

University of San Diego

Digital USD

San Diego Regional Quality of Life Dashboard

The Nonprofit Institute

2023

Understanding the Green Workforce

Gladys Torres Olivarria

University of San Diego, gladystorres@sandiego.edu

Darbi Berry

darbiberri@sandiego.edu

Leaders 20/20, University of San Diego

Follow this and additional works at: <https://digital.sandiego.edu/npi-sdlife>



Part of the [Environmental Sciences Commons](#), and the [Nonprofit Administration and Management Commons](#)

Digital USD Citation

Torres Olivarria, Gladys; Berry, Darbi; and Leaders 20/20, University of San Diego, "Understanding the Green Workforce" (2023). *San Diego Regional Quality of Life Dashboard*. 7.

<https://digital.sandiego.edu/npi-sdlife/7>

This Report is brought to you for free and open access by the The Nonprofit Institute at Digital USD. It has been accepted for inclusion in San Diego Regional Quality of Life Dashboard by an authorized administrator of Digital USD. For more information, please contact digital@sandiego.edu.

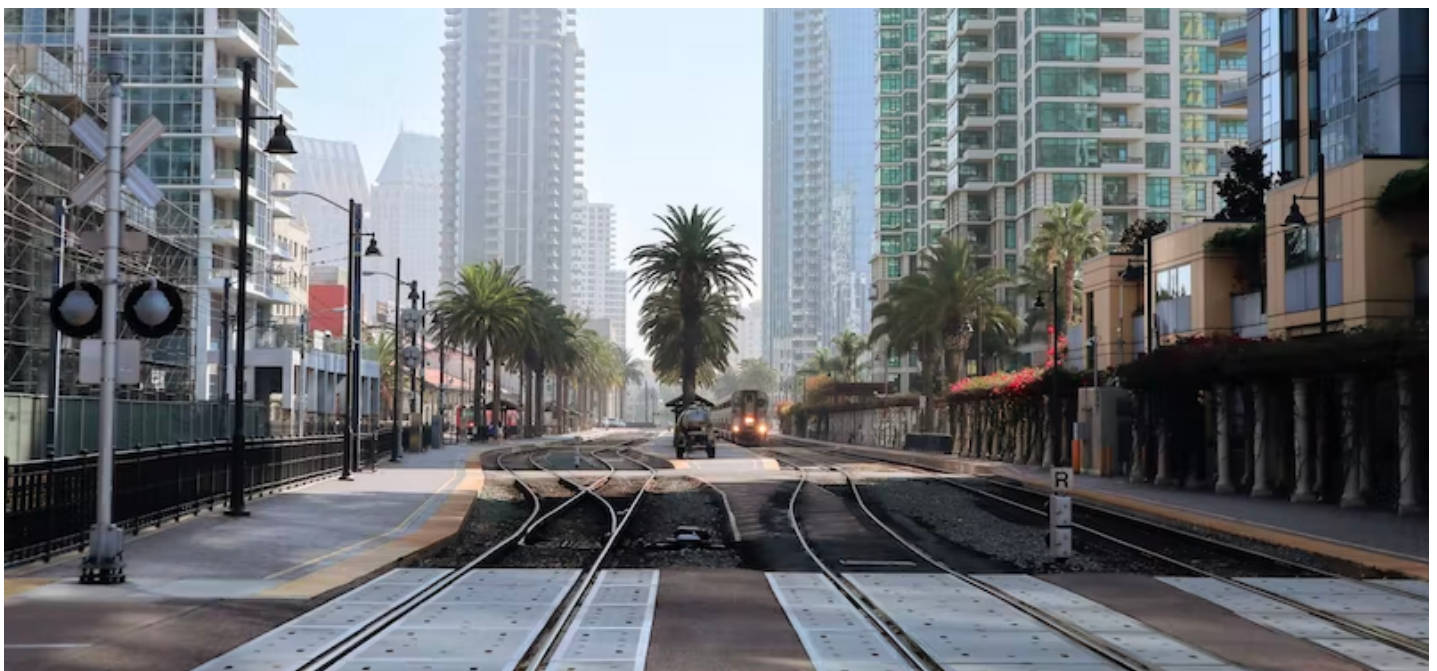
UNDERSTANDING THE GREEN WORKFORCE



What is the Green Workforce?

