

 Global Insights

Sustainability and the Rise of Green+ and Turquoise Jobs

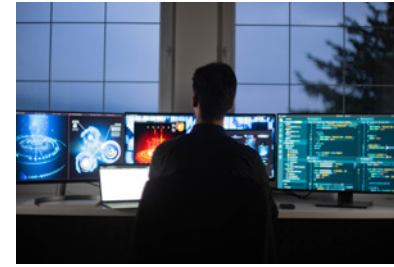


GLOBAL GREEN JOBS DEMAND IS GROWING
2x Faster
THAN SUPPLY

MOST EMPLOYERS **91%**
WORLDWIDE SAY THEY DO NOT HAVE THE
SKILLED TALENT THEY NEED TO ACHIEVE
THEIR SUSTAINABILITY GOALS

GLOBAL GREEN BUSINESS TRANSFORMATION
WILL IMPACT THE SKILLS NEEDED FOR.
775+ roles

Contents



Today's conversations about sustainability beg the question: what is the workforce that will get us to more sustainable companies, communities and economies? The green jobs that got us to where we are today with environmental improvement were necessary for the progress we have achieved, but alone they are not sufficient to get us where we need to go and can go next.

To address the question of who needs to be involved to achieve a more sustainable future, we must adopt a broader perspective. ManpowerGroup's research into the sustainability workforce not only builds on the foundation of green initiatives but also envisions a wide range of roles that enhance our collective sustainability progress, from climate health to innovation and bio-inspired business.

- **What is the work of sustainability** and how is it driven by organizations and employers who see opportunities as well as responsibility?
- **How can companies integrate sustainability into their core business strategies** to not only address environmental concerns but also drive new business, employee engagement and retention across multiple generations?
- **What new roles and skills will be essential in the evolving sustainability workforce** to ensure the successful implementation of green business transformation?
- In what ways can sustainable brand leadership serve as a **competitive advantage in attracting top talent and enhancing consumer loyalty**?

Key Drivers of the Sustainability Era



Resources

Dependencies,
(Dis)respect & Management



Innovation

Resiliency, Opportunities
& Demands



Holistic Mission & Wellness

5P System Orientation



Built World & Infrastructure

Reformation



Bio-Business

Lean, Clean & Green



Transparency

Decision Support
through Data



Nature

Affinity & Alliance

The Green Transition is Not Going Away

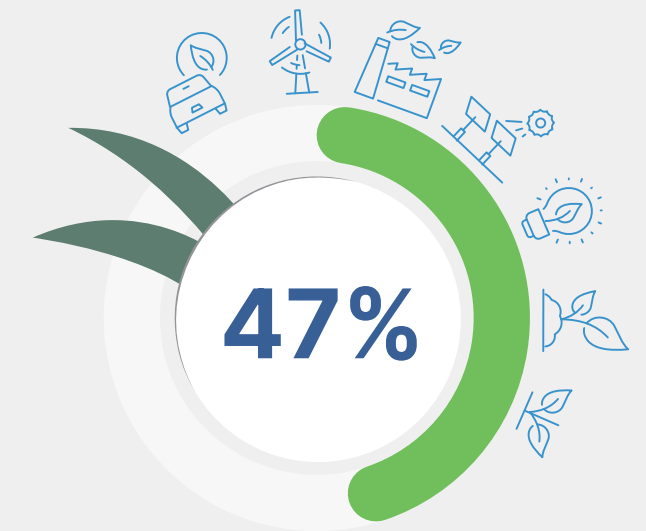


The momentum of global green transformation and business growth continues. Massive capital investments in green infrastructure are in progress or reaching completion. Bio and nature-inspired product and process innovation make the news every day. At the global level, investment in key technologies such as green energy and vehicle electrification are accelerating. Business leaders that hesitate to improve, expand and pivot risk losing out on the rewards of a global shift to more circular and sustainable business models.

- **Green Investment Continues:** Despite an increasingly complex outlook for global climate negotiations, the green transition remains a priority for many organizations globally. Nearly half of employers worldwide (47%) anticipate the ramping up of efforts and investments to reduce carbon emissions as a key driver for organizational transformation.¹
- **Growing Consumer Urgency and B2B Demand:** More than half of consumers (60%) say their climate change concerns have increased over the past two years and more than one-third of B2B customers (36%) would change suppliers today if their sustainability needs aren't met.²
- **Organic Growth Opportunity in Bio-Based Business:** The economic opportunity for bio-based solutions to complement or even substitute conventional ones will continue to grow, reaching \$7.7 trillion by 2030 for food and feed waste, products, and energy.³
- **Investor Support Continues:** More than half of individual investors (54%) say they plan to increase their allocations to sustainable investments, while more than 70% believe strong ESG practices can lead to higher returns.⁴

