



THE ADECCO GROUP

Creating the Green Talent Pool For Climate Action

Introducing the Green Talent Potential Index; a country benchmark on which country is building and retaining the best workforce to mitigate climate change.

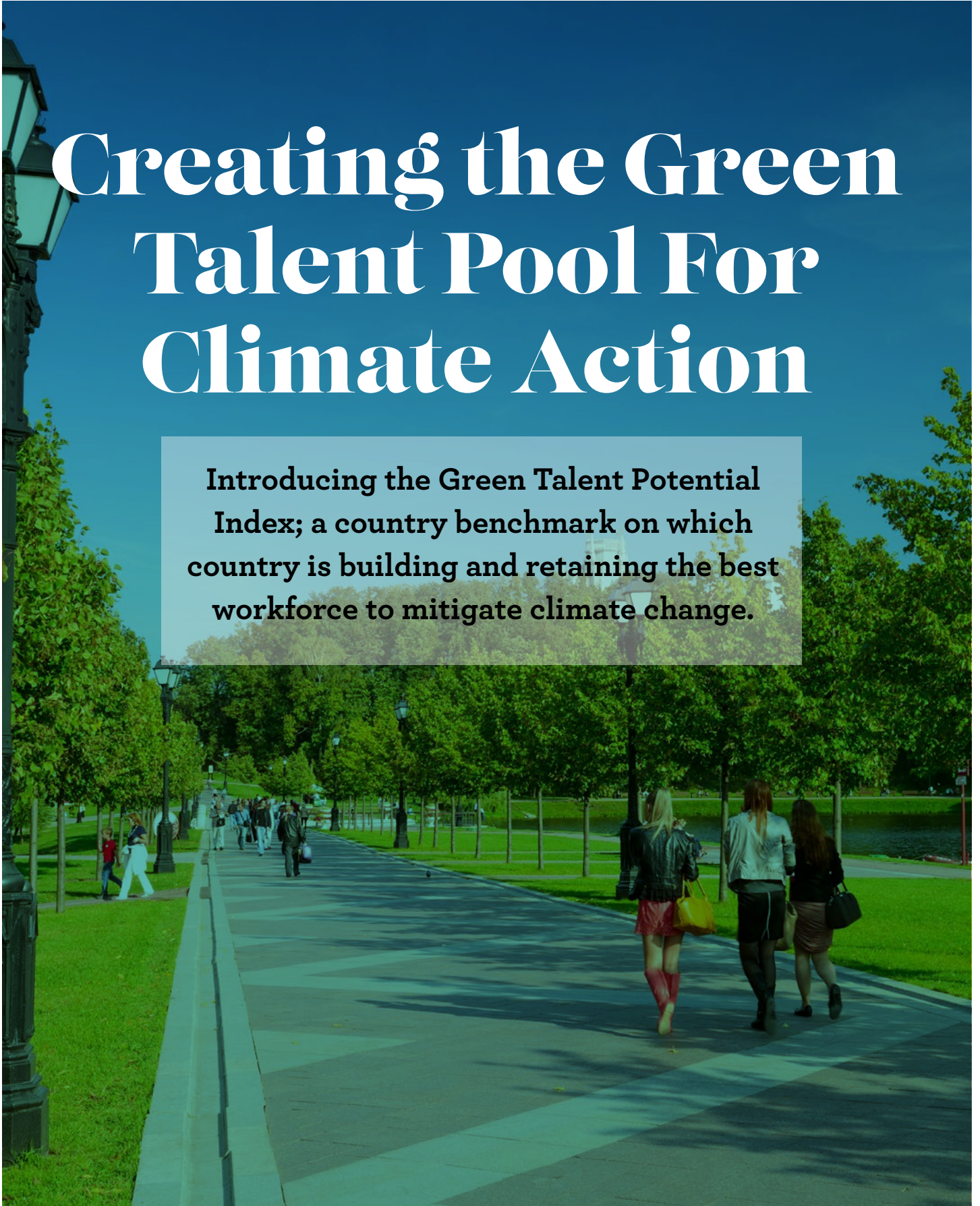


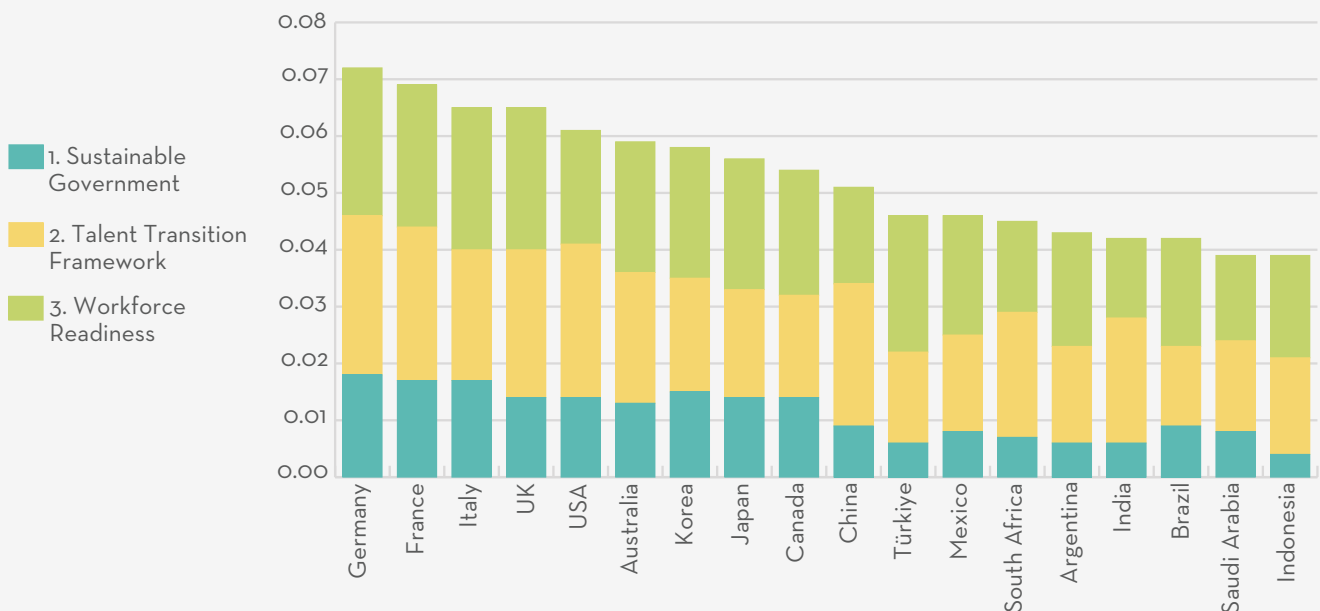
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Main Findings

1. For sustainable businesses and organizations to access a talent pool that holds the right skills for carbon-neutral production, they need the support of the appropriate regulatory framework that builds an enabling and thriving ecosystem and conditions for that talent pool to prosper. Labour Market Policy is one of the tools that defines that framework. As the need to focus on building a competitive workforce thriving on green skills emerges as a competitive imperative, the skills gaps for sustainable production abound. The Adecco Group, with its strong legacy and expertise in advocating for appropriate labour market regulation, sheds a light on the insufficient recognition by Labour Policy authorities around the world of the reporting commitments and international comparative metrics set out by the Paris Accords Target. The Adecco Group introduces the Green Talent Potential Index, an experimental benchmark to track country progress on labour policies that support a transition to a green economy. In this it has been inspired by the ILO Guidelines for Just Transition¹. For this first edition, it assesses and benchmarks the countries of the G20.

Green Talent Potential Index

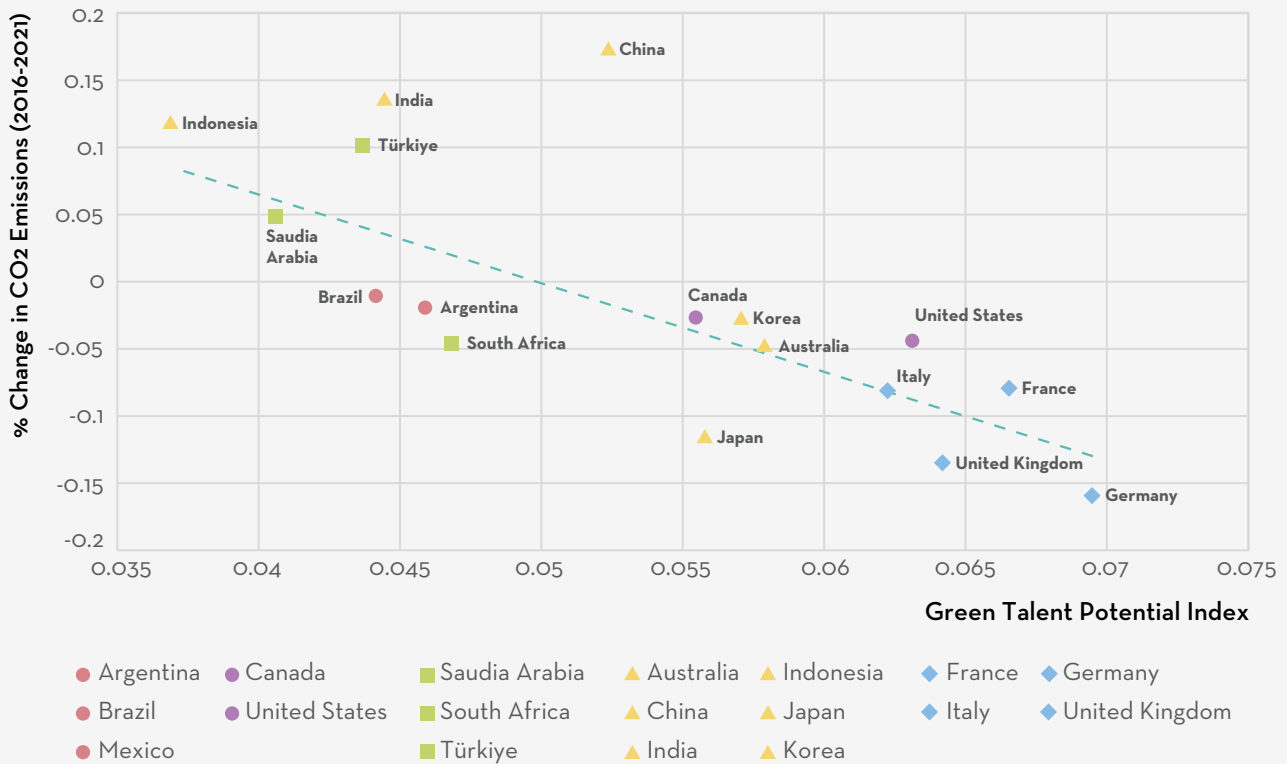


The Green Talent Potential Index.

