Global Mobility and the Green Skills Revolution

Over the next 10 years the top four risks facing our global society relate entirely to **the changing climate and degrading environment**, according to the World Economic Forum's *2024 Global Risks Report*.[1] Extreme weather events, critical changes to planetary systems, biodiversity loss, and the shortage of natural resources are primed to dominate the social, economic, and environmental challenges that our world will face.

The solution to these challenges lies in the transformation of human life to varying degrees, such as development of new infrastructure, fairer governmental systems, alternative approaches/reduction in consumption, and technological advancement, to name only a few.

It is no surprise that the convergence of social, economic, and environmental issues is becoming a more prominent topic for the global mobility industry. We're seeing more sustainability conversations creep into conference agendas, client procurement requests, and supplier onboarding, spurring collective contemplation from leaders, such as *what is our current impact, why should we care, and how will this affect us?*

To date, most of the narrative surrounding global mobility and sustainability has focused on how we can transform our industry to reduce the negative effects of moving employees around the world.

While these are important discussions — and we welcome greater dialogue between all stakeholders on this topic — this white paper has a slightly different focus. We will review ways in which global mobility can enhance the transformation that our societies need to meet forthcoming risks. We will specifically consider the role of relocation as a tool for accelerating green skills development.

A Green Transition

The world we know today is not sustainable — not for the health of our planet, nor for communities and economic development. With optimism for a safer, more prosperous future, both public and private actors are confronted with the concept of a *green transition*, a transformation needed within our societies and economies to mitigate climate impacts and adapt to our changing planet.

Mitigation: *To minimize the extent of environmental degradation, climate change, and any associated secondary impacts that affect our communities, such as forced migration, health risks, and global instability.*

Transitions relating to mitigation will include the development of low-carbon alternatives that reduce the creation of greenhouse gas (GHG) emissions and combat climate change.

Examples:

- By 2028, renewable energy is projected to contribute 42% to total power generation.[2] Transitioning to hydro, wind, and solar energy production will be essential for reducing global emissions and aligning with net zero targets.
- Product designers now involve life-cycle analysis to review the overall environmental impact of products at every level (manufacturing, distribution, use/consumption, and end-of-life care).
- Businesses are focusing on ways to integrate nature-positive services and products into their operations and supply chains, recognizing that more than half the world's total GDP is reliant on nature and is therefore at risk from biodiversity collapse and ecosystem threats[3].

Adaptation: *To adapt to a world different from the one we're currently living in, which will bring new stresses and amplify existing challenges.*

Planetary changes, such as increased global temperatures and extreme weather events, will impact communities and traditional ways of living.

Examples:

- With extreme weather events becoming more intense and more frequent, communities will need to enhance existing weather protection mechanisms to ensure safety. This includes creating flood defenses and cyclone early warning systems[4] for countries most at risk. In England, around 20% of homes already experience overheating issues[5] and will need retrofitting to ensure residents' well-being as temperatures increase.
- Agriculture is one of the most affected sectors when it comes to climate change; by 2050, global food yields could decline by 30%.[6] In some regions, adopting regenerative and novel approaches to farming is the only way to maintain viable crop production. Tactics include prioritizing drought-resistant crops, implementing water conservation systems, protecting native plants, and introducing spatial-reading technology.
- Land use is also likely to change as countries try to adapt to changing weather patterns. The Netherlands, which faces significant flooding risks, has developed the "Room for the River" program to change land use around risk-prone areas and essentially give the river more space.[7]

The *green transition* must be considered as a global concept in the same way that international collaboration and cooperation is required when addressing all emerging financial, social, and environmental risks[8] (such as cyber insecurity, armed conflict, and economic collapse).

While the progress made by countries toward decarbonization targets is variable and widely contested, there is significant evidence that the green transition is a priority at an international level. Countries are gearing up for this transition (e.g., the U.S. government's Inflation Reduction Act).

Introducing the Green Collar Workforce

Bringing the *green transition* to life relies on various factors and the availability of certain resources. One essential component is the access to the necessary skills and capabilities of today's labor market — otherwise known as *green skills*.

Green skills is "an umbrella term for the technical skills, knowledge, and capabilities required to tackle the environmental challenges we face and to unlock new opportunities for growth."[9] To become more sustainable and resilient, businesses must focus on upskilling existing and future employees to utilize green knowledge and capabilities, thus creating the *Green Collar* workforce[10].

What does this mean in practice? At a global level, there are various examples where the existing workforce is insufficient for future needs, if we are to combat environmental challenges.

