

# Green borders: Climate change and business mobility



**Business  
advisory group** | on  
migration

**Deloitte.**

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# Green borders:

## Climate change and business mobility

### Acknowledgement

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The Business Advisory Group on Migration, which is housed at the IOE, brings the voice of business to the GFMD and to international debates on migration. Established in 2015, it is open to all companies and business associations that share its goal of promoting more transparent, effective and humane labour migration policies.

Deloitte is a leading global provider of audit and assurance, consulting, financial advisory, risk advisory, immigration and tax services with approximately 455,000 people in more than 150 countries and territories. Our culture and purpose is to make an impact that matters, using three common ambitions. Firstly, our WorldClass initiative, through which we will support 50 million people by 2030 develop job skills, improve educational outcomes, and access opportunities to succeed in this new economy. Secondly, our WorldClimate sustainability strategy, through which our people are playing their part by making responsible climate choices within our organisation and beyond. And finally, our ALL IN diversity and inclusion strategy”.

## Executive summary

Discussions and research on issues arising from climate-related migration have, understandably, focused primarily on protecting the rights and needs of people on the move. This report brings a business perspective to these discussions. Drawing on published material and interviews with employers across a range of regions and industries, it identifies four areas where labour mobility interacts with the ability of businesses to meet sustainability commitments, adapt to climate change impacts, and remain competitive in a climate-change impacted world.

### **First, labour mobility will be required to fill skills shortages related to the low carbon transition.**

Skills shortages threaten to delay the Net Zero transition: no country currently has enough domestic talent in key sectors, and national training and reskilling schemes are not being scaled up at the pace required. These problems are compounded by outdated immigration systems that can act as a barrier to employers accessing the talent they need. Thus, while not a panacea, better integration between the green skills in demand and immigration legal pathways can accelerate the low carbon transition.

### **Second, businesses will need to adjust to changes in the size and composition of the work force.**

Large scale movements of people risk a rise in informality. At the same time, the transition to a green economy is creating both opportunities and potential displacements in the existing labour force, as well as highlighting skills gaps and skills shortages. Policies that address informality in general and specifically support reskilling and the integration of migrants into the formal economy will help businesses adjust to climate-related challenges and further drive the Net Zero transition.

### **Third, businesses – particularly SMEs are at risk.**

Many economies are suffering the negative consequences of climate change through the impact of extreme weather events on supply chains and cost of raw materials, compounded by existing skills gaps and the departure of skilled workers. Small and medium enterprises (SMEs), which face a higher relative regulatory burden and have less capacity to adapt, are particularly vulnerable, and their closure or departure will have implications for the viability of local communities. Ensuring a proper enabling

environment for businesses, especially SMEs, can facilitate, accelerate, and incentivise the development of resilient and sustainable enterprises, and enable them – as well as their employees – to remain in their communities.

**Finally, climate change impacts and responses on attracting and retaining employees.**

Employers will increasingly have to address the impacts of climate change not only on their infrastructure and operations, but also on their employees. Extreme heat, vector borne diseases and the impact of extreme weather all can affect employees' health, wellbeing and productivity. At the same time, showing leadership on Net Zero and other environmental objectives is becoming increasingly important in attracting and retaining talent.

In sum, with immigration systems that improve global talent mobility, accelerated green skills training in all sectors and regions, and support for SMEs to adapt *in situ*, governments and business can work together to mitigate the consequences and maximize the benefits of climate-related migration.

# Introduction

Discussions on climate-related migration have generally focused on people on the move, with action directed at preventing displacement due to climate change impacts and ensuring safe and organised migration pathways that protect the human rights for those who move. Business shares these concerns and objectives. At the same time, much less analysis has focused on what climate-related migration means for business. This report examines the diverse ways in which labour mobility and climate change interact in ways that will become increasingly salient for businesses.

The global response to climate change is accelerating as countries work to reduce emissions in line with Paris Agreement compliant temperature targets. 89 per cent of global emissions, representing 92 per cent of global GDP, now form part of a Net Zero target through countries' Nationally Determined Contributions. However, only 44 per cent of these targets include a published plan<sup>1</sup>. Businesses, together with other partners, have a critical role to play in supporting governments to ensure just transitions, so that such targets are met in a manner that does not put at risk sustainable job growth, development and social stability. Yet businesses are also among the most exposed to the physical and transitional risks and challenges. Private sector investment and innovation will be an important, if not the most important, source of the goods, services and innovation required to meet the challenge climate change poses by creating new jobs and essential new technologies. Further, companies are making their own Net Zero commitments: 65 per cent of the annual revenue of the world's largest 2000 companies is now covered by a target<sup>2</sup>.

However, the impacts of climate change are also accelerating. While the focus for businesses has been, and tends to remain, on managing the impacts of the Net Zero transition, the direct impacts of climate change – increasingly severe, frequent or newly experienced weather-related hazards – floods, storms, wildfires, extreme heat and drought - are affecting, or can affect, businesses. Such events can cause delays and disruption to supply chains, shortage of raw materials, infrastructure damage, service disruption and productivity loss, including through reductions in workforce productivity, and a reduced demand for products and services<sup>3</sup>. In a 2020 survey conducted among IOE's global network, climate change was identified as one of the most significant risks to business and a major concern for employers' organisations.\*

Coherent and adequate policy frameworks, developed in collaboration between governments and employers, are crucial for a successful transition that supports and enables employers to transform while dealing with increasing challenges. Skills shortages threaten to delay the Net Zero transition: no country currently has enough domestic talent in key sectors and training is not being scaled up at the pace required. Planned and supported mobility of both companies and individuals will be key to