Workforce Implications:

- Employers must take a broader view when they consider sustainable business and take a longer view when they consider future talent needs.
- With global talent scarcity projected to grow in the coming years, the skilled talent needed to sustain green business transformation will become increasingly difficult to find.
- Nearly half of Gen Z (45%) and Millennial (42%) candidates say a potential employer's environmental reputation impacts their job consideration.⁵



MANY EMPLOYERS WILL INCREASE GREEN INVESTMENT IN 2025.¹

1. [WEF 2025 Future of Jobs Report](#) 2. [Bain & Company](#) 3. [World Business Council for Sustainable Development](#) 4. [Morgan Stanley](#)
5. [ManpowerGroup People-First Green Business Transformation Study](#)



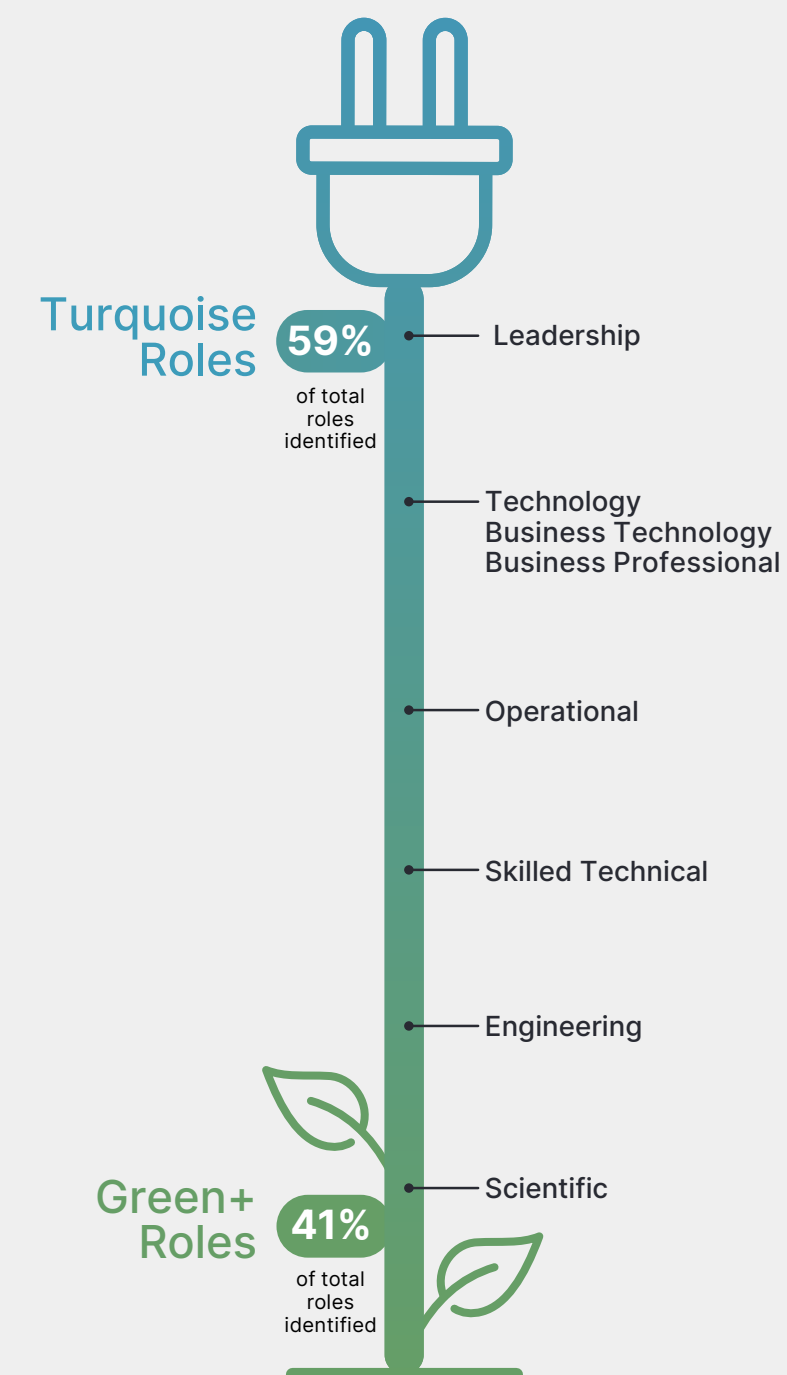
A Green Future with Many Shades

When many think of sustainability and green jobs, they think of very traditional green roles such as wind turbine technicians or solar panel installers. While these roles will absolutely play a key role in the green transition, the impact on the future of work will be much broader. Our research explores the impact green business transformation will have on every job function.