Over the past decades as CO2 levels, ocean levels and temperatures have risen, there has been an increase in the global attempt to preserve the environment. Climate change has rapidly become one of the most pervasive global issues for some years now. The overuse of fossil fuels such as coal, oil, and natural gasses, in collaboration with mass production, and other human impact has led to a tremendous decline in the planet's stability. One initiative to improve environmental conditions is prioritizing the Green Workforce. The Green workforce is an economic approach to combating climate change. The Green Workforce refers to jobs that help us advance towards a more sustainable society and help us transition from the over-dependence on oil towards reducing greenhouse gas emissions. This maximizes an ethical and sustainable use of natural resources rather than the current destructive and polluting methods that have led us to a state of a global emergency.

A Green workforce can bring in millions of new jobs and opportunities. According to ILO, or the International Labor Organization, the Green Workforce could open up the green economy and create 24 million jobs. With the right policies and environmental values, economic growth can be a big contributor to expanding the Green Workforce. Aside from the economic gain of a Green Workforce approach to the job market, there is also a big social factor when talking about the Green Workforce and sustainability. The complexity of climate change makes it an intersectional issue.



When talking about what the Green Workforce is Mary Spilde, Ph.D¹ (SEED Center) put the Green workforce in the following 3 categories (Figure 1):

- **Existing Jobs Needing New Technical Skills:** Jobs that transition into new/ improved skills that center sustainability
- **New Direct Green Jobs:** Jobs created specifically as part of the Green Workforce
- **Greening of Existing Jobs:** Pre-existing jobs that highlight sustainability as effort to create consciousness

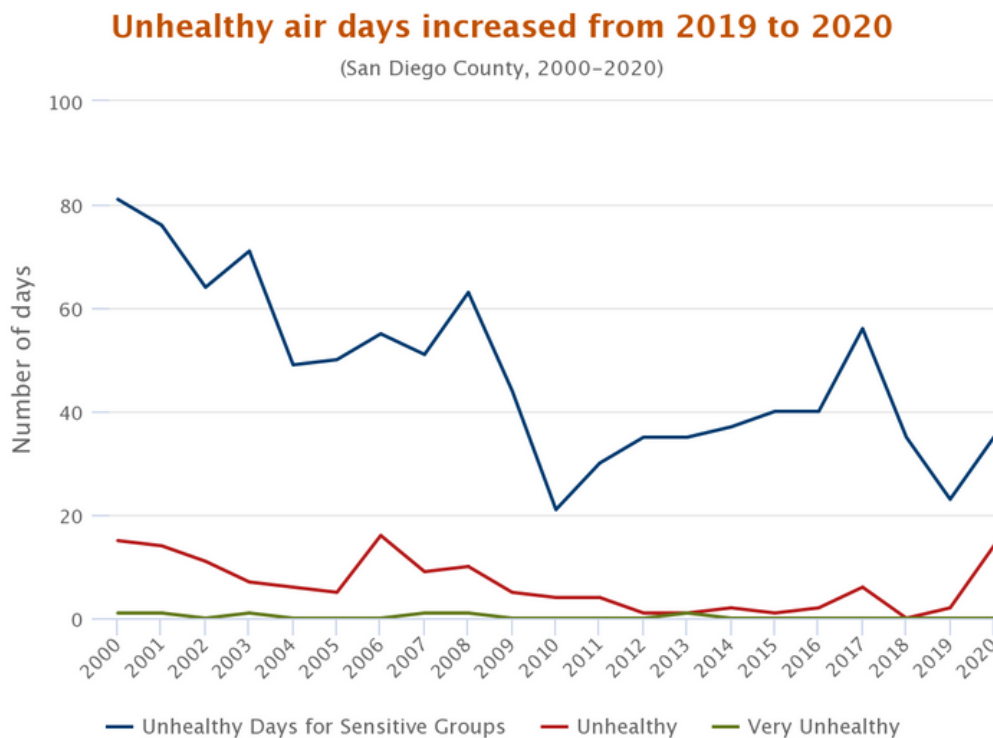


Figure 1: Different professions that fit under the defined 3 categories of the Green Workforce