¹The International Labour Organisation (ILO) is the UN agency focussed on labour market policies. It sets International Labour Standards for its members (most countries of the world) to adopt and provides them with labour policy guidance and support. The ILO is governed by governments, workers and employers.

2. The main findings of this benchmark and assessment are:
 - Overall, countries with a (relative) higher rating of Green Talent Potential have better outcomes on CO2 emissions. Inclusive and agile (labour market) institutions and more inclusive and qualitative labour market performance are strongly related to decreasing rates of CO2 emissions.

Changes in CO2 emissions since 2016 and the Green Talent Potential Index

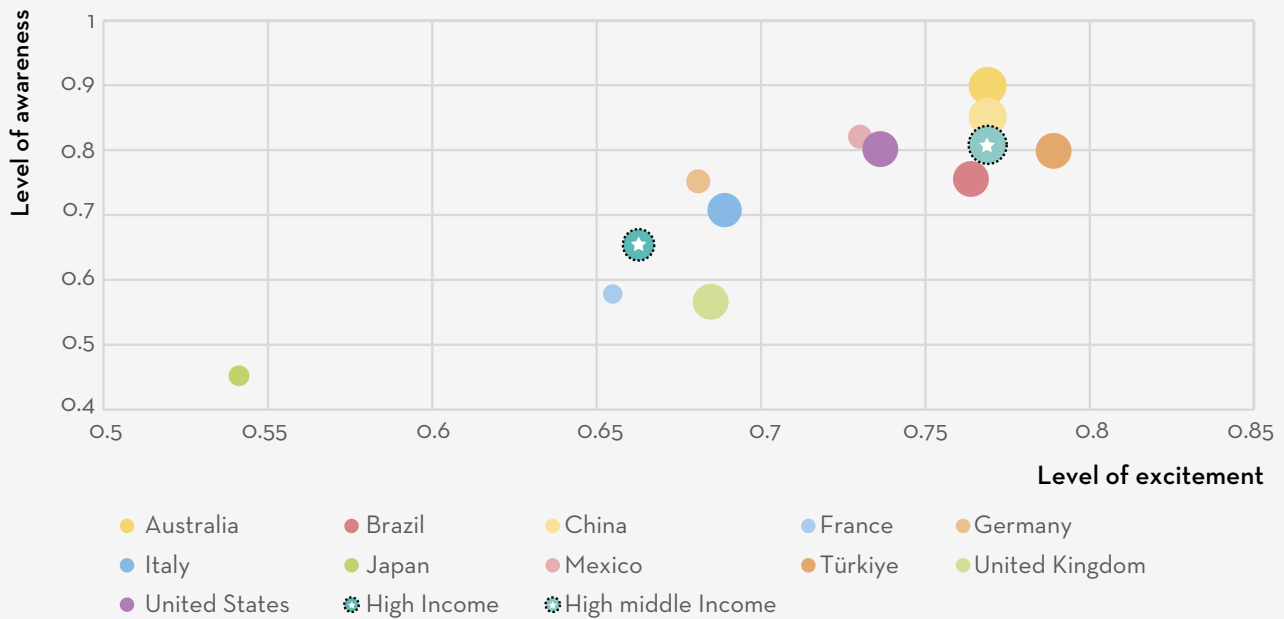


This chart plots the Green Talent Potential Index and the percentual development in CO2 emissions since 2016 (UNFCCC, 2021). Different markings are used to indicate regional differences.



- Overall G20 economies with higher levels of development perform better on Green Talent Potential. Still, also high-income countries showcase deficiencies, most notably on their workforces' willingness to skill.
- Workers in G20 countries with better labour market outcomes are less inclined to reskill towards more carbon neutral jobs, while they appear more aware of the risk of climate change in general. Workers in countries with worse labour market outcomes are showcasing a higher willingness to retrain towards more sustainable jobs.

The Perceived Impact of Climate Change on Working Lives



This graph plots levels of excitement (horizontal) and awareness (vertical) on the impact of climate change on one's working life in the G20 countries as identified through the Adecco Group Global Workforce of the Future survey. The level of awareness is represented by the type and number of impacts respondents identified on their careers as a result of climate change. Excitement is represented by the respondents' expression of positive or negative feelings on the impact of climate change on their career. The size of the marker indicates how willing people are to engage in training (ranked 1-5). The larger the marker the more willingness people expressed to engage in training (irrespective of climate change). The graph also includes the averages of respondents in high income (n=19) and high middle-income countries (n=4) in the aforementioned survey.

- Countries expressing social and labour market goals in their National Determined Contributions² (e.g., ambitions with respect to training, awareness raising, addressing specific disadvantaged labour market groups) also showcase the worst performance in terms of governance accountability, transparency and inclusiveness – which challenges the transparency and durability of those human capital commitments.



² The "Nationally Determined Contribution" (NDC) represents the commitments of each country to reduce greenhouse gas emissions and adapt to climate change.

- Latin American G20 Countries (Brazil, Argentina and Mexico) showcase a high level of awareness on climate change risks and appear more willing to introduce instruments to reskill workers in order to mitigate the impact of the green transition on their careers.
 - G20 countries are highly polarized on sustainable government (a combination of country wide sustainable innovation and government inclusiveness and governance quality³). “Sustainable Governments” appear to support better labour market and climate outcomes as well as more inclusive and agile labour market institutions.
 - Flexible ‘hire and fire’ legislation alone - although crucial as part of an agile labour market that can adjust to changes and shocks related to (the mitigation of) climate change - need to be complemented by labour market mechanisms that support the transition into more carbon-neutral employment. The involvement of social partners in the design and implementation appears to more strongly relate to decreasing numbers of CO₂ emissions than relaxed hire and fire regulations.
 - The performance of China and India is concerning. Both countries are high CO₂ emitters and have rising numbers of emissions. Still, their Green Talent Potential is lagging behind, mostly on account of high numbers of informal employment, youth unemployment and a low awareness of climate risks. This leave workers unconnected to the (formal) labour market and economic activity. This in consequence results in these countries and business and organizations part of it operating without a proper workforce that could support the timely curbing of the high numbers of CO₂ emissions.
3. International comparison and scrutiny of labour market policies must be an indicator for tracking climate action. Right now, policy comparison and metrics are mostly available from (selected) developed economies. This is concerning given the developing economies in the G20 have rising CO₂ emissions. Greater transparency allows for a better analysis of labour market policies and frameworks that support the green transition. In turn, this will allow for more targeted international collaboration and development support measures. Moreover, having these metrics can support sustainable business and investors identify which countries hold the Green Talent Potential to scale sustainable private sector growth.



³ For more information on “inclusiveness and governance quality, see section: Pillar I - sustainable government.








Policy recommendations

- **Filling skill gaps for the green transition requires framework conditions that promote connected initial education, career guidance and lifelong learning.** As such - and vastly beyond the policy efforts identifying green skills alone - this requires bespoke support measures for workers to adjust to a sustainable and green economy.
- Employment and employability underpin that adjustment. **Labour market regulation must ensure that a diverse population is able to join the workforce and that employers can adjust workforces to the necessary changes in the economy.** A variety of quality and regulated employment arrangements must support this adjustment.
- **If workers find themselves exposed to (prospective) unemployment, support measures must be designed towards adjusting to a green economy.** Apart from lifelong learning opportunities that deliver the right skillsets, these must ensure workers are empowered and incentivized to pick up new - more sustainable - lines of work in new and changing sectors.
- Governments need not and cannot(!) do it alone. For labour market support measures to deliver on climate targets their design, implementation and adjustment need to be Inclusive and Accountable. **By structurally and meaningfully involving businesses and workers in them a connection is made with the (sectoral) realities and workforce needs. This connection promotes the buy-in to policy targets, the effective use of public resource and the early warning for recalibration of these policies.**
- Better labour market policies deliver better climate results. To speed up climate action, ILO constituents must come together to provide transparency to track progress through comparable metrics. These need to **be updated periodically and reported into the annual UN Climate Change Conference (COP).**



Country specific recommendations

Based on the Green Talent Potential Index, we set out a series of country specific policy recommendations. All of these apply to all countries in scope, but based on the comparative ranking the different priorities are highlighted for certain countries to improve overall performance.

	Improve transparency on the inputs and performance of adult education systems.
	Improve the involvement of private employment services in the delivery of public activation and employment support measures.
	Improve overall inclusiveness and accountability of governance towards more agile and effective policy design and implementation.
	Improve employment agility and labour market participation by reducing barriers and risks related to the hiring of new workers in new ways of working.
	Promote the transition from informal to formal work by lowering the bar to enter into the formal economy and formal employment, cracking down on the informal and rogue (labour) market behaviour.
	Improve the involvement of social partners in the design and implementation in activation and labour market policies.
	Improve frameworks that promote green innovation and policies.
	Strengthen the coverage of unemployment support to allow people to reskill towards the green economy.
	Promote the awareness of climate risks and people's willingness to re- and upskill to mitigate the impact on people's working lives.
	Promote the (re-)transition from school to formal work by ensuring curricula align with the changing economy.
	Ensure human capital is addressed in upcoming National Determined Contributions.

⁴ The G20 includes Argentina, Australia, Brazil, Canada, China, France, Germany, India, Indonesia, Italy, Japan, the Republic of Korea, Mexico, The Russian Federation, Saudi Arabia, South Africa, Türkiye, the United Kingdom, the United States, the African Union and the European Union. Together they represent over 80% of the global economy, 75% of global trade and 60% of the world's population.

⁵ A significant part of the data used to shape the Green Talent Potential Index predates the significant uncertainties on developments on the labour market in the Russian Federation as a result of the war in Ukraine.

Introduction

The management of climate change is a human endeavour. It is led and driven by people. By changing behaviour, production and work, people can prevent and mitigate the changes brought by a changing global habitat. That puts the labour market at the heart of the climate transition. Labour markets must function to the benefit of this global transition.

Right now, they do not. Labour markets simply aren't ready. For a vast variety of reasons – ranging from gaping talent holes to political instability – the global workforce overall lacks access or a pathway into sustainable means of production. Bluntly put: with the current global workforce we will not meet our ambitions to reduce carbon emissions and global warming.

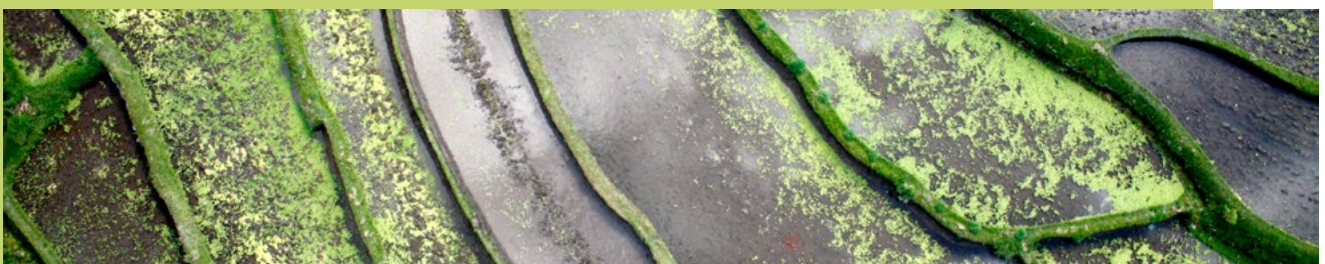
Key in this deficiency is the lack of a global comparative framework to track progress on labour markets' capacity to deliver on the green transition.