- To move away from fossil fuels, the U.S. needs to quickly electrify its infrastructure. However, access to professionals is limited, which is putting a halt on the country's ambitions to accelerate electric vehicle usage and renewable energy capacity. By 2032, it is estimated that there will be **810,000 new job openings** for electricians.[11]
- As a result of the EU's focus on solar expansion, it is projected that by 2027 the industry will **create 1.2 million jobs in Europe** — a significant increase over the 648,000 employees in 2022. This means that jobs created for the solar sector would almost double in just five years.[12]
- In Egypt, sustainable agriculture expansion is set to require **8 million new additional workers** by 2050[13]. Regenerative and nature-positive methods of farming are necessary for ensuring the country's food security and export market.
- On a global scale, the International Labour Organization has projected that the renewable energy industry will create an additional 23 million jobs by 2050.[14]

The joint Deloitte and Institute of Environmental Management and Assessment report, *A Blueprint for Green Workforce Transformation*, outlines the different types of green skills that we can expect to see in the coming years.

- **Expansion of Skills and Scope for Existing Specialist Sustainability Roles:** Not only will more businesses need sustainability managers and related professionals, but jobs in environmental services will be in higher demand.
- **Increased Need for Green Skills in Non-specialist Roles:** Examples include jobs in marketing, product design, or customer service, where consumer behavior and regulation will involve sustainability aspects.
- **Transition of Workforce from Unsustainable Sectors to New Roles:** Those working in traditionally emissions-intensive industries (such as oil & gas or automotive) may need additional support as they transfer skillsets to expanding industries (e.g., renewable energy or battery vehicles).
- **Demand for Green Skills in New Green Sectors/ Organizations:** The green transition will involve innovation on a scale that creates new sectors; consider the growing focus on hydrogen or carbon capture and storage solutions.

Resemblance can also be seen between the *green transition* and digital transformation.[15] As digital infrastructure became an essential component of doing business, companies were faced with a significant upskilling task to ensure that their workforce could function while shifting to a technology-focused approach. It is generally expected that an employee in any role will have a basic level of digital literacy. Similarly, there is huge demand for a new field of specialist technology and data roles, as businesses continue to drive their digital agenda. We can expect a similar shift with the creation and evolution of green skills in the coming decades.

The Availability of Green Skills — and Future Projections

As outlined previously, many private sectors and public bodies have already identified skills gaps for proposed industry changes. But what is the current demand for these skills and capabilities, and is the available workforce able to meet these needs?

Between 2021 and 2022, the number of green jobs in the UK increased by 8%. This overshadows the total employment increase of 0.5% for the same period[16], indicating that sustainability-specific roles are becoming more prevalent and in greater demand.

Existing employees also recognize that this skillset will be fundamental to delivering future responsibilities. A PwC and World Economic Forum study highlighted that 39% of workers agree that green skills will be important to their job in the next five years[17], with 75% of sustainability professionals agreeing that all jobs will require green or sustainability skills by 2050[18].

Analysis of LinkedIn data also showed that job growth is not restricted to environmental sectors, such as environmental services, construction, or renewable energy. Rather, the fastest growing demand for green skills lies in sectors such as **luxury goods, technology, finance, and health science**[19].

As with other general skills development, there are various challenges that businesses face to improve education and awareness.

Core Barriers to Corporate Upskilling:

- **Upskilling requires significant investment of financial and labor resources.** Delivering and developing effective training is time-consuming, and global organizations must take into account equitable development of skills across different regions.
- **Employees may not wish to develop their skillset.** Given that sustainability is still a relatively new concept for organizations, encouraging employees to focus on environmental and social impact may require additional incentivization[20]. This might involve changing performance management systems or introducing new benefits.
- **Accessing effective training programs and opportunities is another limiting factor.** While larger organizations may have resources to develop programs in-house, the green transition must be considered as a collective transformation that includes small- and medium-sized enterprises. Coordination and collaboration between public institutions and private organizations could address this issue[21] by aligning national policies and investment to support corporate progress.
- **Businesses should take sustainability efforts seriously and embrace the green transition within corporate culture and governance.** This is imperative if employees are to meaningfully adopt training principles and practices. Successfully integrating sustainability is perhaps the most ambitious challenge that businesses face.

Prioritizing Social Justice

The *green transition* narrative is often accompanied by the concept of justice to the point where a "just" *green transition* is the presumed approach to be taken.

Here, "justice" refers to the prioritization of social issues during the *green transition*. How can we transform our societies in a way that addresses existing and future social inequities? A low carbon, nature-positive future should be enjoyed by all, including minority groups, Indigenous peoples, and those who have not been historically involved in decision-making.