The different professions above are categorized based on their type of sustainability. Whether they are new professions, retrained professions or applied to existing professions, the progress towards eco-sustainability within the workforce is an essential step towards reducing the impact of climate change.

Why Do We Need A Green Workforce?

As the health of the planet rapidly declines, due to human impact, it is essential that current and upcoming industries focus on moving away from the overuse of fossil fuels and other unsustainable practices. Over the past decade, reports have shown that San Diego has the worst air quality among cities in the U.S. Air quality is measured and reported by the Air Quality Index (AQI). AQI tracks particle pollution, like ash, car emissions and CO2 in the Ozone. It categorizes air quality based on these conditions. (Figure 2)



Data Sources: U.S. Environmental Protection Agency, Air Quality Index Report, 2021

The Nonprofit Institute - University of San Diego

Figure 2: Description of AQI levels in San Diego from 2000-2020, Data Provided by the Equinox Quality of Life Dashboard²

With over 30 days in the unhealthy AQI zones, San Diego has the 7th worst air pollution among U.S. cities and received F ratings when investigating the Ozone and 24-hour Particle Pollution data.³ At a global and local level, it is crucial that industries commit to culture change by adopting more sustainable practices that will lower their carbon footprint and contribute to a sustainable future. Green jobs allow for industries to do their part in lowering their carbon footprint and helping improve the overall air quality. While there is a misconception that expanding the Green Workforce will lead to job loss, in reality over 1.2 billion people's jobs need a healthy and stable environment in order to properly work. The job market and economy would not suffer from the Green workforce because there would be new jobs created as well as preexisting jobs that would not disappear.

The importance of the Green Workforce is highlighted when looking at the effects of climate change. Millions of people have been and continue to be displaced by climate change. Whether it be because of the rise in sea level, natural disasters or unlivable environments, people are forced to move because of drastic environmental changes.⁴ The severity and frequency of natural disasters are increasing due to human induced climate change. The intense destructive effects of climate change continue to lead people out of jobs and places to live (Figure 3).

In California alone there has been an increase in wildfires, drought seasons, earthquakes, severe weather and floods. More specifically, in San Diego there has been a visible increase in temperatures and sea levels. The average daily temperature is expected to rise by 5 degrees Fahrenheit by 2040 and an expected rise of 3.6 to 10.2 feet by 2100 for the ocean levels.⁵ Climate Change is a detrimental issue that affects more than just the physical attributes of the planet. The importance of the Green workforce is highlighted when looking at the effects of climate change at a micro and macro level.