This report sets out to compare the world's biggest economies on how well their workforces are equipped to meet climate targets. It proposes a 'Green Talent Potential Index' to benchmark economies - and moreover their labour markets - on the capacity to deliver on the Paris Climate Accord targets. It brings together a vast set of labour market (governance) indicators to arrive at three pillars for the Green Talent Potential: (1.) Sustainable Government; (2.) a Talent Transition Framework; and (3.) Workforce Readiness.

This first edition of the Green Talent Potential Index benchmarks the G20 countries⁴ (excluding the Russian Federation⁵). It finds that inclusive and transparent (labour market) governance and climate awareness are key conditions for delivering sustainable economies. And yet, even in the G20 countries with the most inclusive (labour market) support measures and institutions, motivation to adapt, train and reskill is lagging behind countries that show considerable gaps in labour market participation and the existence of basic labour market frameworks.

All this highlights the need for policymakers to look at Climate Change through the lens of Labour Market functioning and its capacity for change. In the context of the COP28⁶, the Adecco Group brings forward this new, unique and thought-provoking benchmark as food for thought and a call to action: a comprehensive and transparent benchmark and periodic stocktake is needed to ensure labour market institutions empower businesses and (future) workers to adapt to carbon neutrality.

The Adecco Group itself is stepping up to take responsibility and act in this regard. This report thus also showcases how the Adecco Group leverages its labour market expertise and legacy to support its clients and associates to make the change.



⁶ 2023 UN Climate Conference (UNFCCC COP28)

Introducing the Green Talent Potential Index

Skill gaps are the bottleneck of the climate transition. Carbon-neutral or -negative technologies can only be adopted if public and private employers can access the workforce to implement, operate and innovate them. Indeed, international research clearly shows that the transition to a green economy overall⁷ delivers more jobs, still - consistently - these studies highlight that filling those (new and adjusted) jobs is the main challenge (IRENA, 2020) (OECD, 2023) (ILO, 2019). On the other side of that coin, current unsustainable productivity is disproportionally driven by low and middle skilled workers. For a successful fade out, we need to bring those workers into the sustainable economy. This per se amplifies a Call to Action that has resonated for a while, notably the importance of a framework for lifelong learning.

Yet, the conditions for bridging talent gaps are but an insignificant, if not absent, aspect of the periodic reporting, benchmarks and assessments that are done to track progress on the Paris Agreement⁸ and the limitation of a global temperature rise of 1.5°C by the end of the 21st century. Per se, meeting that target already appears untenable (IPCC, 2023). The current comparative reporting⁹ strongly focuses on an output approach to reduce greenhouse gas (GHG) emissions as such. The human or labour market dimension is - if at all (ILO, 2019) - scarcely addressed in Nationally Determined Contributions (NDC). They do not deep dive into specific activation policies or efforts on the education and training front. At best, the NDCs identify specific target groups highly exposed to climate change (for different reasons) or mention skilling policies in broad and general terms (The Adecco Group, 2022).

Notwithstanding the crucial importance of the existing NDC (reporting) formatting, agreement and processes, the labour market dimension

is overlooked. Through a lack of comparative metrics on labour and training policies, (1.) countries (and the social partners within them) aren't challenged to build the institutions needed for labour market change; (2.) the lack of urgency diminishes the resources available for countries and social partners to compare, learn and develop; and (3.) trade unions, innovative businesses and sustainable investors cannot adequately compare countries on their Green Talent Potential.

The Green Talent Potential Index puts the spotlight on the that gap in the global labour market governance of the climate transition. The index seeks to benchmark economies and their institutional traits, workforce attributes and labour market institutions. It is inspired by models for sustainable labour market governance, notably those set out by the International Labour Organisation 'Guidelines for a just transition'¹⁰. These guidelines - agreed by governments, workers and employers - provide policy guidance for the greening of economies, enterprises and jobs while securing the ILO Decent Work Agenda: social dialogue, social protection, rights at work and employment. Thus, identifying a more sustainable green economy and improved labour market outcomes are ambitions that stand to re-enforce each other. From this vision, it identifies a labour policy toolbox for social partners and governments to leverage.



⁷ While recognizing that that job displacement varies across economies, sectors and occupations, depended on their resp. exposure to unsustainable production.

⁸ Paris Agreement Under the United Nations Framework Convention on Climate Change

⁹ The Nationally Determined Contributions (NDC)

¹⁰ https://www.ilo.org/wcmsp5/groups/public/@ed_emp/@emp_ent/documents/publication/wcms_432859.pdf

The index and its indicators

The index brings together existing and new indicators. They are structured along three key pillars (figure 1). Sustainable Government, Talent Transition Framework and Worker Readiness. The first, Sustainable Government, looks at the quality, inclusiveness and predictability of government as well as the country's dedication and outcomes on Innovation & R&D. The second, Talent Transition Framework, zooms in on labour market institutions and policies and identifies the involvement of social partners and the capacity to support the sectoral and occupational transition of employers and workers. Finally, Workforce Readiness addresses labour market outcomes (informality, (youth) unemployment, labour market and VET participation, etc.) as well as worker sentiments on lifelong learning and climate change. Each pillar and the subcomponents are addressed in detail separately in a dedicated section.

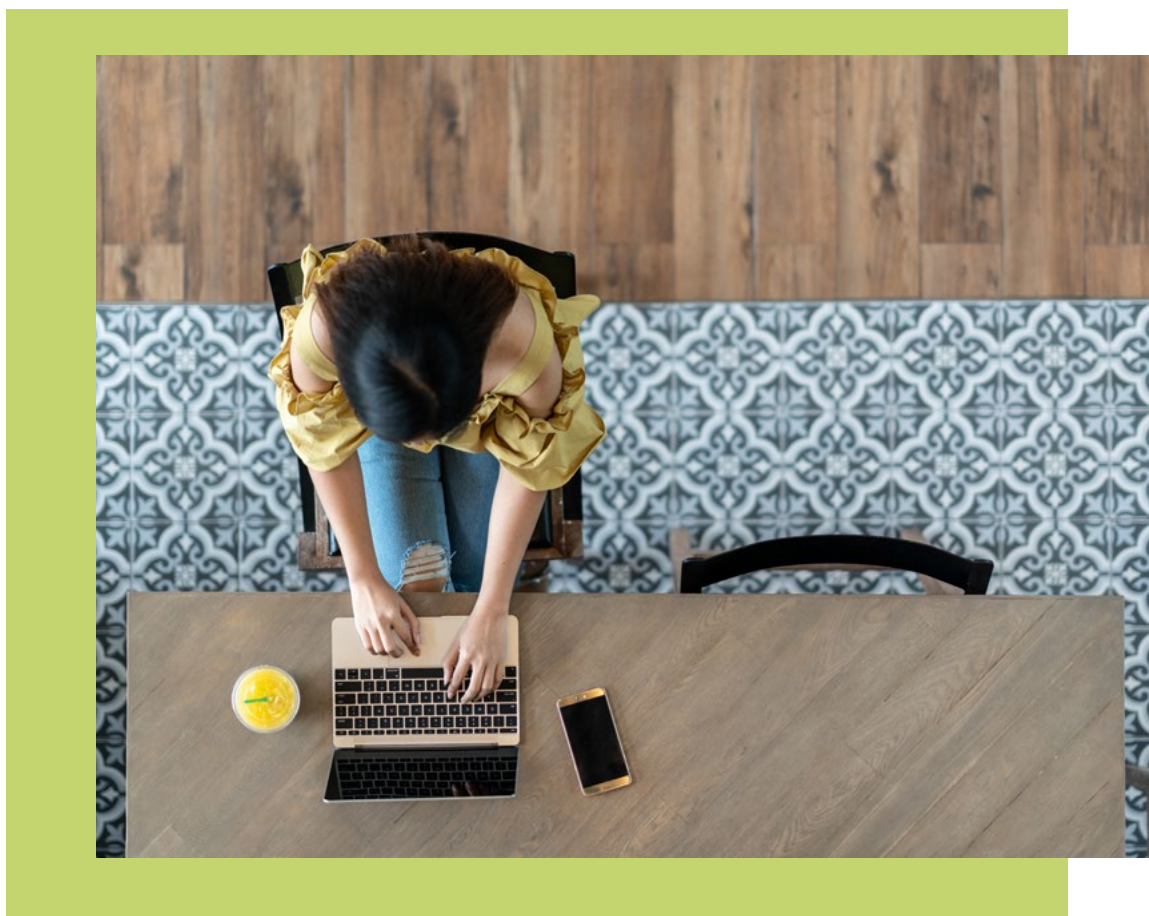
The various subcomponents are normalized on a 0-1 scale to arrive at a comparative ranking in each of them. Each of these are ten weighted to arrive at a rating for each of the individual pillars. To conclude in the overall Green Talent Potential Index and ranking of the countries assessed the pillars are weighted differently. Given the focus of the benchmark on the labour market, the first pillar weighs 20% of the total, while the second and third pillars weigh 40% each. Hence, the indicators that address the labour market institutions and outcomes more strongly determine the individual country's comparative rating. As such, the Index is a subjective benchmark as it ranks and weighs both objective and subjective information.



Figure 1 - The three pillars of the Green Talent Potential Index

The Index and its methodology are novel. Still, it strongly builds upon data from global (labour market) institutions such as the ILO, OECD, World bank, UNESCO as well as private non-governmental organisations and research institutes. In addition, it also includes three new indicators that integrate proprietary data from The Adecco Group Global Workforce of the Future (GWOF) Survey and comparative data from the World Employment Confederation (WEC), the global industry representative of the private employment services industry. In shaping the Index, the gaps in the data availability were addressed by establishing estimates to create a comparative overview of the economies in scope of this report. A full methodological overview is available upon request.

Given the rationale for its creation and the novel nature of the Index, it also serves as an invitation to all labour market and civil society stakeholders to further develop and improve the metrics that track progress on labour market transition. In its commitment towards delivering a green and inclusive labour market, the Adecco Group stands ready to further collaborate with the (international) worker and business communities as well as (inter)governmental institutions.



A Transition to the Green Economy:

The Adecco Group Contribution - LHH: A workforce to build batteries for electric cars.