When managed correctly, decarbonization can bring equitable benefits for communities. For example, investment for adaptation can be used for those who are most vulnerable to climate change. Resources can also be directed to communities that lack public support, empowering them with the skills and knowledge to thrive in low-carbon environments.

From an upskilling perspective, education and training should not only focus on technical and soft skills for environmental awareness but also consider how cultural and diversity, equity, and inclusion (DE&I) capabilities are learned and integrated into future business.

There is also a lack of workforce diversity within traditionally "green" professions.[22] By viewing upskilling through a social justice lens, we can involve more voices in this conversation. Without delving into the reasons why DE&I is central to business success (there are many), it is clear that organizations with well-developed cultural intelligence further drive innovation and productivity.

Finally, taking an inclusive approach to green upskilling would ensure that we achieve a global transition (as opposed to isolated or regional development).

GREEN SKILLS INSIGHT

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How Can Global Mobility Support the Transition?

When it comes to addressing skill-focused labor shortages, developing internal skillsets continues to be a priority for enhancing workforce capabilities.[23] PwC's *2022 Global Hopes and Fears Survey* highlights that 40% of companies rely on upskilling and knowledge transfer to address such shortages, compared to a quarter of businesses that are widening recruitment to include more diverse individuals.[24]

In Aon's *2024 International People Mobility Survey Report*, focus on talent development was recognized as a key trend for global mobility, suggesting that more businesses are using long-term assignments as a way to develop talent and prepare future leaders.[25]

The concept of moving employees has generally been seen as a solution for these labor shortages. Research think tank ODI Global highlights that human mobility "can fill skills and labor gaps, facilitate skills development, create networks, and foster innovation."[26] This encourages us to take a few steps back and ask, *what's the real connection between human mobility and upskilling/knowledge transfer?*

Through an anthropological lens, it's clear that human mobility has been instrumental in shaping life as we know it, especially for the purpose of **global knowledge transfer**. As an inherently mobile species, moving between different areas has been essential for humanity to make advancements in science & technology and develop new, hybrid cultures as different groups and communities blend together.

When we dive deeper into human mobility, we can observe two types of knowledge transfer occurring (in isolation or simultaneously):

- The mobile individual/group disseminates information or learnings *to* the stationary community in the destination location.
- The mobile individual/group learns capabilities and skills *from* destination communities, which can be adapted for use in their home country.

"Knowledge cannot be acquired in a mechanistic way but must be learned by individuals' participation in communities of practice."[27] To share knowledge most effectively, individuals should be integrated into a culture where this knowledge is prevalent and "practiced." Here we can see the true connection to the value of relocation: enabling individuals and teams to develop their skills while being situated among a new **culture**.

GREEN SKILLS INSIGHT

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A Closer Look at Cross-border Movement and Knowledge Transfer:

A 2022 study on migration and knowledge focused on the journey of several highly skilled migrants who returned from working in developed countries to their home nation of Ethiopia.[28] Between the group, the duration of stay in the host country ranged from 1 to 42 years, involving a wide range of industries across both public and private sectors.

The study examined how the knowledge gained by the migrants was later used or adapted upon their return to Ethiopia. Surprisingly, although the group were highly skilled, the focus of their knowledge transfer was non-technical fields. Some of the most valuable skills for their home country were "soft" in nature, including socio-cultural norms, organizational & work practices, and modes of behavior.

While technical skill development is undoubtedly a primary driver for moving individuals to different regions, we should recognize the many benefits attached to the integration of people in different cultures and situations. This might include the development of everyday behaviors, which when managed effectively, could result in the development of "sustainable" living practices (e.g., gaining a different view on consumption, protection of resources, or an appreciation for the natural world, all which are inherently better for our planet).

So, could relocation address the transfer of technical skills required for corporate success while also supporting the wider community transition to sustainable norms?

As outlined above, the *green transition* is more than simply an environmental or economic shift. This transformation also gives us space to prioritize social enhancement and equity issues as part of sustainable development and to ensure that our future is one built for the prosperity of people *and* the planet.

At a macro level, relocation could be a solution for addressing these issues by opening up interactions between communities, improving cross-cultural intelligence & sensitivity, evolving international & domestic collaboration, and ensuring that *everyone* is involved in the conversation.

At a micro level, the global mobility industry is already well-equipped to promote the benefits of relocation (productivity, career development, and an opportunity to align work goals with personal ambitions).

Existing Mobility Partnerships for Green Skills Growth

There are already several success stories from the public sector when reflecting on the connection between mobility and green upskilling.