1 Black, R., Cullen, K., Fay, B., Hale, T., Lang, J., Mahmood, S., Smith, S.M. (2021). Taking Stock: A global assessment of net zero targets. Energy & Climate Intelligence Unit and Oxford Net Zero [https://ca1-eci.edcdn.com/reports/ECIU-Oxford\\_Taking\\_Stock.pdf](https://ca1-eci.edcdn.com/reports/ECIU-Oxford_Taking_Stock.pdf)

2 Net Zero Tracker (2023) Net Zero Stocktake 2023: NewClimate Institute, Oxford Net Zero, Energy and Climate Intelligence Unit and Data-Driven EnviroLab. [https://ca1-nzt.edcdn.com/Reports/Net\\_Zero\\_Stocktake\\_2023.pdf](https://ca1-nzt.edcdn.com/Reports/Net_Zero_Stocktake_2023.pdf)

3 WEF (2023) Accelerating Business Action on Climate Change Adaptation. White paper in collaboration with PwC. Geneva: World Economic Forum [https://www3.weforum.org/docs/WEF\\_Climate\\_Change\\_Adaptation\\_2023.pdf](https://www3.weforum.org/docs/WEF_Climate_Change_Adaptation_2023.pdf)

\* **Guidance Paper on employment, just transition and climate governance;** In a 2019 survey, 69 percent of businesses said that increasing environmental and disaster risks have a considerable impact on their operations and reputation, Changing Business and Opportunities for Employer and Business Organizations.

meeting the labour market demands urgently required for green transitions and ensuring adaptation that protects the viability of local economies challenged by climate change. The decisions that employers make are key factors in determining whether, how and where people move, as well as the outcomes of migration. Many potential climate-related migrants will be SME owners themselves or will be employed by a SME.

This report examines the ways in which well-functioning migration pathways can support employers in meeting their climate change policies and building climate resilience. It explores four interactions between employers, climate change, and labour mobility: 1) Labour mobility to fill skills shortages related to the low carbon transition; 2) Businesses as employers of climate- and transition-related economic migrants; 3) Business owners as potential climate-related and transition-related economic migrants; and 4) Climate change impacts and responses making it increasingly difficult to attract and retain employees. These insights are drawn from interviews conducted with selected IOE members from around the world from October to December 2023.



### Box 1: IOE, climate change and labour mobility

Businesses are contending with multiple migration-related challenges to productivity: skills shortages, the technology driven evolution of the workplace enabling remote working and new forms of gig work, a large informal economy associated with high poverty and low productivity, and the politicisation of migration undermining the efficacy of migration systems.<sup>4</sup>

IOE advocates for well-balanced labour migration models that create positive outcomes for employers, workers and governments, and support the achievement of the United Nations Global Compact for Migration and the Sustainable Development Goals. Such migration models would prioritise:

- Flexible, transparent, and predictable labour mobility frameworks that respond to current and anticipated labour market needs.
- Regulatory frameworks that discourage informality and promote and ensure responsible recruitment of foreign workers.
- Improved systems for identification, recognition and development of skills to promote skills mobility.

Most work to date specifically at the employer-climate-labour mobility nexus, has been undertaken through the concept of “Just Transition”. The Just Transition focuses on the impacts on the labour market of policies that aim to reduce emissions.<sup>5</sup>

Like many other international organisations, businesses and governments, IOE is committed to supporting the transition to a low-carbon global economy. IOE works with its global network of national employer and business federations to advocate for an orderly and just transition that recognises the urgency of achieving net-zero emissions and ensuring continued economic development and inclusive growth through:

- Continuous, coherent and anticipatory understanding of skills needs, in collaboration with the private sector, based on skills analysis taking into account projected needs, local contexts, and geographical distribution.
- A proper enabling environment for businesses, particularly SMEs that facilitates, accelerates and incentivises the creation of more resilient and sustainable enterprises that can achieve decarbonization objectives while creating quality employment and maintaining business needs.
- Ensuring targeted funding, also through partnerships, and dedicated frameworks/institutions to support transition planning and implementation to increase resilience and sustainability for enterprises.
- Developing well-functioning markets and effective regulatory conditions that are clear and stable and incentivise innovation and entrepreneurship.

4 Business Advisory Group on Migration (2022) Business Perspectives on Migration: What does successful implementation of the Global Compact for migration mean for the private sector? A contribution from the Business Advisory Group on Migration to the first International Migration Review Forum, Geneva.

5 IOE (2022) Guidance Paper on employment, just transition and climate governance. Geneva: International Organisation of Employers. <https://www.ioe-emp.org/news/details/guidance-report-on-climate-change-employment-and-just-transition>

# Key interactions at the employer-climate change-labour mobility nexus

## Labour mobility to fill skills shortages related to the low carbon transition

The ability to access and deploy needed skills and talent is critical to a business' ability to operate, as well as to maximize growth, productivity, and innovation. Surveys have consistently found that chief executives regard having the right talent as the most critical factor for their business growth, and business leaders look decades ahead to align skills availability with innovation and market opportunities. However, companies all over the world, in many sectors of the economy, are reporting serious skills gaps.

According to the Washington D.C.-based Center for Global Development, no country currently has enough domestic talent to support the green transition, and current training pipelines are not being scaled up quickly enough to meet agreed climate targets. For example, a recent study warned that by 2030 there could be a global shortage of 7 million green energy workers, with the solar sector contributing the most to the skills gaps.<sup>6</sup> The International Energy Agency projects that within the energy sector, the transition to Net Zero will create 14 million new jobs related to clean energy technologies, require around 5 million workers to move away from fossil fuel sectors and will require additional skills training in 16 million workers<sup>7</sup>.