As the world accelerates the use of green technologies in a bid to reduce CO₂ emissions and tackle climate change, few industries are feeling the impact as much as the automotive sector.

With the EU imposing a cut-off deadline for making new fossil-fuel run combustion engines in 2035, the pressure is on for companies to switch from traditional thermal engineering to electric or alternative fuel cells, such as hydrogen. What's more it's all happening at breakneck speed - this means re- and up-skilling workers to develop the new technologies at a similar pace.

In this context LHH and Adecco supported Stellantis, a major automotive company, and France Electrical Batteries Gigafactories manufacturers to make transition happen. As part of its strategy, Stellantis has committed to an ambitious electrification roadmap. By 2030, it plans to offer more than 75 full-electric models (Battery Electric Vehicles, or BEVs), representing 5 million units in BEV sales globally.

To achieve this, Stellantis plans to restructure its thermic motor factory in the North of France and focus on reskilling and -deployment. At the same time, the first vehicle electric battery gigafactory was opened in the same region, at the end of May 2023. Working on a skills transition from thermal to electric vehicle operation is no small undertaking: Stellantis has 600 employees impacted by this transformation while North of France will see over 10 000 new positions created that are linked to the gigafactories.

LHH started an ambitious reskilling program. It identified the new skill needs and put in place a blended training program (digital + in presence gigafactories experiencing) focused on specifics skills expected by gigafactories and taking

in account existing skills from Stellantis and industries employees. The challenge: optimize the length of the training and give access to the program to high seniority profiles.

To ensure in presence training at local level, LHH supported the launch of the first Battery Training Centre in Europe - fully tailor maid training center dedicated to gigafactories environment - to structurally support the human capital development in this emerging field.

To ensure the gigafactories' attractiveness at national and European level and employees' employability, LHH worked with a dedicated team from UIMM to create a new certification for all Gigafactories industries. The new created certification is now used as a model for other companies, countries and labor markets to foster the attraction of workers in these new jobs and sector.

Moreover, LHH and Adecco support the recruitment of over 200 employees for the new ACC battery plant by the end of 2023 and 600 by the end of 2025. For employees who don't plan to join the new ACC plant, LHH has also put in place its highly skilled Outplacement team, which ensures that outgoing workers also get the best support and guidance.



The 2023 Green Talent Potential Index

This full and first version of the Index is listed below. 18 countries¹¹ of the G20 are benchmarked to arrive at a ranking of which they are best positioned to reshape their workforces for the benefit of the green transition.

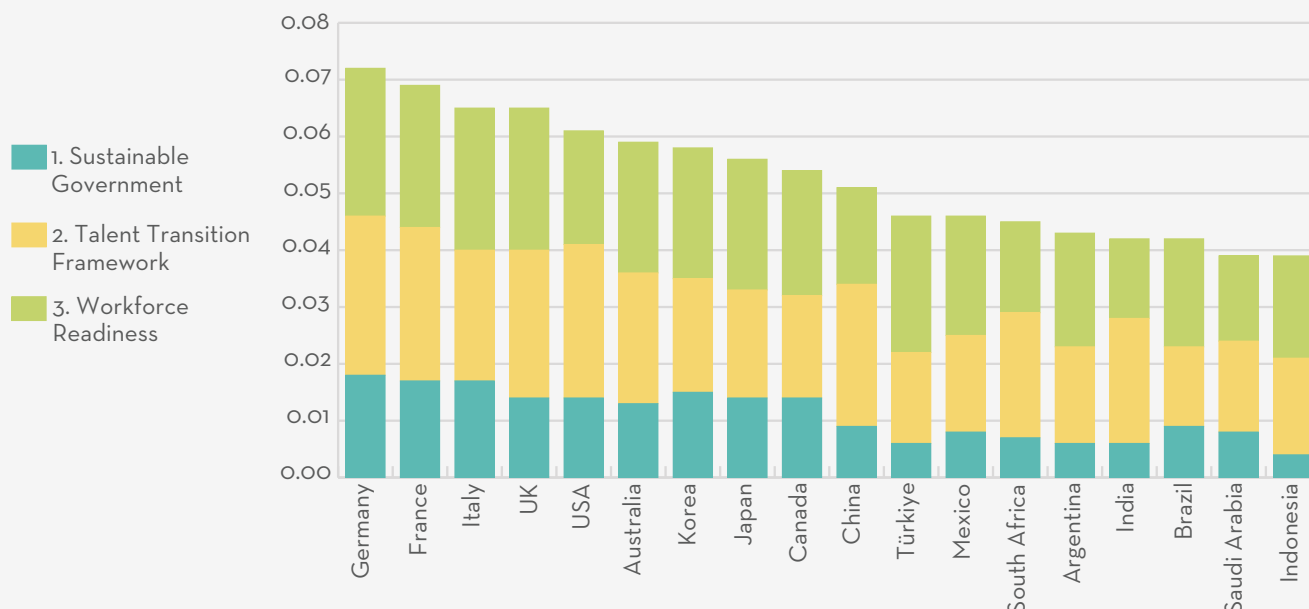


Figure 2 - The Green Talent Potential Index. Pillar 1 is weighed 20% of the total. Pillars 2 and 3 are resp. weighed 40%.

The full index clearly shows that Germany, France, the United Kingdom and Italy hold the best cards to undergo the green labour market transition. As below sections show, these countries score best on all underlying pillars as they perform well on government innovation, inclusiveness and transparency, the best labour market institutional set up and their employment outcomes perform better over other economies in the index. In general, it shows that developed economies are rated higher. Potentially unsurprising, it highlights the importance for tight scrutiny of labour market policies and outcomes; and moreover, the exchange of policies that support the transition to a green economy and labour market.

Digging into the Index, the background to the ranking shows that the top three (DE, FR, UK, IT) are mostly driven by good scores on the transparency and inclusivity of overall governance and the involvement of social partners in activation policies and notably with regards to partnering with private employment services. These countries also have high levels of (formal) employment and labour market participation, high levels of VET participation and have an (comparative) high awareness of climate change as a risk.

¹¹ The G20 includes Argentina, Australia, Brazil, Canada, China, France, Germany, India, Indonesia, Italy, Japan, the Republic of Korea, Mexico, The Russian Federation, Saudi Arabia, South Africa, Türkiye, the United Kingdom, the United States, the African Union and the European Union. A significant part of the data used to shape the Green Talent Potential Index predates the significant uncertainties on developments on the labour market in the Russian Federation as a result of the war in Ukraine. As the Index tracks countries, regional blocs EU and African Union aren't included.

On the other end of the Index, the most important drivers for the scores relate primarily to the overall governance conditions for inclusivity and innovation (pillar 1) and worse labour market outcomes in terms of informality, unemployment and labour market participation (pillar 3). Still, the populations of these countries do clearly express stronger motivation and willingness to up and re-skill (in general, and in the face of a potential impact of climate change on their working life).

Of further interest is that the middle-income countries in the G20 collectively score lower on pillar 1 (sustainable government) yet differ in terms of pillar 2 and 3 (talent transition framework and workforce readiness). Indeed, China together with South Africa and India score well upon their talent transition frameworks; while the Republic of Türkiye (hereafter Türkiye), Mexico and Argentina perform well on their workforce readiness.

Pillar I - Sustainable Government

A Collective Point on the Horizon: Accountability and Inclusivity

The Sustainable Government pillar of the GTPI brings together broad indicators of overall quality governance as well as environmental innovation policies¹². As such, it is not focussed on the labour market capacity per se. Still, it does provide insight into (1.) the governmental dedication towards environmentally friendly technological innovation; and (2.) the overall transparency, accountability, inclusiveness and predictability of government. As such, these aspects determine the overall framework conditions in which workers and employers operate and are able to depend on the government to ensure they can confidently take mid- to long term decisions to change their labour market behaviour¹³. Moreover, this pillar includes a government's ability to be accountable and its inclusiveness towards change; thus implying not only that government integrates scrutiny and timely adjustment if policies yield insufficient results, but also ensures that in shaping (adjusted) policies whole of (civil) society and social partners are involved. As such, this pillar builds on the ILO Guidelines for a Just Transition, most notably those that address stability, evaluation, interdepartmental collaboration, national planning, the macro-economic stimulation of sustainable production and innovation, and lastly the tripartite collaboration with social partners.

The subcomponents of this pillar showcase the clear divide between developed and emerging economies in terms of governance (figure 3). The former (except for Saudi Arabia) score higher in this regard. Still, although the inclusiveness and accountability of governance most strongly determines the overall ranking, the differences on environmental innovation showcase that China, Brazil and Mexico perform better than some more developed economies.



¹² For “Sustainable government” the latest available information from the following sources has been used: Corruption Perception Index (Transparency International, 2023), The Sustainable Governance Indicators (Bertelsmann Stiftung, 2023), the Transformation Index (BertelsmannStiftung, 2023), Renewable capacity statistics (IRENA, 2023), OECD Main Science and Technology Indicators (OECD, 2023), IMF Climate Change Dashboard (IMF, 2023), World Governance Indicators (Kaufmann & Kraay, 2023).

¹³ The “Sustainable government” pillar is weighed at 20% of the total Green Talent Potential Index.

Sustainable Government

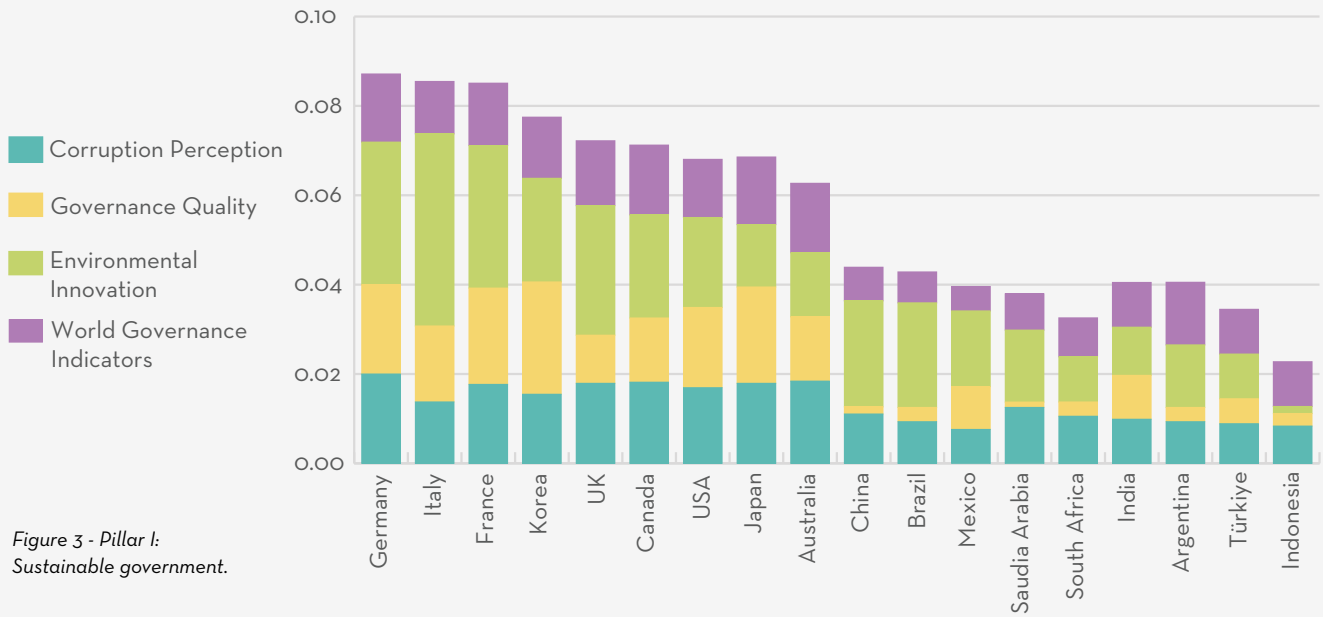


Figure 3 - Pillar I: Sustainable government.