- **Green Roles:** Green jobs are often synonymous with traditional green roles concentrated in the environmental sciences and outdoors where conventional ecology-oriented scientists, engineers and skilled trades directly interact with and contribute primarily to environmental sustainability. Examples include water quality technicians, forestry technicians and conservation managers.
- **Green+ Roles:** Green+ jobs are more advanced and broader. Green+ Roles apply multi-domain scientific, technical, and operational skills, principles, practices and technologies to positively impact the environment and living systems – directly and indirectly. Examples include product and process designers, materials and chemical engineers, renewable energy specialists, bio-scientific roles and even the conventional green roles with an updated systems-thinking mindset.
- **Turquoise Roles:** Turquoise roles go well beyond what we consider to be typical green career paths. They are concentrated in multiple business functions that together are key to ongoing business success and resilience. These include senior leadership, governance and policy, community impact, finance, marketing, legal, IT and HR/human services. Turquoise roles are increasingly key to sustainable solutions design and green business model evolution.

1. [Manpower Accelerating the Sustainability Workforce Study](#)

A NEW VISION OF SUSTAINABILITY JOBS



[Click here to see a listing of select Turquoise & Green + Roles](#)

Why The Future of Green May Look Turquoise



In addition to the expanded Green+ roles, Turquoise roles are the future of green business transformation. While many green jobs today are concentrated in traditional scientific and technical roles, turquoise jobs span nearly every business function. They will become increasingly important as sustainable business practices advance due to their influence on longer term business strategy. In business terms, these jobs live at the intersection of blue-sky strategy and green business transformation.

- **Turquoise:** Manpower studied more than 775 roles to measure their green potential. The majority (59%) of turquoise roles were found in business professional and leadership roles.¹
- **Green+:** The remainder of the 775 analyzed roles were classified as Green+. These are concentrated in scientific, engineering and skilled technical business functions.¹
- **A Growing Challenge:** Despite the recent economic uncertainty, global demand for green talent grew twice as quickly as supply between 2023 and 2024.

Workforce Implications:

- Green+ and turquoise roles, which are concentrated in high-skill business functions, will become increasingly difficult to fill as global green talent demand grows.
- Jobs that support Sustainability initiatives are growing twice as fast as candidates with the skills to perform them. Organizations will need to invest in learning & development pathways for their existing talent to meet demand. ManpowerGroup's research identifies the Business, Technical, and Professional skills that will be essential in the future.
- Nearly half of employers worldwide (41%) anticipate green transition will have a significant impact on their organization.³



SKILLED TURQUOISE AND GREEN+ ROLES WILL BECOME INCREASINGLY DIFFICULT TO FILL AS GLOBAL GREEN TALENT DEMAND GROWS TWICE AS QUICKLY AS SUPPLY.²

1. [Manpower Accelerating the Sustainability Workforce Study](#) 2. [LinkedIn 2024 Global Green Skills Report](#)
3. [WEF 2025 Future of Jobs Report](#)



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Closing Green and Turquoise Skills Gaps

The global shift toward more sustainable business models will continue to drive green jobs growth. As industries continue to embrace more circular business practices like our view of the Sustainability Solution Life Cycle, the demand for professionals with the new mix of green+ and turquoise+ skills has surged. The ability to close this skills gap will determine an organization's ability to not only reach its sustainability goals but also differentiate itself among clients and future candidates.

- **A Global Shortage:** Most employers (91%) worldwide say they do not have the skilled talent they need to achieve their sustainability goals.¹
- **Mind the Gap:** Skill gaps are categorically considered the greatest barrier to business transformation, with 63% of employers identifying them as a major barrier over the 2025-2030 period. The same research estimates 59% of workers worldwide will need additional training to perform their existing roles by 2030.²
- **The Gap in 2030:** The current green talent supply and demand trajectory will lead to a 19% global shortage of workers with sufficient green skills by 2030.³



Workforce Implications:

- More than half the global workforce needs additional training to perform their existing roles. Green skills gaps add an additional layer of complexity. [Click here](#) to see two examples of how conventional roles can be skilled up into more sustainability focused work.
- New sustainability regulations such as the European Sustainability Reporting Standards (ESRS) and Corporate Sustainability Reporting Directive (CSRD) will require additional training to ensure compliance.
- Sustainability targets will also drive the need for talent in highly skilled and difficult-to-fill roles. For example, sustainable procurement was the fastest growing green skill in 2024.³

1. [ManpowerGroup Employment Outlook Survey, Q4 2024](#) 2. [WEF 2025 Future of Jobs Report](#) 3. [LinkedIn 2024 Global Green Skills Report](#)

Sustaining Green Transformation to Futureproof Your Business

We know we are living in a time of great challenges and transition. In many important sectors of the economy, green transformation is well underway. Industry-leading organizations understand that transformation to a circular economy is not just the right thing to do, but also a future business necessity and great source of opportunity. What does this mean for the future of work? When the fundamental ways you do business change, so does the world of work.