- **Move Green is a circular mobility scheme between Andalusia and Northern Morocco**[29]**.** The program centers on the movement of Moroccan graduates to Spain for a four-month training assignment. During this time, graduates enhance their academic and technical-vocational skills relevant to renewable energy and green economy — engaging with Andalusian entrepreneurs and companies. At the end of the training, the graduates receive support finding suitable job placements or developing their own business activity back in Morocco as part of a re-integration phase.

  The ambition of this initiative is to enhance professional development, with a particular focus on sustainability skills. However, this is also an opportunity to improve cross-border public-private partnerships between Andalusia and Northern Morocco, deepening trade relations and employment generation specific to the green economy.

- **RELOCATE is a domestic upskilling program in Sweden, co-founded by the European Social Fund**[30]**.** Individuals relocate from areas with high unemployment to regions where there is a great demand for skilled labor (e.g., where green skills are in short supply). As part of the relocation program, individuals receive targeted training to help them flourish in the new location and in a new job or sector, as well as tailored counseling to support their move.

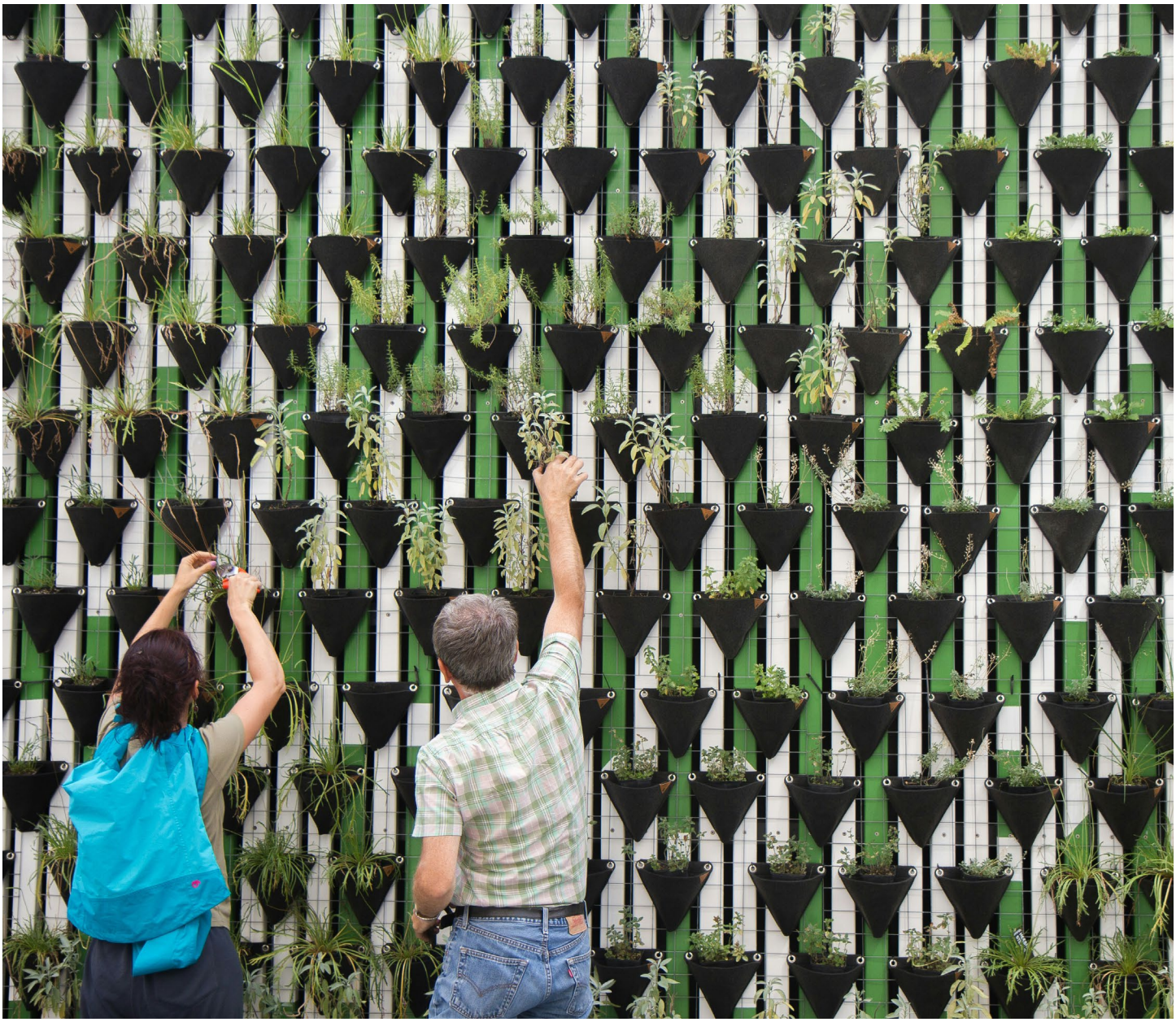
  This program is not aimed only at developing green capabilities; it undoubtedly marks the specific value of relocation in the green transition.