IOE members interviewed for this report echoed such findings, exemplified by this representative of a members' association for a heavy industry in France:

*"In France, there are some labour shortages in the construction and industrial sectors, but also in the care sector, safety sector – everywhere. So, companies and different involved stakeholders are trying to recruit and to train people in France. We are also trying to attract young people to our industry, but it's not enough. So sometimes we have to recruit abroad. But immigration is a complicated political topic in France at the moment. We have some discussions regarding a new law, related to immigration. It's a really sensitive debate. Our member companies have always recruited people from abroad."*

However, green skills will also be required outside of the energy sector. A recent report from Deloitte described four likely shifts in the job market as economies move away from fossil fuels<sup>8</sup>: expansion of skills and scope in existing specialist sustainability roles, increased need for green skills in non-specialist roles, the transition of workforces from unsustainable sectors to new roles and the demand for green skills in new green sectors and organisations (see Figure 1). Respondents mentioned that while investments are being made in public education schemes, training programmes are out of sync with the scale of the low carbon transition and the speed at which it has to occur. Governments have a responsibility to ensure that talent mobility takes

6 <https://www.bcg.com/publications/2023/will-a-green-skills-gap-put-climate-goals-at-risk>

7 IEA (2021) Net Zero by 2050: A Roadmap for the Global Energy Sector. Paris: International Energy Agency <https://www.iea.org/reports/net-zero-by-2050>

8 Deloitte (2022) A blueprint for green workforce transformation. London: Deloitte/IEMA

place in the context of training and reskilling of local work forces such that they are well positioned to take up new opportunities. Since national training and reskilling schemes are not keeping pace with low carbon transition, often training takes place in house. For example, one respondent described the actions they were taking to prepare for using green hydrogen in their operations:

*“We have a very large research centre – looking at green hydrogen as one of the areas of research. But we’re looking at also creating a whole set of training systems and modules to actually get people to learn how to deal with hydrogen. Because hydrogen is a different animal. And god willing, in the next ten years we will be making a lot of hydrogen... So we’ll need a whole workforce of trained technicians to handle that.”*

**Figure 1**

Four shifts in the market for green jobs and green skill. Taken from Deloitte UK and Institute of Environmental Management and Assessment’s 2022 report

**A blueprint for green workforce transformation**



<https://www2.deloitte.com/uk/en/pages/consulting/articles/green-skills-for-green-economy.html>

Changes in business models and markets, coupled with demographic realities and rapidly emerging technologies, increasingly require businesses to hire, train and transfer workers at all skills levels across borders, wherever in the world they can be found. Labour mobility will be crucial to fill skill gaps associated with the low carbon transition. Well-crafted migration policies should allow migrants at all skills levels to bring their energies and talents to places they are badly needed. This is generally a win for both sending and receiving countries. If and when these workers return home

they bring with them new skills, expertise and knowledge. And meanwhile, their work abroad contributes to prosperity at home by generating remittances and diversifying household incomes<sup>9</sup>.

Most governments are aware of the need to attract and retain skilled migrants – as well as the enterprises that employ them. One response is tailoring migration laws to facilitate the entry of skilled foreign workers and ensure their effective implementation. Too often, cumbersome, unclear, or continuously changing procedures and regulations, often adopted in response to protectionist demands from domestic constituencies, make it difficult for enterprises to hire or to transfer skilled workers into their jurisdictions in a predictable and cost-effective way. Visa programmes often do not support the transfer of the diverse set of skills required for the low carbon transition. IOE members interviewed for this report echoed these findings. However, there were some examples of agile immigration policies that were able to respond to skills gaps rapidly and efficiently (see Box 2).

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9 <https://www.cgdev.org/blog/solving-global-green-skills-crisis-requires-new-mobility-paradigm>

## Box 2 Skills transfer through labour migration – an example from Morocco

In this quote, a recruiter from Morocco succinctly describes the benefits of immigration for meeting skills gaps and upskilling the local workforce.

“In the 2010s, one of the largest American industrial engineering companies in the world, came to invest in Morocco as part of a joint venture with the world leader in phosphate mining. This company brought new techniques but also required some skills that unfortunately were not found in Morocco. I cite as an example, welders who specialize in underwater welding, for example, on pipelines. So what did we do? This company sought these skills in several countries including India and Bangladesh. Several of these welders came to settle in Morocco and allowed Moroccans to acquire new skills in underwater welding. 10 years later most of them had returned to their respective countries but their presence in Morocco had allowed them to transfer their knowledge to the Moroccans. Today, Moroccans export this know-how to several countries of our continent Africa.

The Department of Labour Migration was initially sceptical that these were legitimate skill gaps: “Do not tell us that we do not have these skills in Morocco!” However, when convinced that the answer was no, the employment department made it easy to recruit all the necessary skills. Another recent example took place during the construction of one of the largest towers in Africa in Rabat. Here it was necessary to recruit skills for the installation of equipment at height as is practiced in skyscrapers. What did we do? We had to bring back skills from Nepal. The result was extraordinary.

The example of welders specializing in underwater welding and installers of high-altitude equipment are only tiny examples. The result in all this is that Morocco gradually acquires skills by opening its job market to foreign skills that transfer their knowledge to the Moroccans. This is beneficial for a country like Morocco that is planning to be an economic power in the medium and long term. When it comes to labour migration, it is important to see the glass is always half full and never half empty.”