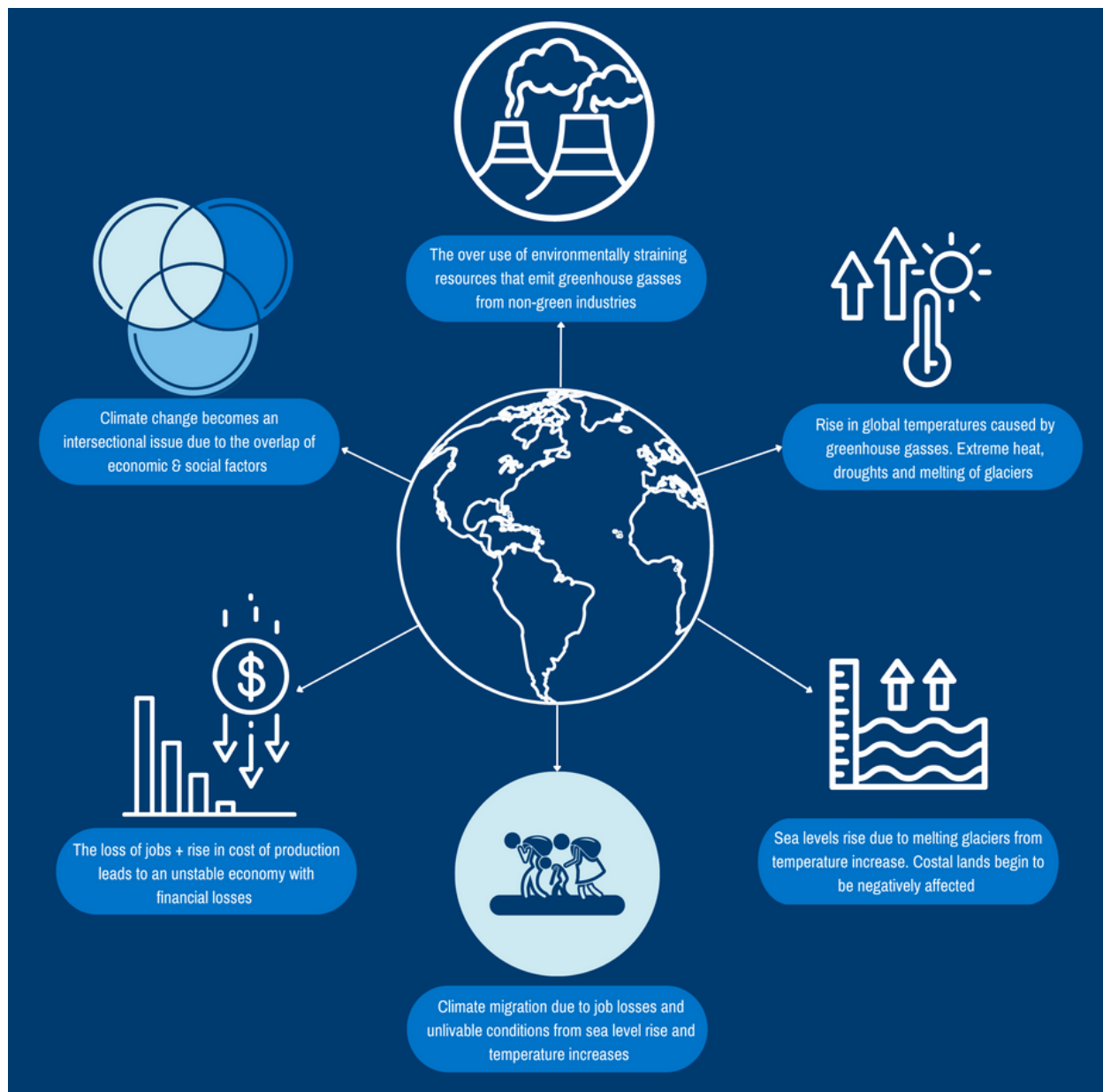


Figure 3: Connections between pollution, climate change, climate migration, and the economy

Green Workforce: Leadership Spotlight



The LA Conservation Corps⁶ is a nonprofit, community-based organization started in 2016 that focuses on underrepresented youth and community aid. There are extension programs to the corps network that focuses on advocacy and project funding. The LA conservation corps offers various programs including:

1. **Young Adult Corps:** Focuses on getting young adults training and paid work experiences that will offer livable wages and are environmentally focused.
2. **Clean & Green:** A public-private partnership the organization has with the city of Los Angeles that does city clean ups while offering environmental values to youth.
3. **After School Program:** An education-centered after school program for youth in the LA school districts that provides enriching academic activities to prepare youth for the future.
4. **Corps Member Development:** A support service program that focuses on providing its members with human necessities including housing, transportation and food assistance.

Organizations like this one that focus on closing the racial-ethnic and socioeconomic gap between well-paying green jobs, capture the intersectionality of climate change, while also creating an inclusive learning environment that focuses on environmental wellness.