Given the divide on governance, this is where significant opportunities for improvement lie for developing countries in particular. Overall transparency, accountability and inclusiveness need to be improved to shape a more stable environment for labour market actors to structurally buy in to them. Indeed, this will further stimulate trust into the ambitions expressed in the National Determined Contributions (NDC), including the labour market and social targets expressed in them.



The Transition to the Green Economy: The Adecco Group Contribution - Akkodis: Green&Fly

Aviation is recovering strongly from its biggest ever crisis, the COVID-19 pandemic. But with impressive growth rates comes a huge and growing climate impact. In 2021 aviation accounted for over 2% of global energy-related CO₂ emissions, having grown faster in recent decades than road, rail or shipping. Aviation emissions will continue to grow rapidly in the decades to come, as the number of global air passengers is expected to double over the next 20 years.

As a tech frontrunner within aviation, Akkodis is deeply committed to the green shift, and in 2021 Akkodis launched a zero-emission concept for regional flights, named Green&Fly. The 100% electric hydrogen powered concept aircraft Green&Fly demonstrates a strong commitment to scaling up renewable energy and contributing to the decarbonization of the aviation industry, through technology and innovation.

The Green&Fly concept is meant to inspire the industry, as well as serving as a challenge to Akkodis' own engineers to radically rethink personal air transport. And they've risen to the challenge, presenting a truly disruptive design.

Green&Fly - Sustainable Aircraft Concept

Hydrogen

Hydrogen is the main power source for the aircraft's fuel cells, with back-up batteries and an ultra-capacitor for optimized distribution

Flexible Cabin

To maximize the utilization rate, the cabin design is flexible allowing the aircraft to easily be converted from Passenger to Freighter.

New Shapes

The rhombohedral wing shape, compared to a classic wing shape, generate less turbulence at wing extremity allowing a significant reduction in drag. It also enlarges the wing surface area, opening up new possibilities for a significant increase in drag to lift ratio.

Next-gen Cockpit

The cockpit integrates digital applications and AI to facilities single-pilot operations.

Novel Materials

The stiffening of its structures is driven by an algorithm developed by Akkodis. Inspired by biomimicry, the structure design is based on the growth process of a leaf's veins to improve stiffening efficiency, thus reducing the mass of the aircraft.

Energy Recovery Landing Gear

The aircraft design also incorporates energy recovery landing gear, featuring electric extension/retraction, with the aim of progressively replacing all hydraulic components with electric ones to reduce emissions.

Energy Management System

The EMS of Green&Fly supervises the different energy sources available (fuel cell, battery and supercapacitor). These sources are different in their dynamic behavior but are complementary, making it possible to respond optimally to the energy needs of the system in real time.



Pillar II - Talent Transition Framework

The Toolbox for Labour Market Change

The second pillar focuses on the institutional environment for labour market governance. As such it looks at activation (ALMP) and (adult) training policies as well as the strictness of hire and fire regulations (employment agility) and the coverage of unemployment support. In this, special emphasis is put on the involvement of social partners in shaping and implementing these policies.¹⁴ This emphasis echoes a strong call for such involvement in the ILO Guidelines. Together this outlines how the labour market policies of the G20 compare to empower workers and business to tilt to towards a green economy.

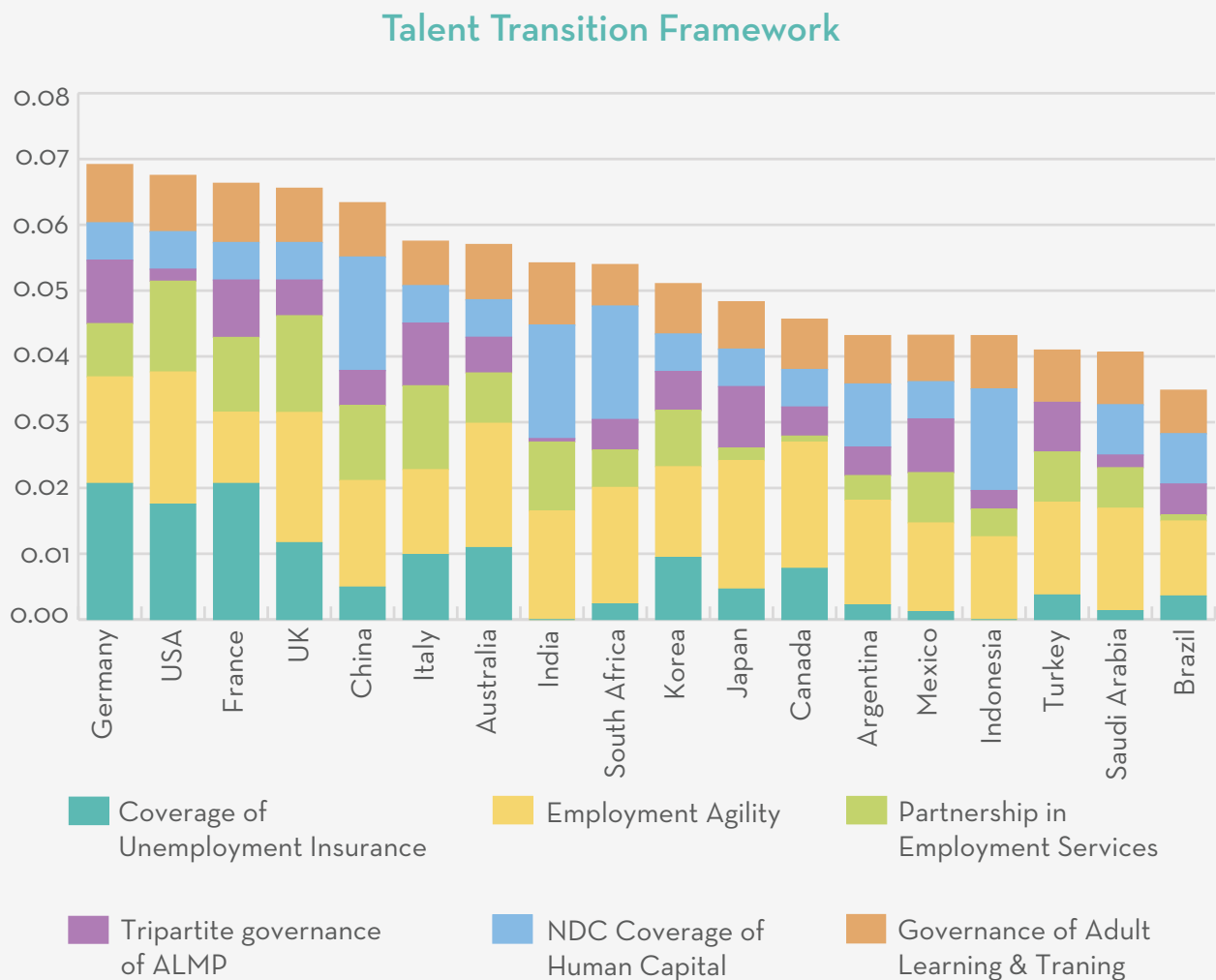


Figure 4 - Pillar II: Talent Transition framework.

¹⁴ For the “Talent Transition Framework” the latest information used is from the ILO Social Protection Database (ILO, 2023), OECD Employment Protection Legislation Index (OECD, 2020), ILO EPLex database (ILO, 2023) World bank Employing Workers data (World bank, 2019), World Employment Confederation Regulatory Survey (WEC, 2022), OECD Dashboard of institutional set-up of ALMP provision (OECD, 2021), World Employment Confederation Survey on public-private partnership in public employment service provision (WEC, 2021), OECD/AIAS ICTWS database (OECD, 2021), ILO Employment Policies Database (ILO, 2021), OECD data on social partner involvement in educational training systems (OECD, 2019), NDC Explorer (German Development Institute, 2022), and UNESCO data on progress in adult education policies (UNESCO Institute for Lifelong Learning (UIL), 2022).

Most notable differences in this pillar lie in the availability of unemployment insurance and the private involvement in activation policies ('tripartite governance of ALMP' & 'partnership in employment services'). Indeed, this trumps (sizable) differences in the strictness employment protection legislation ("employment agility") and the governance of adult learning & training. A main second differentiator is the extent to which 'education', 'training' and 'awareness' are addressed in the country's NDC. Indeed, an address of these human capital dimensions indicates the country's policy priority to integrate these dimensions in their national response to climate change. In fact, it is this NDC that helps explain relative high results for China, India and South Africa on the talent transition framework.

The USA and UK rank higher because of their relative higher scores on 'employment agility' and the strong public-private partnership in the provision of employment services, even though the overall social partner involvement in labour market governance lags behind. Although this allows businesses to tap into a broader talent base and more easily adjust their workforce to economic conditions (e.g. firing redundant workers and hiring workers with the right skills), it does not provide (1.) a sufficient framework for displaced workers to increase their (green and sustainable) employability while unemployed; or incentivize employers to retrain their existing workforce.

Most concerning per the Index are Argentina, Indonesia, Brazil and Saudi Arabia where relative strict employment protections exist on the one side, while activation and training policies lack adequate social partner involvement on the other. This impedes employers to adjust workforces by either hiring new staff or up-and reskilling their existing workforces. Moreover, it incentivizes workers to stay in "comfortable" job postings, without (potential) access to meaningful support measures for unemployment and/or employability.



Structural Social Partner Involvement is an issue across most of the G20



Active Labour Market Policies (ALMPs) and notably the provision of employment services to workers and jobseekers are crucial supports for workers as the transition across the economy. The “public-private partnership in employment services” and “tripartite governance of ALMP” dimensions in Pillar II: Talent Transition Framework address to what extent private labour market actors (workers’ representatives, businesses and private employment services) are involved in the design and implementation design and implementation of these ALMPs. Indeed, the integration of private stakeholders into these supports allows policymakers to closely connect to sectoral and occupational realities and ensure frameworks that support workers transition can adjust in an appropriate and timely fashion.