However, filling labour shortages from overseas is not a panacea, especially in the context of increasingly hostile political environments to immigration in many countries, making bureaucratic hurdles and the integration of migrants in the labour markets of destination countries increasingly difficult. Negative discourse and sentiment towards immigrants, who can be seen as a threat by local workers, can lead to tensions between migrants and locals. As such, policies are needed to guide action when making use of labour migration to accelerate low carbon transitions. For example, the Australian government has signed a labour migration agreement that will bring 400 temporary workers from overseas to support the construction of a new electricity transmission project. The Electrical Trades Union is attempting to negotiate new agreements for the project, because the overseas workers will be paid lower than the industry standard, and workers will not be granted the right to stay<sup>10 11</sup>. As currently no country has a surplus of green skilled workers, migration must go hand in hand with training to ensure that there is an overall increase in people with the right

<sup>10</sup> <https://www.etunational.asn.au/2023/09/20/etu-exposes-renewable-energys-dirty-secret-at-project-energy-connect/>

<sup>11</sup> <https://www.theaustralian.com.au/nation/politics/importing-workers-a-stunning-betrayal-says-electrical-trades-union/news-story/5cf5fd75a72f10c52f0e1de3d9206796>

skills – through, for example, bilateral training and mobility partnerships. For example, see reference<sup>12</sup>. Businesses as employers of climate impacted and transition-related economic migrants

While migration is urgently required to accelerate the transition to low carbon economies, climate change is shifting the economic landscape and will generate migrants. Thus, employers will be recruiting from a talent pool that includes climate change impacted migrants, as well as low carbon transition-related economic migrants. The most recent IPCC report<sup>13</sup> concluded that climate-related migration will be difficult to differentiate from rural-to-urban labour migration. It also concluded that for migration to be an effective form of adaptation to climate change, migrants must have choice over how and when to move, and safe paths to do so. When migration takes place under conditions of distress, it undermines resilience as people are exploited and further marginalised in destination locations. The ILO has recognised the complexity that migration adds to achieving a Just Transition, particularly in the context of high levels of informality. As the economic landscape changes, people need to be assisted so that they only migrate by choice and not under duress.

In addition to legal pathways that facilitate international recruitment of talents, employers are looking for ways to recruit migrants locally. Many people who have had to leave under conditions of distress due to climate impacts may be living in a destination country in an irregular manner and working in the informal sector. Solutions are required to integrate irregular migrants into the formal job market, such that they can contribute to the host societies, access decent work opportunities and avoid further erosion of their rights and wellbeing<sup>14</sup>. For example, Colombia's response to receiving 1.8 million people from Venezuela has been an attempt to regularise those migrants and ensure that they are able to fully participate in the formal economy – thus contributing to the social security system and key services that support their wellbeing<sup>15</sup>. Figure 2 shows the sectors into which Venezuelan newcomers to Colombia are working.

<sup>12</sup> <https://gsp.cgdev.org/>

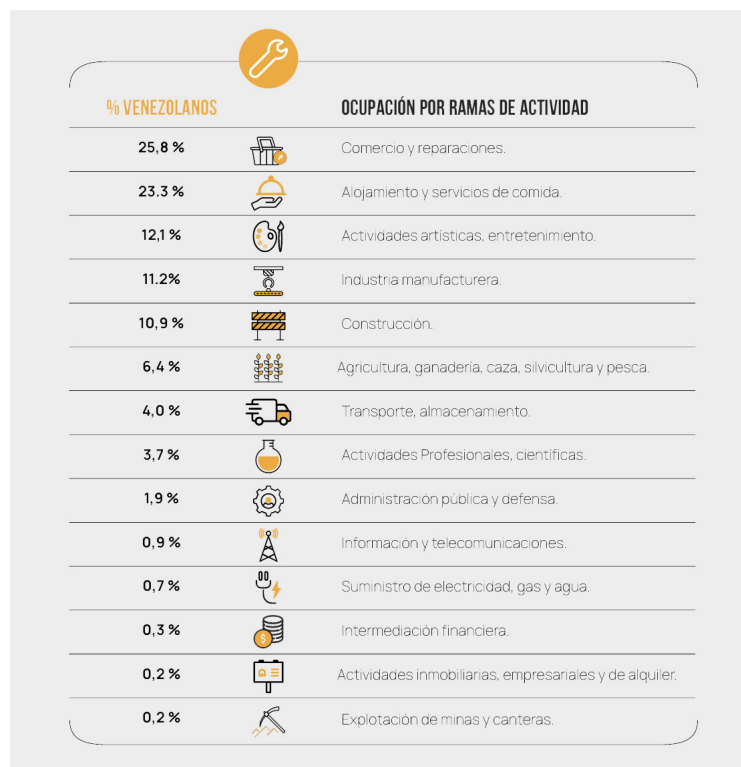
<sup>13</sup> <https://www.ipcc.ch/report/sixth-assessment-report-working-group-ii/>

<sup>14</sup> Business Advisory Group on Migration (2022) Business Perspectives on Migration: What does successful implementation of the Global Compact for migration mean for the private sector? [https://gfmdbusinessmechanism.org/wp-content/uploads/2022/05/20220513\\_N078\\_ANNEX\\_Business\\_perspectives\\_on\\_migration\\_-\\_IMRF\\_2022.pdf](https://gfmdbusinessmechanism.org/wp-content/uploads/2022/05/20220513_N078_ANNEX_Business_perspectives_on_migration_-_IMRF_2022.pdf).

<sup>15</sup> ANDI (2023) Inclusión laboral de migrantes, una apuesta del sector privado. Bogotá: Asociación Nacional de Empresarios de Colombia. <https://www.andi.com.co/Uploads/Paper%20Inclusi%C3%B3n%20Laboral%20a%20Poblaci%C3%B3n%20Migrante%20-%20Junio%2023.pdf>

**Figure 2**

Occupation by sector of Venezuelan migrants who had arrived in Colombia following the political and economic crisis in Venezuela. Taken from the 2023 Fundación ANDI report: **Inclusión laboral de migrantes, una apuesta del sector privado.**



<https://www.andi.com.co/Uploads/Paper%20Inclusi%C3%B3n%20Laboral%20a%20Poblaci%C3%B3n%20Migrante%20-%20Junio%202023.pdf>

