profound lack of trust, and many have simply retreated to their own ideological bubbles. Skepticism about the statements and actions of other countries has strongly hindered coordinated efforts on global challenges.

The reality of climate change is no longer debated since eco-shocks spare no country or region. Rather than cooperate on global mitigation efforts, governments and the private sector focus on adaptation. Climate activists have become increasingly radical in their methods to demand action, moving from global protests to what some call ecoterrorism.

Governments prioritize energy independence and seek to exploit whatever energy sources are most accessible and reliable. For some countries, this has meant a rapid rise in adoption of renewables, while others have doubled down on fossil fuels. New geopolitical fractures and several uneasy alliances have resulted.

Territorial disputes and resource wars have proliferated. Proxy wars rage in Africa, access to mineral resources in the Arctic seabed has become a flashpoint, and access to water fuels conflict in the Middle East and South Asia. Overfishing and warming seas have left critical fish stocks in dangerous decline, further fueling conflict between China and its neighbors.

Technological moonshots such as geoengineering are being embraced as a last-ditch effort to avert catastrophe, but their governance is insufficient in avoiding unintended consequences.



## Human Rights Implications *of Walled World*

### Civil Rights

Territorial disputes, resource wars, and spikes in ecoterrorism have all resulted in increased violations of the right to life, liberty, and security, along with incidences of torture and inhuman treatment, arbitrary arrest, detention, exile, and slavery. Pervasive data collection has virtually erased the concept of privacy in many regions.

### Political Rights

Pervasive surveillance has resulted in a decrease in civic participation and limited rightsholders' freedom of expression, freedom of association and assembly, and desire/ability to partake in political discourse, including elections.

### Economic Rights

While a handful of nations have attempted to protect the right to work and ensure livelihoods for their citizens, most are focused on deploying emergency measures to meet other basic needs. Other economic rights are considered largely irrelevant since these are contingent on employment.

### Social and Cultural Rights

The reality of climate change, compounded with the state of the global economy, has significantly impacted the right to food, clothing, and housing as well as the right to physical and mental health, social security, and education. Many are seeking support from the state, putting a strain on welfare systems. Entire communities are falling between the cracks.

### Environmental Rights

The right to a healthy environment and right to water have been severely compromised. The focus on climate adaptation has worked to anticipate natural disasters and provide emergency response, rather than address the root causes of climate change. Disenfranchised and marginalized populations have been disproportionately affected.





# 03

## RESILIENT REBIRTH

# SCENARIO

The 2020s got off to an extremely turbulent start, but by the end of the decade, a more cooperative global order has emerged, forged in the long struggle to contain and recover from the COVID-19 pandemic and tempered by subsequent environmental shocks.

The effort to contain COVID-19 catalyzed a surprising degree of global collaboration, setting the stage for cooperation on a wide range of issues as many governments embraced visionary plans to recover from COVID-19 and weather increasingly frequent eco-shocks caused by climate change.

A more global ethos emerged, and it is largely accepted that “we’re all in this together.” These days, innovative policy ideas to address common challenges are shared widely and quickly, with an emphasis on evidence-based best practices.

The global economy has evolved to become more of a resilient network, in which disruption in one part of the network doesn’t take down the whole and in which greater

local autonomy is balanced by “smart trade” and diversified supply chains. Technologies like 3D printing and circular economy practices enable greater flexibility, agility, and localization.

The physical footprint of many businesses has become more decentralized, bolstered by technologies that enable better remote connection from home and small satellite offices. Global trade in cheap goods has declined, but the exchange of ideas, information, and specialized products is robust. Consumers highly value quality and reliability.

Capital markets have evolved to put a premium on long-term value creation. Post-GDP measures of national economic performance have gained momentum. The global economy now takes “resilience” rather than “growth” as its north star.

# Human Rights Implications *of Resilient Rebirth*

## Civil Rights

The COVID-19 pandemic and climate eco-shocks in the early part of the decade compromised many communities' right to life, liberty, and security as well as freedom of movement. This triggered social justice movements and subsequent reforms and protections to address issues related to systemic oppression and discrimination.

## Political Rights

Despite concerns around surveillance and privacy early in the decade, freedom of expression, freedom of association and assembly, and civic engagement were later championed as part of an initiative to create global, more inclusive responses to emerging issues.

## Economic Rights

Government and business coordinated efforts to protect the right to work and the right to a fair wage, especially in response to the transition away from fossil fuel technologies. Trade unions were brought into policy negotiations and business discussions early on, ensuring representation of rightsholders. The protection of these rights leads to better protections around other economic rights.