Public institutions have a key role in facilitating these programs and providing the necessary resources to enable the easy movement of people. However, **there must be a coordinated approach between public and private actors** to ensure that any governmental support can be translated into industry innovation and expansion.

Such coordination should include facilitating the freedom of movement. One ongoing discussion is how immigration policies can be adapted to support human mobility for the green transition; the 2023 EU Solar Jobs Report [31] calls for the EU Talent Pool to consider ways the solar sector's needs can be integrated into existing immigration policies. **In the UK, there have been discussions regarding development of a Net Zero Workforce visa to help address labor shortages**[32]. This visa would operate in a similar way to the existing UK Health and Care Worker visa.

GREEN SKILLS INSIGHT

Move Green and RELOCATE focus on enhancing green skills through targeted training and relocation.



Our Vision for Accelerating Green Skills

From our review of the existing demand for green skills and the value that relocation brings, we have identified three primary ways that global mobility can further drive the *green transition*:

- **"Mobile" Green Sectors:** The expansion of specific *green sectors* (such as renewable energy, construction, and transport), which may benefit from comprehensive global mobility programs solely due to their specific business function.
- **Transferring Skills within Non-specialized Sectors:** As outlined above, we see an increase in demand for green skills within non-environmental industries, such as luxury goods and technology.
- **Cultural Experience:** Putting technical upskilling aside, the integration of employees within other communities could support the development of "sustainable living" practices, personal habits, and behaviors that shift ways of thinking towards the environment.

A Green Transition for Global Mobility

As outlined previously, the development of green skills is a *global* issue, leaving no sector or workstream exempt. This, of course, includes our very own sector.

By embracing the impending *green transition*, the global mobility industry will be able to:

- **Mitigate** the worst impacts of climate change, environmental degradation, and social injustice. Such impacts would undoubtedly threaten the viability and scope of relocation.
- **Adapt** to a changing world, which will see relocation change in many ways. For example, as we move to a warmer and more volatile climate, insurance demands will change, shipping ports may face more frequent and extensive disruptions, and housing in some regions will be extremely scarce and difficult to source for relocating individuals.

As we face new environmental and social challenges, global mobility professionals will need an additional set of skills in their relocation toolbox. For example:

- **Health and Safety:** Our teams must be better equipped to deal with consequences of extreme weather or heat-related incidents, ensuring that we can proactively manage assignees' safety and well-being. At a client level, global mobility teams will need to identify how climate change specifically affects certain locations, which may impact the safety of employees during their assignment.
- **Supplier Selection:** Choosing suppliers with demonstrable experience managing environmental and social concerns will become more valuable for global mobility teams, not only to ensure transparency on activities across the entire value chain but also for ensuring that assignee safety and well-being can be effectively managed.
- **Driving Decision-Making:** Global mobility teams must be well-versed in the benefits of choosing sustainable options, ensuring that businesses and their relocating employees recognize the collective impact our choices are making. Mobility counselors can share specific information with relocating employees regarding ways to improve their environmental impact at every stage of the move.
- **Diverse Needs and Requirements:** The ability to effectively manage and respond to diverse needs and requirements is an existing challenge for many teams, and with the growing focus on DE&I across corporate sectors, this will likely become a more central part of managing stakeholder relationships. Global mobility teams must be able to respond to different identities, requirements, and cultural backgrounds to ensure the success of relocation experiences.

A greener global mobility industry will involve each stakeholder embracing this change, whether in destination services, the movement of goods, or the management of mobility programs. While there will certainly be new skills required for managing technological or operational aspects (e.g., innovations to shipping, tighter legislative requirements), it is evident that all mobility professionals will need basic upskilling. As highlighted above, a useful exercise is to consider how developing green skills is the same as improving digital literacy.

Bristol looks forward to engaging with our clients and other stakeholders to further drive this transition.

GREEN SKILLS INSIGHT

By embracing the impending green transition, the global mobility industry will be able to mitigate the worst impacts of climate change, environmental degradation, and social injustice.

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