Country	Existence of Tripartite Council ¹	Social Partners involvement in Youth Employment Policy ²	Social Partners involvement in Education and Training ³	Social Partner Involvement in PES Governance ⁴
Germany	○	0.75	0.75	0.236
Italy	0.25	0.5833333333	0.75	0.125
Japan	○	1	0.5	0.1805
France	0.25	0.5833333333	0.5	0.236
Mexico	○	0.8333333333	0.5	0.125
Türkiye	○	0.666666667	0.5	0.1805
Korea	0.25	0.625	○	0.1805
UK	○	0.604166667	0.25	0.125
Australia	○	0.541666667	0.25	0.1805
China	○	0.916666667	0.003547974	0.02775
Brazil	0.25	0.4583333333	0.030656089	0.111
South Africa	○	0.6875	0.035958117	0.097
Canada	○	0.166666667	0.5	0.125
Argentina	○	0.166666667	0.029061494	0.08325
Indonesia	○	0.4375	0.033845279	0.0415
Saudi Arabia	○	0.3333333333	0.013394598	○
USA	○	○	0.25	0.06925
India	○	○	0.026629737	0.0555

Table 1 - Tripartite Governance of Active Labour Market Policies (ALMP) ranks countries on (1.) the existence of a tripartite council that is involved in labour market governance (OECD, 2021); (2.) the recent involvement of social partners in the design of youth employment policy (ILO, 2021); (3.) the involvement of social partners in education and training (OECD, 2019)(4.) Social partner involvement in PES governance (OECD, 2021)

Zooming on the involvement of social partners in activation and training policies a concerning picture appears (Table 1). Only four countries have a national Tripartite Council for policy coordination, and social partners involvement in the governance of the public employment service and education and training is limited. Only in the formulation of Youth Employment Policies there is more involvement; albeit also not of structural nature (figure 5). This disconnects policymakers from sectoral and general developments in the economy, and thus from the responses of the workers and businesses to them. The other way around, social partners will be disconnected from the policy targets and the resources allocated to them. This coordination failure impacts

the ability to reduce carbon footprints, while remaining competitive as an economy.

As such, across the G20 there is significant room and need for improvement for the structural involvement of social partners in the governance of labour market governance, notably on education and activation policies. This involvement of social partners cushions the labour market impact of economic policies and trends. And although a degree of labour market flexibility (employment agility) is important to allow employers and workers to adjust on individual level, it not sufficient to shape collective support measures that are connected to labour market realities.

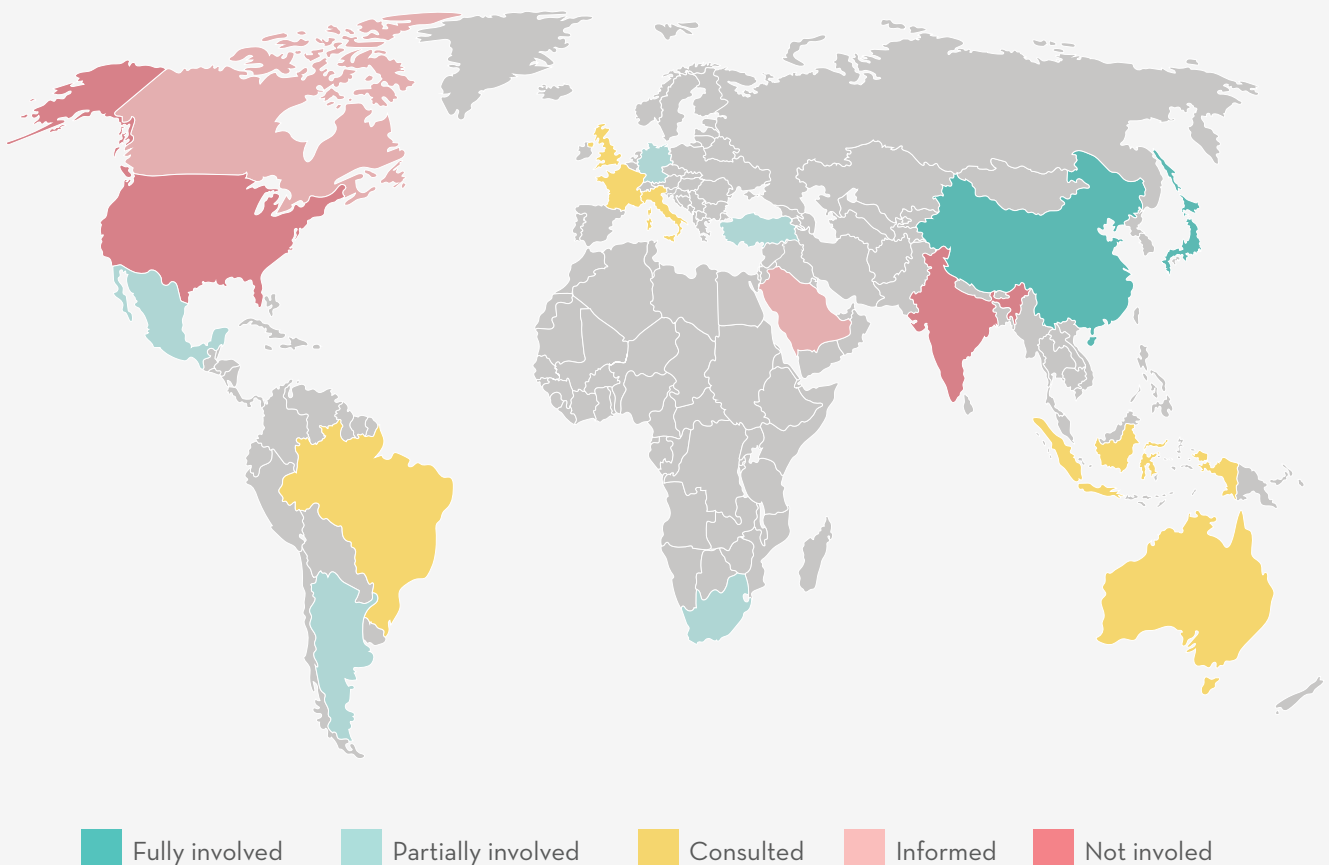


Figure 5: This map showcases the average involvement in various aspects of youth employment design and implementation. To arrive at the average involvement, the various aspects are rated from 0 (not involved) to 4 (fully involved) (ILO, 2021).

Pillar III - Workforce Readiness

Power for Change: Participation and Motivation

The third pillar ‘Workforce Readiness’ addresses two main dimension: (1.) awareness of climate change and its impact on one’s working life and (2.) key labour market outcomes on participation in lifelong long learning, informality, human capital, youth (un)employment and overall labour market mismatch. Together this seeks to move beyond the institutional framework addressed in pillars I and II and shapes an indicator on how well prepared the actual workforces are (1.) connected to the changing economy and labour market. This pillar holds unique insights from the annual Adecco Group Global Workforce of the Future (GWOF) survey that questions workers across the world on key labour market developments¹⁵.

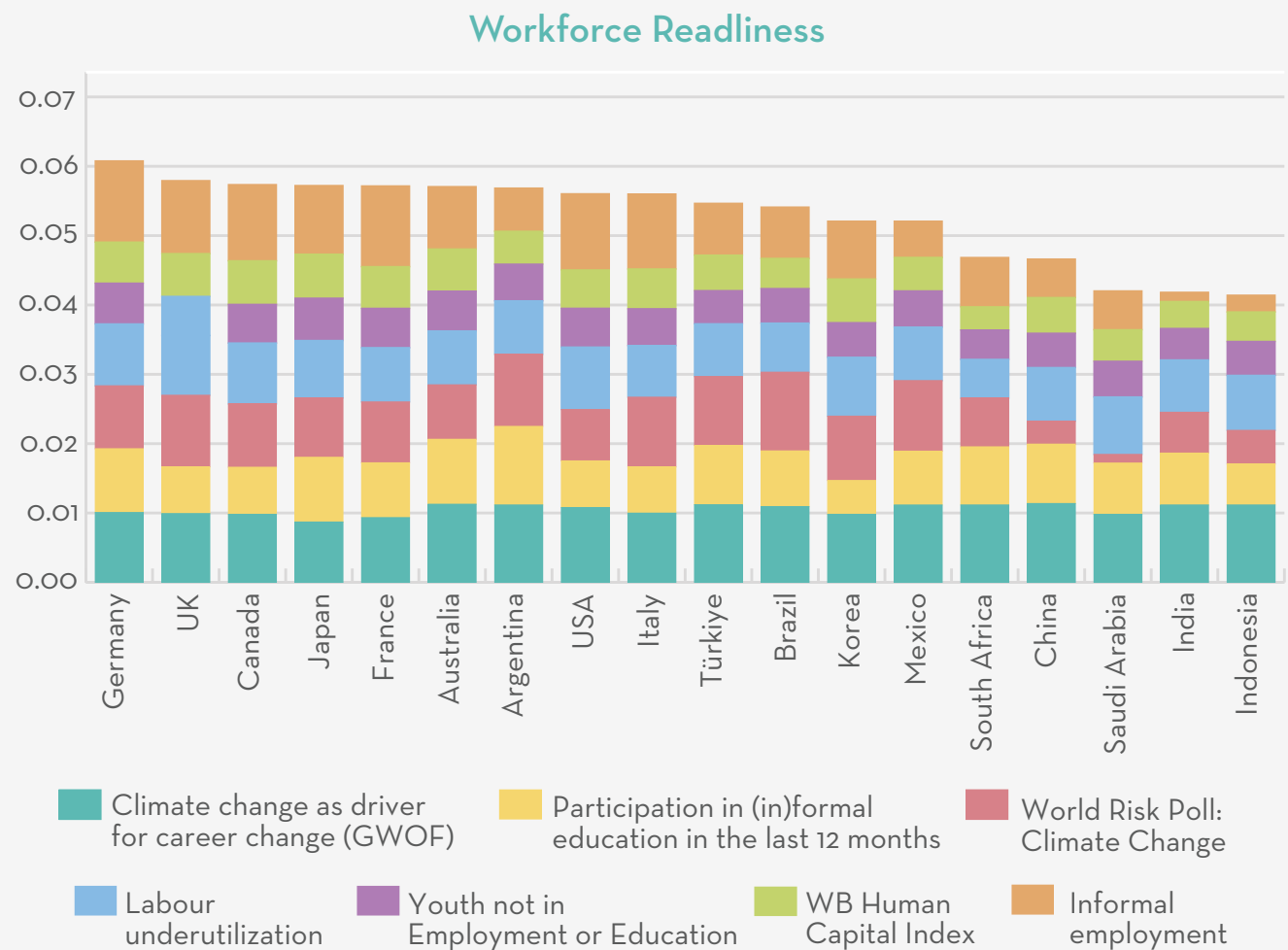


Figure 6 - Workforce Readiness

¹⁵ Next to the proprietary GWOF survey, this pillar brings in data from the World Risk Poll (Lloyd Register Foundation, 2019), SDG Database on informality (SDG 8.3.1) and participation in education (SDG 4.3.1) (United Nations, 2023), ILO on labour market participation and employment (ILO, 2023), and the World bank Human Capital Index (World bank, 2020)

This pillar directly identifies that informal work, basic human capital¹⁶ and perceived risks over climate change are important determinants in the differences across countries. The key finding in this pillar is the evident appetite for lifelong learning in those countries with the worst labour market outcomes in terms of informality, NEET rates and Human Capital. Still, this is most likely not related to the employment risks and opportunities related to climate change. Not unlikely a pathway to better employment per se, irrespective of the carbon footprint thereof, fuels this drive towards employability. That being said, particularly in Brazil, Argentina and Mexico awareness on climate risks is high, as well as the willingness to reskill in reaction to it, even though their labour force is relatively informal and underutilized.