An Intersectional Approach to Climate Change

The Green Workforce covers various aspects of the intersectionality of climate change. If we look at a sector like agriculture we can identify the intersecting factors that affect ecological conditions. Things like temperature increase can lead to job loss because of extreme climates that will be unworkable and affect certain communities more than others. For example in 2013, 92% of agriculture workers in California identified as Latinos and 77% were non-citizens. Systemically these are marginalized groups in the U.S. The strain of climate change in relation to their jobs exists on top of their pre-existing identities and struggles. The Green Workforce is important to combating climate change due to its multi-layered influence at an economic and social level.

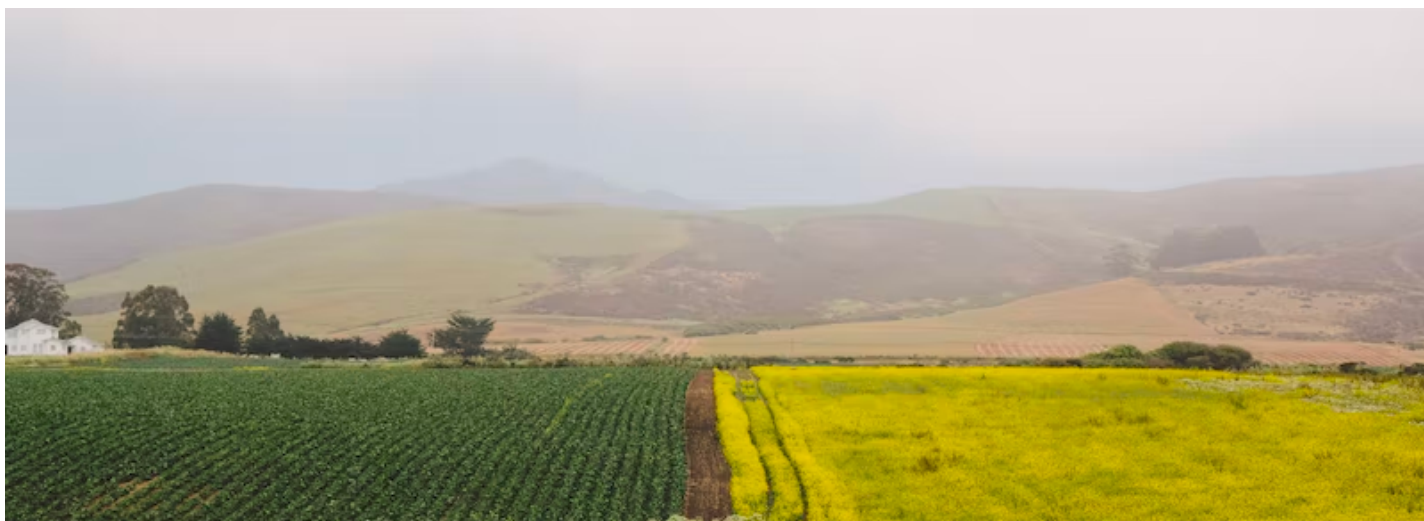


From an economic perspective, the Green Workforce is important in order to move towards a healthier future. This attempt to reduce environmental harm within the economic world fuels environmental change. Job industries rely on an environmentally stable environment both directly and indirectly. With the current lack of stability, there is an increase in unemployment. Jobs like agriculture that uphold our society are among the most affected because of the increase of temperature and droughts that worsen the work condition and affect productivity. The chain of effects of climate change really impact society as a whole. California alone produces over one-third of the country's produce.⁸ With the increase of severe weather conditions and natural disasters, production is being affected. In the long run, ignoring climate change will negatively affect the economy through job loss, increase production costs and increase of produce prices and the overall cost of living. Agriculture is not the only industry being highly affected; another example is impact on the medical field as more health conditions erupt from severe weather and pollution. All industries are being affected (at various levels) as our livelihood interconnects with the foundations of industries that uphold our society.