- **Green Business is Still Good Business:** Organizations that embed sustainability are 75% more likely to attribute greater improvement in revenue from their sustainability efforts and are 52% more likely to outperform their peers on profitability.¹
- **From Green Ambition to Industry Transformation:** As the green transition advances, a growing number of business leaders realize organizational transformation is necessary to sustain their business. Most employers in the Automotive and Aerospace (71%) and Mining and Metals (69%) industries believe carbon emissions reduction will require a fundamental transformation of their business.²
- **Green Transition Meets Talent Scarcity:** Green business transformation requires a highly skilled and motivated workforce. However, most employers worldwide (74%) say they are still struggling to find the skilled talent they need.³

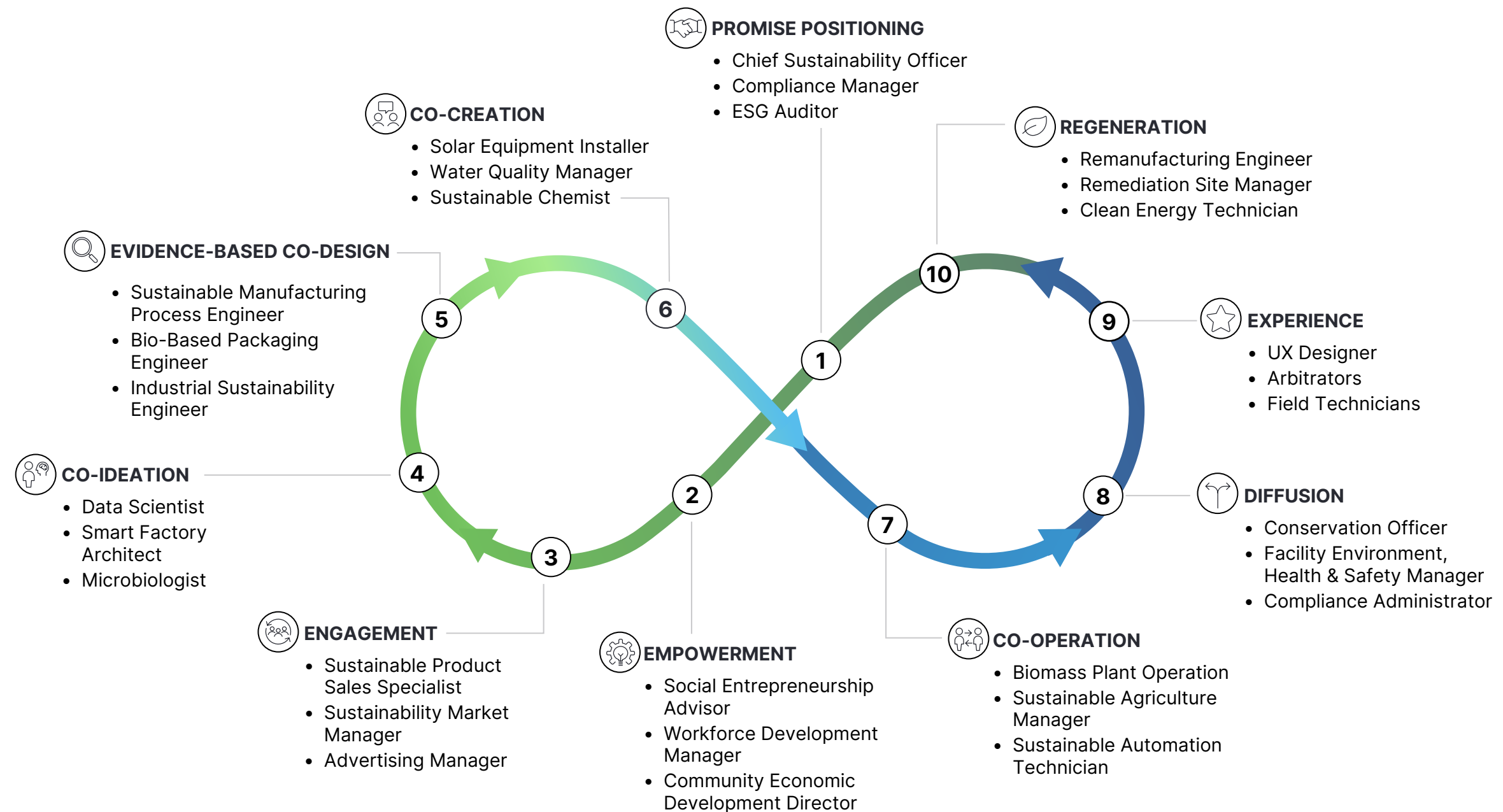
Workforce Implications:

- Workforce strategies must be aligned with the sustainability goals of the business which requires understanding what talent and skills are needed to achieve prioritized outcomes. As a starting point, ManpowerGroup mapped ten priority sustainability outcomes and illustrated how key roles would be aligned to achieve those outcomes.
- Sustainability matters to workers. Nearly two-thirds (62%) say they research an organization's environmental reputation and roughly one-third (35%) say it impacts their decision to accept or reject a job offer.⁴
- Global talent scarcity is expected to grow, particularly in developed economies. This will require a more sustainable approach to talent as recruiting becomes more difficult.



1. [IBM Institute of Business Value](#) 2. [WEF 2025 Future of Jobs Report](#) 3. [ManpowerGroup 2025 Talent Shortage Study](#)
4. [ManpowerGroup People-First Green Business Transformation Study](#)

Futurecast: The Lifecycle of Green and Turquoise Roles



Futurecast: The Future of Skills

GREEN+

Packaging Designer

IT Systems Architect

TURQUOISE



Accountant

IT Systems Architect

The Evolution of a Turquoise Role: Accounting

Accountants continue to focus on the financial and administrative mechanics of financial analysis and business guidance, record keeping, compliance, and reporting. Future-focused, turquoise-smart accountants add the initiative to consider and align sustainability problem solving — both through risk management and opportunity analysis — with fuller understanding and

quantification of the life cycle costs for business decisions, operations and customer/community/environmental impact. Partnering for innovation, new business models, and risk management when it comes to sustainability solutions and use, versus maintaining the status quo, is the key to evolution for the modern accountant.

Skills Evolution

- Full life-cycle cost-impact analysis
- Industry standards frameworks
- Business action support and reporting around fuller 5P practices and measures: cost control and revenue optimization, lean/clean/green design, waste avoidance, and regeneration
- Life-friendly science basics for non-science professionals
- Bio-inspired process, product, service and brand innovation investment practices

- Sustainability oriented internal systems and controls set up and management
- Impactful science-based target setting: greenwashing avoidance
- ESG Planning and Reporting
- Public-private financial positioning
- Emergent market financing
- Co-championing culture integration of business, social and environmental behaviors

Key Takeaways for Employers



Don't wait: In many areas of green, green+ and turquoise – especially skilled technical – talent is already in short supply and demand will grow.



Look Across the Spectrum: Look beyond what are considered typical green roles to close skills gaps. Since Green+ and Turquoise roles are tied to the most strategic business functions, they are critical to long-term sustainable business differentiation.



Fit Before Finish: Soft skills such as effective communication and adaptability will become increasingly important as many hard skills are eliminated by automation. Developing available candidates can save valuable talent acquisition time and resources.



Build It: Make your talent strategy more sustainable by scaling upskilling and reskilling to drive more productivity and engagement from existing employees.



Play the Long Game: Regardless of short-term shifts in political sentiment, the data tells us climate change is here to stay as are the opportunities for sustainability related processes, materials, products and services. Now is the time to build a leadership position built on a workforce bringing the new mix of skills for a sustainable business, social and economic future.



Global Workforce Solutions to Accelerate Green Business Transformation



Workforce Consulting
& Analytics



Workforce
Management



Talent
Resourcing



Career
Management



Career
Transition



Top Talent
Attraction



About Us - ManpowerGroup® (NYSE: MAN), the leading global workforce solutions company, helps organizations transform in a fast-changing world of work by sourcing, assessing, developing, and managing the talent that enables them to win. We develop innovative solutions for hundreds of thousands of organizations every year, providing them with skilled talent while finding meaningful, sustainable employment for millions of people across a wide range of industries and skills. Our expert family of brands – Manpower, Experis, and Talent Solutions – creates substantially more value for candidates and clients across more than 75 countries and territories and has done so for 75 years. We are recognized consistently for our diversity – as a best place to work for Women, Inclusion, Equality, and Disability, and in 2023 ManpowerGroup was named one of the World's Most Ethical Companies for the 14th year – all confirming our position as the brand of choice for in-demand talent.