In Egypt, the situation is different. While it is possible to recruit foreign workers due to the specific expertise they offer, it is not possible to hire migrants already in the country. As such, the Federation of Egyptian Industries had to seek an exception from the Ministry of Labour to be able to train migrant workers for the purpose of hiring them in Egyptian factories. So far, the Federation of Egyptian Industries Organisation has implemented two projects to train migrants, but due to various restrictions, they could only work with several hundred people so far. Therefore, employers in Egypt are keen on working with international organisations to develop legal frameworks for hiring migrants. Such frameworks will be crucial to support people on the move due to climate change, and the countries that are hosting them:

*“What we need is to build our capacities, to be able to transfer knowledge to our members. Because the point is, when you are well prepared for the crisis, you will have much more flexibility to face its challenges and maybe we will not send migrants, but we can receive migrants from other countries around us which may be affected by climate change.”*

The potential for regions vulnerable to, and affected by, climate change and prone to natural disasters, as well as potential receiving regions, to plan ahead has been underutilised, slowing capacity development in key institutions. There is potential to better anticipate where sectors will be made less competitive because of climate change impacts and connect skills gaps to any projections of increases in migrant flows from climate-exposed and vulnerable regions. In its guidelines for a Just Transition<sup>16</sup> the ILO recommends anticipating impacts on employment. One exception may be certain urban areas that are beginning to plan for increased numbers of migrants from rural areas due to climate change.<sup>17</sup> However, such forecasts could cause more economic harm than good, as areas are written off under climate change and, as such, fail to attract investment.

A recent report from the Overseas Development Institute specifically addressed the ways in which migration will be crucial to meet the green transition<sup>18</sup>. The authors highlighted four key intersections between labour migration and the transition to a green economy –their initial intersection focused on supporting green transitions with migrant workforces. However, they also discussed improving the environmental impact and working conditions of migrant workers, creating new green jobs for migrant and host workers and the need to foster green skills for current and future migrant workers.

16 ILO (2015) Guidelines for a just transition towards environmentally sustainable economies and societies for all. Geneva: International Labour Organisation

17 Marandi, A., & Main, K. L. (2021). Vulnerable City, recipient city, or climate destination? Towards a typology of domestic climate migration impacts in US cities. *Journal of Environmental Studies and Sciences*, 11, 465–480.

18 Mason, N., Gençsü, I., Feyertag, J., and Löwe, A. (2022) Migration for climate action: How labour mobility can help the green transition. Working Paper. London: ODI. [www.odi.org/en/publications/migration-for-climate-action-how-labour-mobility-can-help-the-green-transition](https://www.odi.org/en/publications/migration-for-climate-action-how-labour-mobility-can-help-the-green-transition)



**BOX 3** The MCC-Kiribati Threshold Program has been<sup>19</sup> put in place to encourage labour mobility from Kiribati so that the country's economy can start to exploit the international job market, important in the context of increasing exposure to climate risk and high levels of vulnerability in the small island state.

In 2023 the Millennium Challenge Corporation (MCC) and the Government of Kiribati designed the MCC-Kiribati Threshold Program to spur economic growth and reduce poverty for I-Kiribati. The \$29.1 million Program aims to address low participation in international labour mobility, which is currently the country's biggest constraint to economic growth. I-Kiribati under the age of 25 comprise more than half the country's population and more than 50 percent are unemployed due to geographical and economic challenges.

Through partnerships with the Kiribati Ministries of Employment and Human Resource and Education, and in collaboration with the International Labour Organization and the American Councils for International Education, the program will launch several targeted youth employment and training opportunities to prepare young I-Kiribati for the economy of the future. For example, by:

- Improving the Ministry of Employment and Human Resource administrative capabilities to increase market and sector opportunities for I-Kiribati workers, connect under-represented groups to employment, and strengthen the link between skills acquisition and employability;
- Expanding support for I-Kiribati workers and their families as they search for, and secure, overseas employment through the Ministry of Employment and Human Resource;
- Creating experiential growth opportunities and fundamental employment skills for Kiribati high school students.

## Business owners as potential climate- and transition related economic migrants

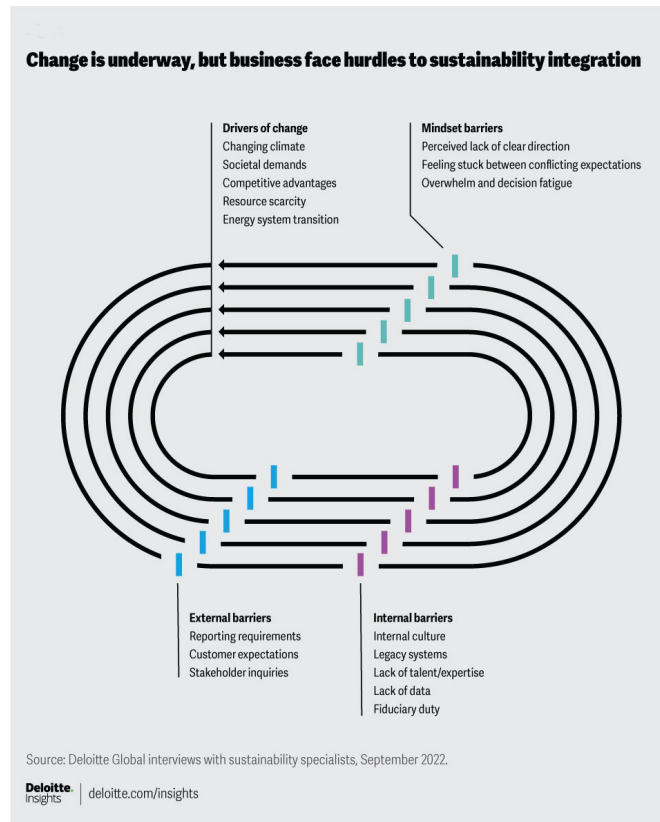
Many economies are suffering the negative impacts of climate change – both directly through extreme weather such as storms, floods, wildfire, and extreme heat – and indirectly through the impact of these events on supply chains and cost of raw materials. The economic and social consequences of such climate-related impacts, compounded by existing skills gaps and skilled workers leaving the area, risk many enterprises ceasing to do business or moving elsewhere. Ensuring a proper enabling environment for businesses, especially SMEs, can facilitate, accelerate, and incentivise the development of resilient and sustainable enterprises, and enable them to remain in their communities. Figure 3 shows some of the challenges of mainstreaming sustainability across a business, that will be exacerbated for SMEs.