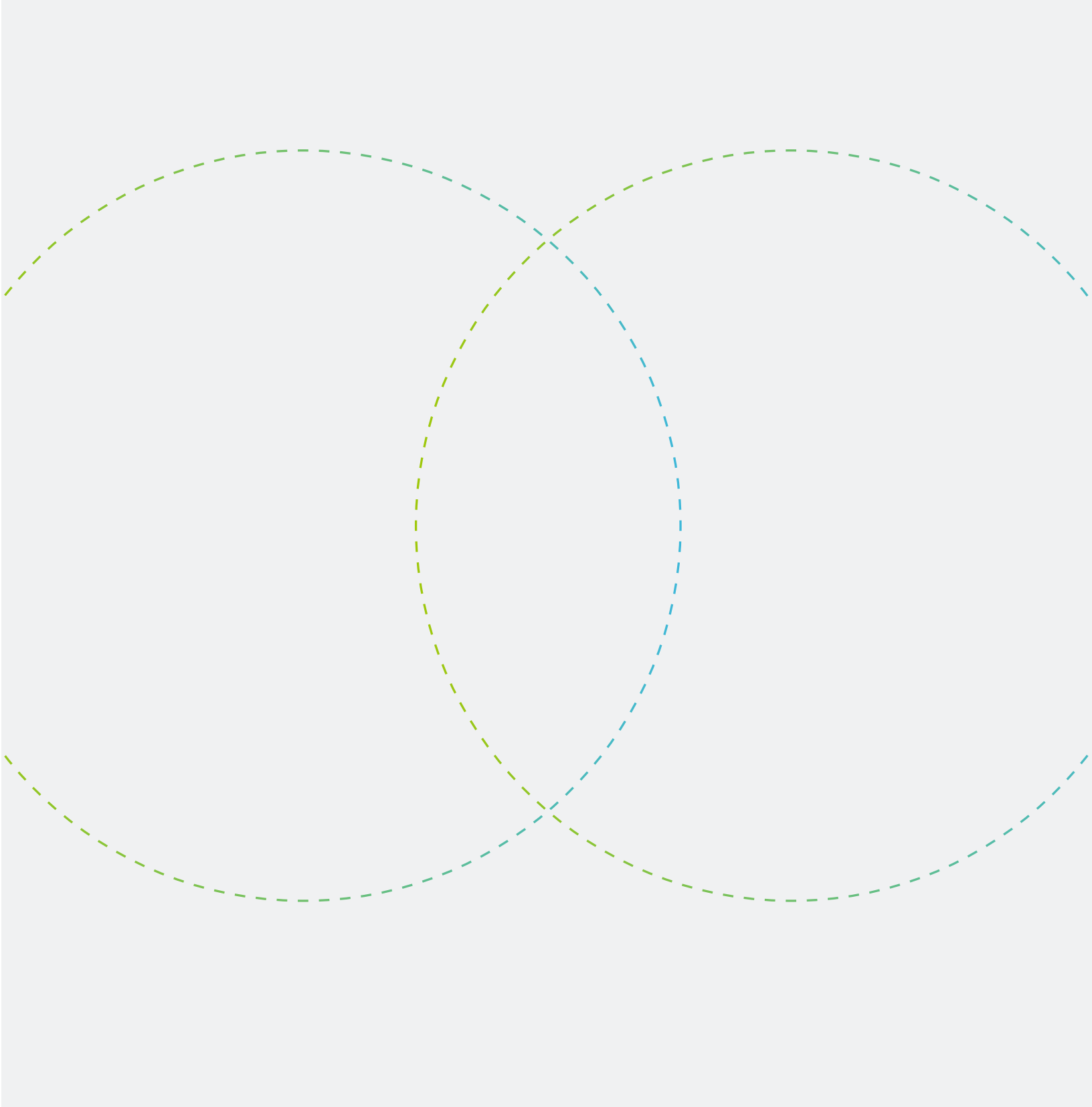
## Social and Cultural Rights

Early in the decade, marginalized populations around the world experienced violations of basic rights, including the right to food, water, clothing, and housing as well as the right to health, social security, and education. Social justice movements provided a platform for coordinated social protection measures and welfare systems that ensured the protection of these rights.

## Environmental Rights

While the right to a healthy environment and right to water were severely compromised for many toward the beginning of the decade, global social protection measures, increased willingness to host refugees, and broad application of new technologies have all helped to ameliorate local environmental conditions and ensure access to water.





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BSR<sup>™</sup> is an organization of sustainable business experts that works with its global network of the world's leading companies to build a just and sustainable world. With offices in Asia, Europe, and North America, BSR<sup>™</sup> provides insight, advice, and collaborative initiatives to help you see a changing world more clearly, create long-term business value, and scale impact.

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