The disconnect to quality employment across the G20 is extensive. There are vast differences on labour underutilization and NEET rates. Notably, South Africa and Brazil score worst on these, but also in Italy and India the full potential of the working age population remains untapped. Stark divides are also visible on youth detachment from the (formal) labour market: South Africa,

India, Türkiye, Indonesia and China showcase worrying numbers compared to the other G20 economies.

Germany, the UK and Canada appear best positioned, mostly on account of their good labour market outcomes, with regards to their overall human capital capacity and hence labour forces that are closely connected to the (formal) economy. That being said, these countries are (together with France and notably Japan) in the lower end when it comes to willingness to reskill in the age of climate change. The UK and Canada also score relatively low on their participation rates in education.

As such, no specific country outperforms others on workforce readiness. Each has its specific challenges. Still, looking through a broad lens towards the G20, the most important challenge might not lie in the awareness of climate change on existing careers, but on creating quality sustainable careers to begin with. This highlights the very strong and determined role governments need to play to positively and negatively incentivize sustainable production, even in the face of lagging awareness on climate change.



¹⁶ The World bank Human Capital Index ranks elementary variables such as survival rates and educational outcomes.

Climate Change and the Willingness to Train: unique insights from the Global Workforce of the Future Survey.

Key in any respect is the overall awareness of climate change and how it impacts one's working life. Understanding the urgency and impact allows people to orient towards reskilling or more sustainable jobs and sectors as such. As part of the 2023 Global Workforce of the Future Survey, The Adecco Group asked workers about their willingness to reskill and to what extent that is driven by climate change. Below chart (Figure 7) showcase the results from the G20 countries in the survey as well as averages of the high income and higher middle incomes.



The Perceived Impact of Climate Change on Working Lives

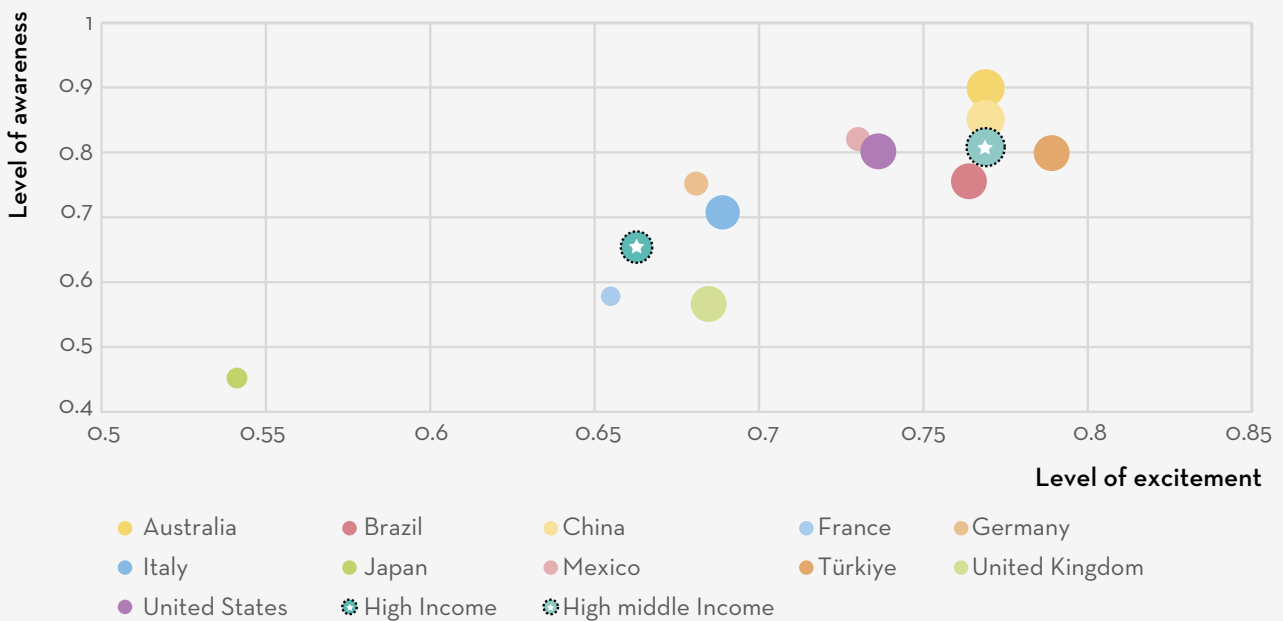


Figure 7 - This graph plots levels of excitement (horizontal) and awareness (vertical) on the impact of climate change on one's working life in the G20 countries that were in the Adecco Group Global Workforce of the Future survey. The level of awareness is represented by the type and number of impacts respondents identified on their careers as a result of climate change. Excitement is represented by the respondents' expression of positive or negative feelings on the impact of climate change on their career. The size of the marker indicates how willing people are to engage in training (ranked 1-5). The larger the marker the more willingness people expressed to engage in training (irrespective of climate change). The graph also includes the averages of respondents in high income (n=19) and high middle-income countries (n=4) in the aforementioned survey.

The data shows that European countries and high-income countries are less inclined to be aware or excited about the impact of climate change on their working lives. Moreover, they are also less willing to engage in training. China, Brazil and Türkiye showcase the most excitement and awareness as well as willingness to train. Anglo-Saxon countries (UK, US, Australia) showcase somewhat better results than their high-income country peers. Japan as clear outlier shows overall nonchalance on climate change's impact on employment as well as on participation in training.

Unsurprising yet reassuring, awareness and excited are strongly correlated meaning workers that express positive or negative feelings on the climate change impact more often identify concrete impacts on their career. Therefore, people are able to translate the risk into potential action. Slight deviation appears to come from the UK, where people express (relatively) more excitement, but also more often identify that they don't know how climate change could impact their working life.



A Transition to the Green Economy:

The Adecco Group Contribution - Adecco: Training the ESG experts of the future.

In Italy, Adecco runs the Adecco Academy. In this academy new labour market entrants can apply to courses that have been tailored towards labour markets gaps with and without potential employers. Once enrolled, through this 70% to 100% of all Adecco Academy students get hired by the clients involved. Over the last 3 years close to 4.500 people have been skilled for a variety of jobs on the Italian labour market. The Adecco Academy is funded through the sectoral 'Forma.temp' training fund. As a result, the costs of the training do not fall upon the students or the prospective employer.

Recently the Adecco academy added two new courses to train ESG consultants and ESG data analysts. Companies want to ensure their businesses operate sustainably in the long term by carefully considering all adverse environmental, social and governance risks and by adding value to a broad range of stakeholders. This includes meeting D&I targets or climate goals and achieving carbon neutrality. Doing so is not an easy feat and will require an organisational transition through a completely new skill set. Integrating sustainability into the business requires structural changes as well as new approach to collecting and reporting ESG information to corporate stakeholders ranging from investors, employees, clients, suppliers, and civil society. Adecco identified that the talent pool capable of leading this change was insufficiently at hand in Italy and decided to add two distinct new course tracks to its Academy. These courses aren't just focused on (under)graduates entering the labour market for the first time, but also towards reskilling existing consultants and corporate accountants with a background in financial reporting.

In the ESG consulting programme the students learn the skills to develop, implement and maintain organisational ESG data collection and reporting. It addresses the societal & economic backgrounds, policy & legal frameworks (SDG, CSRD, etc) as well as the private standards and initiatives (ISO, GRI) that shape what companies need to report on. In the ESG data analytics programme, students learn to IT skills to implement the data infrastructures needed to collect and visualize the organisational performance on sustainability. Programming languages such as Python, Database management systems such as SQL, and visualisation tools such as PowerBI are key parts of this course. Through this, a new talent pool of experts is raised that support companies to improve their impact reporting and shape more sustainable enterprises.



The Green Talent Potential and the Climate Ambitions

This section explores how the countries in the Index perform on key climate targets. Most importantly it measures if countries with high levels of emissions hold the talent pool and institutional framework to support the curbing thereof. Indeed, it helps identify the importance of human capital for the green transition and assesses where room for country improvement lies. Last but not least it identifies the focus for international collaboration and support measures relating to successful labour market policies and institutions.

As a starting point, the status quo shows that the top five countries in the Green Talent Potential Index are some of the current highest emitters of CO₂ emissions per capita. Together they amount to almost 40% of the G20 per capita emissions (table 2). This reflects their developed economies and legacy of carbon emissions. As such, their relative advanced positioning on Green Talent Potential is no luxury. In this respect, it is concerning that Canada - significantly outranking the G20 on emissions per capita - isn't appropriately placed on Green Talent Potential. This relative low positioning results from a lack of social partner involvement in labour market governance (see the section on pillar II showing that Italy, UK, and France perform relatively well on Green Talent Potential, leading to the conclusion that as more people are able to transition into green jobs their individual contribution to production-based CO₂ stands to decrease exponentially.

Country	CO ₂ per capita (% of G20) (2021)	GTPI
Canada	32.66124%	9
Italy	12.67208%	3
UK	11.77159%	3
France	10.82882%	2
Mexico	7.34009%	12
Indonesia	5.16664%	18
India	4.39676%	15
Australia	3.44678%	6
USA	3.39361%	5
South Korea	2.71477%	7
South Africa	1.67636%	13
Türkiye	1.20212%	11
Argentina	0.94051%	14
Brazil	0.52097%	16
Saudi Arabia	0.42716%	17
Japan	0.19564%	8
Germany	0.18476%	1
China	0.18376%	10

Table 2 - CO₂ per capita (% percentage of G20) (UNFCCC, 2021)

¹⁷ Indeed, individuals can contribute to CO₂ emissions if they import goods that have been produced abroad.