<sup>19</sup> <https://www.mcc.gov/news-and-events/release/release-092523-kiribati-labor-mobility-threshold>

**Figure 3**

Challenges to integrating sustainability across business activities. Taken from the 2023 Deloitte Insights article

**Overcoming the hurdles to integrating sustainability into business strategy.**



<https://www2.deloitte.com/uk/en/insights/environmental-social-governance/integrating-sustainability-into-business-strategy.html>

To date, businesses have focused more on the low carbon transition, driven by government regulation, rather than adaptation where awareness of the need to adapt and how to build climate resilience can be low – especially in SMEs. While the private sector is agile and accustomed to managing risk, the accelerating impacts of climate change and the rapidly changing regulatory landscape are challenging the customary ways of working. One of the participants interviewed for this report, captured well this experience of constantly increasing risk levels:

*“Normally you can forecast, or let’s say [carry out] any financial planning that is linked to climate change development or even some actions directly from the company. As this climate crisis is occurring at such a rapid pace...it is quite unpredictable how to forecast these issues, and how to react, to compensate for these different consequences.”*

SMEs face a larger relative regulatory burden in relation to the low carbon transition, and have less capacity to adapt and analyse these issues, they need dedicated support and capacity-building as well as coherent plans from governments. SMEs cannot withdraw from certain exposed sectors or regions to focus on other areas of their business, and are limited to a specific location and by the availability of insurance,

which in some climate-affected regions is no longer provided. To date, government support to businesses in the recovery from disasters has been crucial, as highlighted by an employers' association in Malaysia.

*“... to what extent really the government is able to respond to these changes, whether they would be able to keep up with ... environmental changes, how would the government [assist]? But by and large the Malaysian government has been very very receptive to assisting these companies, even the communities themselves, who are affected by a flood or typhoon on and so forth.”*

Adaptation planning is more advanced for global businesses. In a recent study implemented to inform the global stocktake<sup>20</sup> of the United Nations Framework Convention on Climate Change, the World Economic Forum surveyed 30 large global businesses on adaptation. The findings showed that most are exploring adaptation by focusing on climate risk assessments, opportunity scanning, or community projects. About half of respondents are taking more substantial action, by developing opportunities that have adaptation co-benefits –improving efficiencies, creating value via products and services, or maximizing other sustainability outcomes. However, few are investing significantly in adaptation projects that build their own resilience or that of the communities in which they operate. Only 13 per cent said they have committed financial resources to protecting communities and ecosystems from the impacts of climate change in the next five years<sup>21</sup>. Figure 4 highlights the recommendations of the report for encouraging adaptation in business – through enhancing resilience of business and supply chains, capitalising on opportunities and co-benefits and working with others to build community and ecosystem resilience.

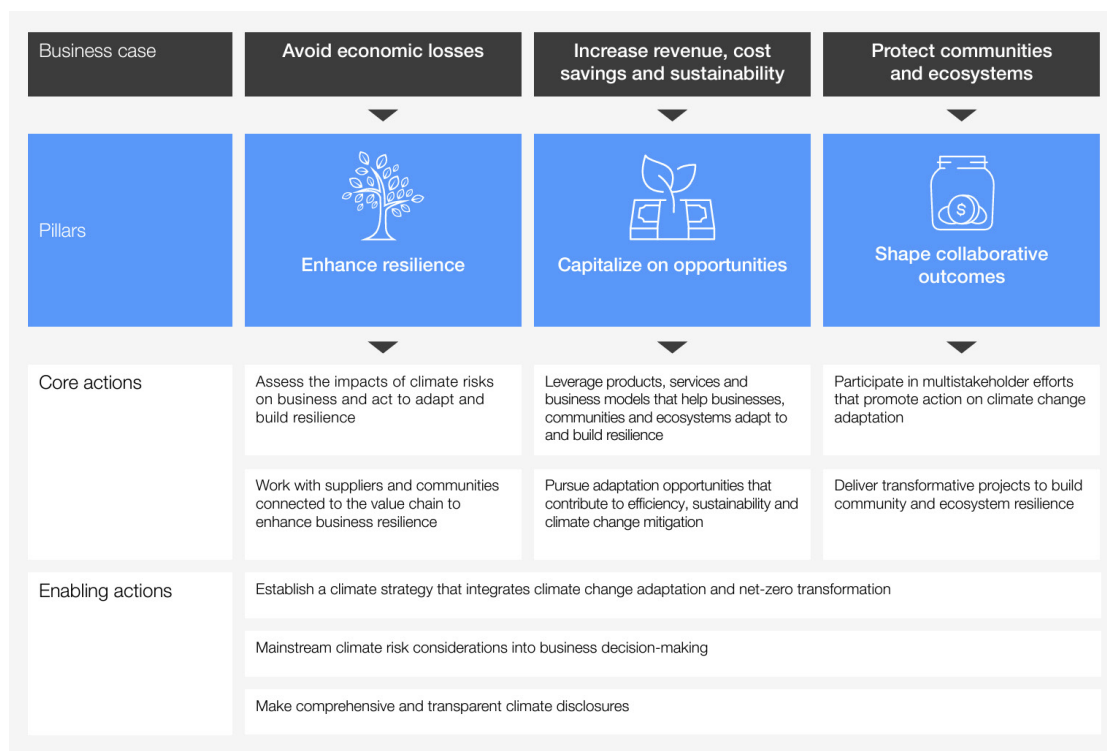
<sup>20</sup> <https://unfccc.int/topics/global-stocktake>

<sup>21</sup> World Economic Forum (2023). Taking Stock of Business Efforts to Adapt to Climate Change. WEF White Paper. Geneva: World Economic Forum. <https://www.weforum.org/publications/taking-stock-of-business-efforts-to-adapt-to-climate-change/>

**Figure 4**

Framework for business action on adaptation. Taken from the World Economic Forum and PwC White Paper

**Accelerating Business Action on Climate Change Adaptation. White paper**



[https://www3.weforum.org/docs/WEF\\_Climate\\_Change\\_Adaptation\\_2023.pdf](https://www3.weforum.org/docs/WEF_Climate_Change_Adaptation_2023.pdf)

Rural areas face the double impact of lack of investment and high concentration of climate sensitive productive industries such as forestry, farming and fisheries, as well as services such as tourism, which are already experiencing the impacts of climate change. In turn, rural to urban depopulation further lowers productivity and levels of government investment. For example, in a recent case in Australia, the Ferrero group pulled out of a 2,600-hectar, 80 million AUD hazelnut farm in New South Wales after only 10 years citing adverse weather and unfavourable climate projections as the reason<sup>22</sup>.

Often in rural areas, the local economy is dependent on providing services to a single major employer, meaning there is not much resilience in the economic system should that company have to close<sup>23</sup>. As such, some of our respondents highlighted the difficulty in ensuring rural populations benefit from the energy transition. For example, when coal-fired power plants were decommissioned, there has been a lack of rural investment to reinvigorate the local economy. Today, with the new communication

<sup>22</sup> <https://www.abc.net.au/news/rural/2023-11-16/company-behind-nutella-ferrero-stops-growing-hazelnuts/103103160>

<sup>23</sup> Keese, M. and L. Marcolin (2023), "Labour and social policies for the green transition: A conceptual framework", OECD Social, Employment and Migration Working Papers, No. 295, OECD Publishing, Paris, <https://doi.org/10.1787/028ffbeb-en>.

technology, there is a potential to leverage remote working to provide new job opportunities, or access to training, even in rural communities<sup>24</sup>. However, remote working and training will not be possible across all sectors:

*“The extent to which workers are in a position to move or be moved - that might be easier in some settings than others. And then, of course, the other aspect of this is that in a number of economic sectors, now we see that actually mobility may not matter quite so much, or where you’re located or where you’re working because, so much economic activity is going online or is made accessible through internet access to telecommunications. So, mobility maybe has to be considered not just in terms of moving from one place to the other but in being able to move one’s skill set and job opportunities without necessarily having to change where you live, or you know being able to do a particular job wherever you are in the world.”*

On the other hand, there is a lack of infrastructure and services that would enable the creation of alternative sectors in these areas and retain or attract workers. It is difficult for businesses to thrive in rural areas, for example, in low carbon sectors such as tourism or forestry as part of the low carbon transition in Colombia, and for employers to attract and retain staff, for example in tea plantations in Sri Lanka. Yet low carbon businesses are key players in supporting the transition to green economies and the climate resilience in their local communities. 87 per cent of global businesses surveyed by World Economic Forum (WEF) recognise they have a role to play in protecting communities and ecosystems from physical climate risks.

## **Climate change impacts and the low carbon transition make it increasingly difficult to attract and retain employees**

Action on sustainability has become increasingly important in attracting and retaining talent. A recent study by Deloitte demonstrated how an employer’s environmental credentials influenced a potential employee’s decision to join the company, as well as their retention, job satisfaction and the likelihood of them recommending the company to others. 69 per cent of people surveyed by Deloitte wanted their employers to invest in sustainability, 7 per cent said they will consider a potential employer’s position on sustainability before accepting a job and 24 per cent have considered switching jobs to work for a more sustainable company<sup>25</sup>. Thus, attracting and maintaining the best talent will require the company to show leadership on Net

<sup>24</sup> Business Advisory Group on Migration (2022) Business Perspectives on Migration: What does successful implementation of the Global Compact for migration mean for the private sector? [https://gfmdbusinessmechanism.org/wp-content/uploads/2022/05/20220513\\_N078\\_ANNEX\\_Business\\_perspectives\\_on\\_migration\\_-\\_IMRF\\_2022.pdf](https://gfmdbusinessmechanism.org/wp-content/uploads/2022/05/20220513_N078_ANNEX_Business_perspectives_on_migration_-_IMRF_2022.pdf)

<sup>25</sup> <https://www2.deloitte.com/uk/en/insights/environmental-social-governance/importance-of-sustainability-to-employees.html>

Zero and other environmental goals. C-suite leaders cite employee morale and well-being and employee recruitment and retention as key benefits of taking action on sustainability<sup>26</sup>. IOE members interviewed echoed this sentiment:

*“Employees are increasingly considering where a company stands on environmental sustainability when choosing employers.”*

Employers will also increasingly have to address the impacts of climate change not only on their infrastructure and operations, but also on their talent. Extreme heat, vector borne disasters, the impact of extreme weather will affect employee health, wellbeing and productivity. For example, heat stress will increasingly challenge productivity, especially in sectors with outdoor workers such as agriculture and construction. Globally, in 2022, an estimated 1.6 billion paid workers—26.4 per cent of the working-age population—worked outdoors. Heat exposure endangers the health of workers, reduces labour productivity, and generates income and economic losses, which cascade through the economy. A recent report on climate and health highlighted some of the potential losses to earnings from heat stress alone (see Figure 5). For example, the global potential loss of income from reduction in labour capacity due to extreme heat was \$863 billion in 2022 with the agricultural sector was the most severely affected<sup>27</sup>.