The most concerning and encouraging finding is reflected in Figure 8. This showcases a strong relation between a high Green Talent Potential and a decrease in CO₂ emissions since the agreement of the Paris Climate Accords in 2016. Countries ranked high in the Green Talent Potential, Germany, France, UK, USA and Italy, have decreasing numbers of CO₂ emissions. Indeed, GDP growth can go hand in hand with the reduction of CO₂ emissions (Ritchie, 2021). While countries scoring relatively low on labour market institutions and outcomes showcase rising numbers of emissions. Of course, as addressed more extensively below, these reductions are still vastly insufficient to meet current climate ambitions.

Changes in CO₂ emissions since 2016 and the Green Talent Potential Index

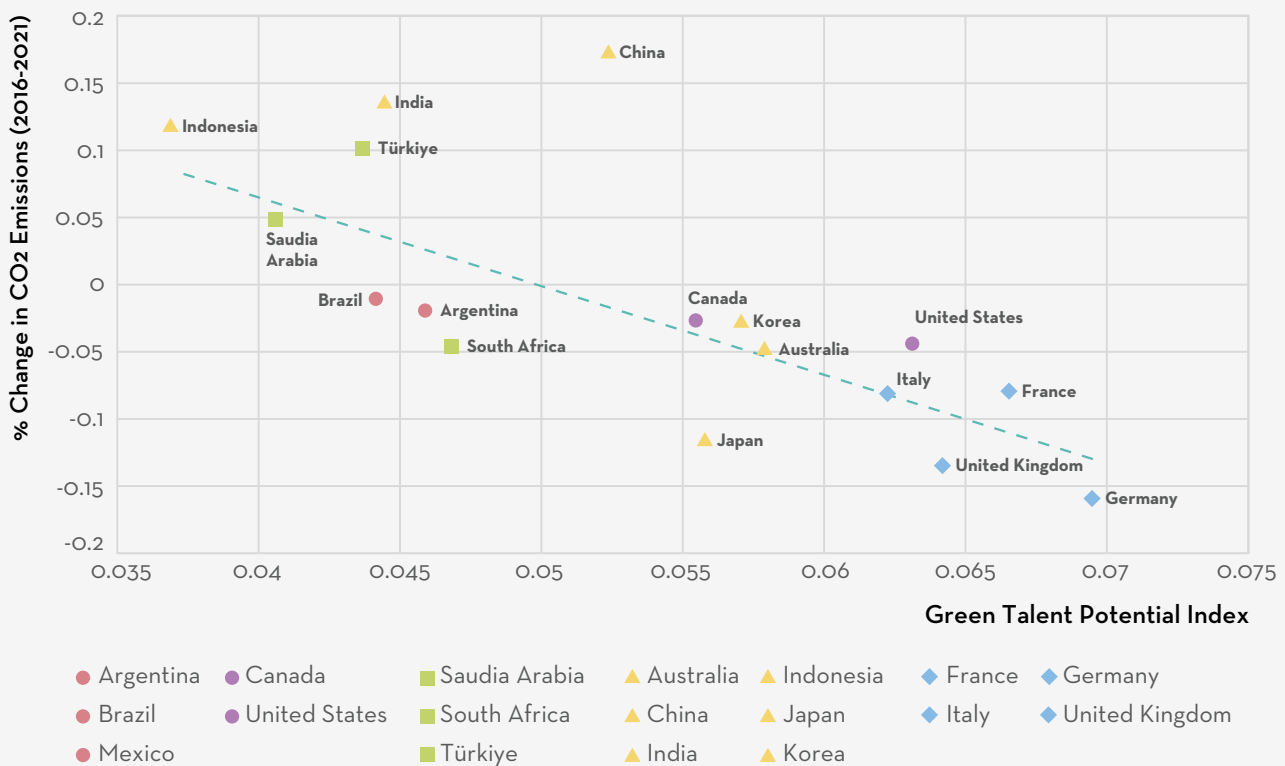


Figure 8 - This chart plots the Green Talent Potential Index and the percentual development in CO₂ emissions since 2016 (UNFCCC, 2021). Different markings are used to indicate regional differences.





More worrying perhaps is the situation in India and China. They have been emitting more CO₂ since 2016, while their labour market framework and outcomes are lagging behind. China and India's emissions aren't just growing, they currently make up a significant portion of global emissions (Figure 9). Encouragement can be found in the relatively high Green Talent Potential of China vis-à-vis other G20 economies with rising CO₂ emissions. Indonesia, Türkiye, Saudi Arabia and India are notably concerning given they showcase the low green talent potential and rising CO₂ emissions.

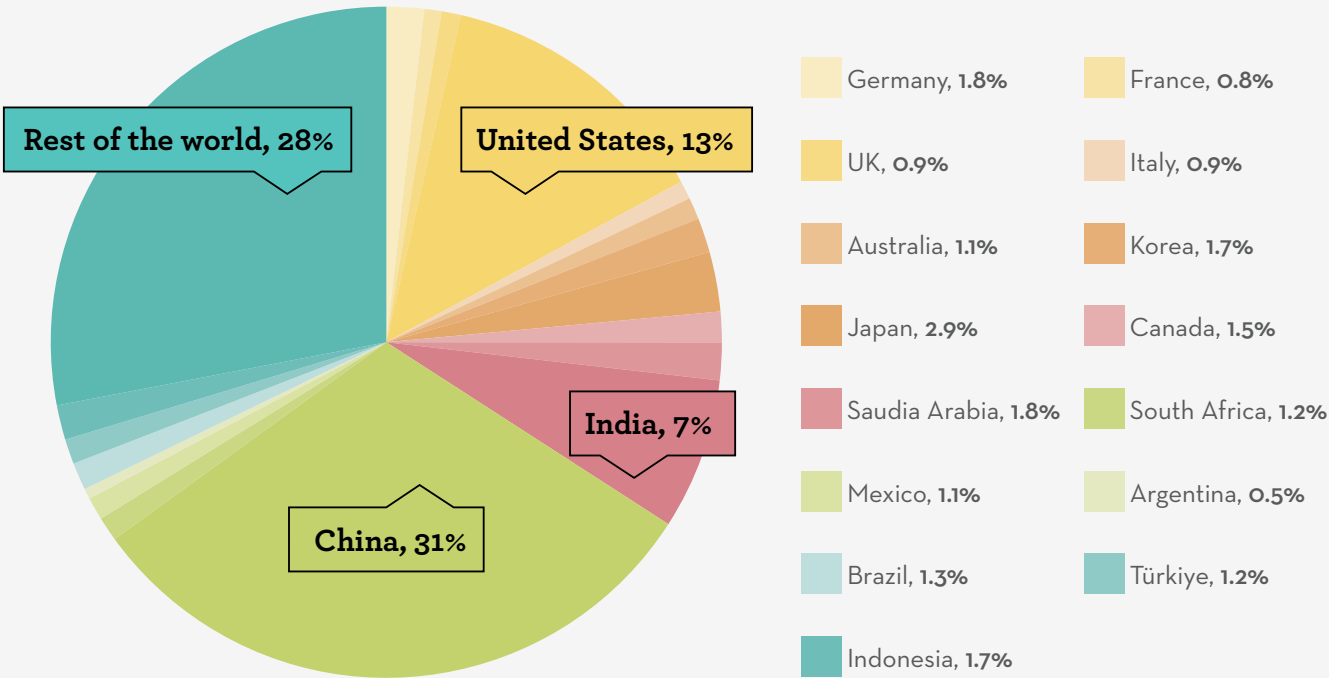


Figure 9 - proportion of CO₂ emissions (UNFCCC, 2021)

Still, irrespective of some positive signs, the targets set by governments still remain highly insufficient. According to the Climate Action Tracker none of the G20 countries are on track to limit global warming to 1.5 degree Celsius. This inadequacy increases as levels of economic development and green talent potential drop. As such, and vastly beyond labour market action alone, more needs to be done. In this respect, ambitions on labour market transformation must not become either a substitute of or a pro-forma argument for other climate action; in this sense improving labour markets is a means to an end. To this point, the countries with the worst performance on Climate action and GTPI pillar 1 Sustainable Government all address the ‘human capital’ dimension in their NDC (see GTPI pillar II).. As such this raises the need for scrutiny on this ‘human capital’ dimension to promote countries align actions with commitments in this regard (Table 3).

Country	Climate Action Tracker Overall Rating	Mentioned in NDC			
		Education	Awareness	Training	Average
China	Highly insufficient	3	3	3	3
India	Highly insufficient	2	4	3	3
South Africa	Insufficient	3	3	3	3
Indonesia	Highly insufficient	4	3	1	2.666667
Argentina	Highly insufficient	3	1	1	1.666667
Saudi Arabia	Highly insufficient	2	1	1	1.333333
Brazil	Insufficient	2	1	1	1.333333
Mexico	Critically Insufficient	1	1	1	1
Canada	Highly insufficient	1	1	1	1
Korea	Highly insufficient	1	1	1	1
UK	Highly insufficient	1	1	1	1
Australia	Insufficient	1	1	1	1
France	Insufficient	1	1	1	1
Germany	Insufficient	1	1	1	1
Italy	Insufficient	1	1	1	1
Japan	Insufficient	1	1	1	1
USA	Insufficient	1	1	1	1
Türkiye	Critically Insufficient	0	0	0	0

Table 3 - Climate Action Tracker overall rating of governmental climate action (Climate Action Tracker, 2023) and the mention of Education, Awareness Raising of Training in NDCs (German Development Institute, 2022). 0: not submitted. 1. Not mentioned in NDC. 2. Mentioned in NDC. 3. Mentioned to implement OR adaptation contributions in NDC. 4. Mentioned to implement mitigation AND adaptation contributions in NDC.

Labour market institutions and performance of countries can play an important part in this. Although not an end in and of itself, proper labour market configurations enable the agility and adjustment of workforces. The institutional arrangement allows (1.) the build of labour supplies that can empower more carbon-neutral production as such and (2.) ensures a transition that allows business and workers to easily and confidently make the shift towards that production. It underscores the importance of the ILO Guidelines for a Just Transition, as well as fact-based and comparative metrics that track progress and can define tailored advice to ensure the labour policies are best calibrated to fix the biggest challenge humankind has ever faced.



Concluding Remarks

The Green Talent Potential Index is an effort to support that international comparison and policy action. Although open to calibration itself, the Index identifies where opportunities lie on the national level and where policy makers' attention must lie. Moreover, it allows business, workers and investors to identify the economies holding the best cards for sustainable employment, production and (personal and financial) growth.

The Adecco Group recognizes that this is work in progress and for all stakeholders to co-create and stands ready to partner with governments, business and workers to make a green and sustainable future work for everyone.



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