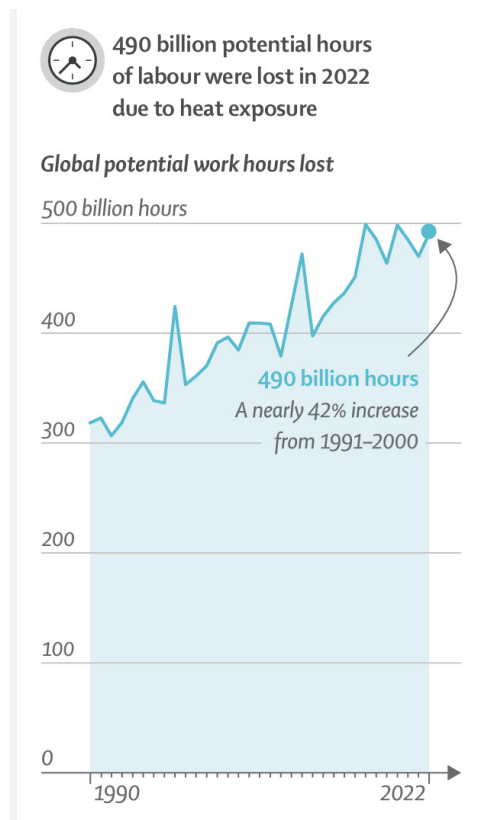
*“Climatic variations can influence the spread of vector-borne diseases, affecting the health of workers. Employers may be concerned about increased health risks and the impact on labour availability.”*

<sup>26</sup> <https://www2.deloitte.com/uk/en/insights/environmental-social-governance/importance-of-sustainability-to-employees.html>

<sup>27</sup> <https://www.lancetcountdown.org/2023-report/>

**Figure 5**

Global potential work hours loss to heat exposure. Taken from [Key findings of the 2023 report of the Lancet Countdown on health and climate change](#)



One representative of the global mobility sector who was interviewed for this report, explained that after a climate-related disaster it “is not only about getting the doors open and lights on again, but also getting their talent back in”. Looking after employees who have faced traumatic experiences and lost their homes to extreme weather under climate-related extremes will increasingly form part of an employer’s activities, regardless of whether such support has traditionally been part of company culture. Not only will companies be less productive in such post-disaster contexts, employers may lose their talent as the physical and psychological impacts of climate change undermine wellbeing and people consider moving out of risky areas. In a context of labour mobility, and remote work, it will also be increasingly important for companies to know where their employees are so that they can support them in moments of crisis.

*“As you’ve seen the increase in inclement weather whether it’s hurricanes, flooding or fires resulting from climate change that impacts locations where companies have talent that need to be supported and in many cases, this could be something where again you’ve had folks that have relocated to that area... One of the things that the global mobility and talent mobility [sector] is*

*increasingly asked about is dealing with individuals in times of crisis, whether that's a geopolitical crisis, but increasingly and more commonly, it's natural disasters."*

**Box 4:** Keeping employees safe: Employers can protect their staff, reduce injury and illness costs, and maintain business continuity in the face of climate change by taking 3 key actions - findings from academic research <sup>28</sup>

"Look for opportunities to cut heat-trapping greenhouse gas emissions in their own operations and urge their peers and all levels of government to do the same. Without addressing the root causes of climate change, increasingly stringent and expensive measures will be needed to keep workers healthy and safe.

Don't wait for state and federal officials to set safeguards against climate-related conditions such as extreme heat. In the U.S., the federal Occupational Safety and Health Administration is slow to promulgate and update standards for new or worsening workplace hazards, even when workers are already being harmed.

Finally, employers should plan for increasingly frequent extreme weather and disasters in a way that incorporates future climate risks, rather than simply relying on historical data or experience. Surveys of U.S. businesses and other employers have repeatedly shown insufficient levels of preparedness for even "normal" emergencies, let alone increasingly extreme disasters fuelled by climate change."

<sup>28</sup> Constible, J., & Knowlton, K. (2021). How Can US Employers Keep Workers Safe From the Health Harms of Climate Change? American Journal of Health Promotion, 35(1), 143-146.



## Conclusion

At the nexus of climate change, employers and labour mobility, the term climate-related migrant takes on a new meaning. A climate migrant, rather than being someone forced to move because of climate change impacts, could be someone on the move who could contribute to accelerating the transition to a low carbon economy. By providing assistance for adaptation, in particular to SMEs, enhancing green skills training across various industries and global regions, and implementing effective immigration systems that facilitate the movement of global talent, governments can foster a more positive approach to the Net Zero transition. This, in turn, would enable businesses worldwide to effectively navigate the challenges posed by climate change, ensuring sustainable economic development and the creation of new professional opportunities for individuals to secure a decent livelihood.

Key to enabling businesses to thrive under climate change is an orderly transition with transparent regulatory frameworks. Financial and technical support will be key to ensure that regulatory requirements do not place excessive burden on SMEs that prevent them from growing sustainably. Labour shortages and skills gaps are already delaying the transition to Net Zero and are compounded by immigration systems that often act as a barrier to employers accessing the talent they need. The low carbon transition can be further accelerated by improving the nexus between the skills required for the low carbon transition and immigration legal pathways, in a context of education and training programmes.

Businesses are accustomed to managing risk and dealing with uncertainty. However, the impacts of climate change are accelerating and putting stress on the resilience of businesses. Without adaptation and adequate government support, business coping capacities will be exceeded with implications for the owners of those businesses, their workers and the wider community. There is an untapped potential to look to sectors likely to be affected by climate change, ensure that workers are properly looked after and upskill and reskill them, so that they can move to other sectors growing as a result of climate change.

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