The Green Workforce is an opportunity towards stabilizing the environment by changing consumption and production. If we continue to overlook the damage many job industries do to the environment, we are contributing to the damage. We need the Green Workforce in order to find ways to better the wellbeing of the planet and heal the long-term damage made over centuries of over-consumption and exploitation.

Moving away from the economic factor and into a social perspective, there's a lot of intersecting factors when talking about the Green Workforce and environmental justice. The same report by the International Labor Organization says “Global and local environmental degradation threaten jobs and worsen working conditions, especially in developing countries and among women and the world’s most vulnerable people (including migrant workers, people in poverty, and indigenous and tribal peoples), making environmental sustainability an issue of social justice.”⁹ While climate change affects everyone, due to structural factors and a long history of environmental racism, inequities within climate change disproportionately affect marginalized groups depending on ethnic-race identity, gender, age and socioeconomic status. Environmental racism targets marginalized communities, making them more vulnerable hazards. A study showed how white people are exposed to lower-than-average concentrations of CO2 emissions in comparison to people of color. By state, an average of 78% of exposure is disproportionately experienced by people of color, 29% White, 77% Black, 73% Hispanic and 75% Asian.¹⁰ These disproportionate racial-ethnic exposure further attests to the social factor of climate change. While marginalized groups are often at most risk there is also a lack of accessibility for green jobs. Creating an accessible platform for green jobs opens a market for well-paying occupations.

Climate change is among the top environmental threats. Over the past decades we have visibly seen the effects of overuse of fossil fuels and exposure to greenhouse gasses. Communities have felt the strain of climate-centered issues. It is important that industries acknowledge these issues and mobilize towards adapting new efforts to preserve the environment and its resources. Careers that center sustainability, like the Green Workforce, are contributing to a climate culture change that benefits the greater good. By emphasizing professions that conserve energy and are environmentally conscious there will be progress towards a generational change that focuses on minimizing the effects of climate change. While sustainable habits in the workplace and in personal use are not anything new, it has gotten more global attention. The Green Workforce is an opportunity to incorporate sustainability into daily practice and to build a balanced environment and economy.



Sources

1. Spilde, M. (2012). Community Colleges Meeting the Challenge. Sustainable Colleges and University: New Goals and New Challenges for Higher Education Leaders.
2. The Nonprofit Institute. Equinox Quality of Life Dashboard. (2022) <https://www.sandiego.edu/soles/centers-and-institutes/nonprofit-institute/what-we-do/create-and-share-knowledge/dashboard/air-quality.php>
3. American Lung Association. California: San Diego. (2022). <https://www.lung.org/research/sota/city-rankings/states/california/san-diego>
4. Jayawardhan, S. (2017). Vulnerability and Climate Change Induced Human Displacement. *Consilience*, 17, 103–142.
5. City of San Diego. Climate Resilient San Diego. (2020). <https://www.sandiego.gov/sites/default/files/crsd.pdf>.
6. LA Conservation Corps. (2022) <https://www.lacorps.org/>
7. Rogers, P., Buttice, M. K., & California Research Bureau. (2013). Farmworkers in California: A Brief Introduction. California Latino Legislative Caucus. <https://latinocaucus.legislature.ca.gov/sites/latinocaucus.legislature.ca.gov/files/CRB%20Report%20on%20Farmworkers%20in%20CA%20S-13-017.pdf>
8. California Department of Agriculture/. California Agricultural Production Statistics. (2023) <https://www.cdfa.ca.gov/Statistics/#:~:text=California's%20agricultural%20abundance%20includes%20more,the%202021%20crop%20year%20are%3A&text=Dairy%20Products%2C%20Milk%20%E2%80%94%20247.57%20billion>
9. International Labor Organization. World Employment and Social Outlook 2018. (2018)
10. Tessum, C. W., Paoella, D. A., Chambliss, S. E., Apte, J. S., Hill, J. D., & Marshall, J. D. (2021). PM 2.5 pollutants disproportionately and systemically affect people of color in the United States. *Science Advances*, 7(18)

The Leaders 20/20 Network is a young and emerging professionals network that provides education and civic engagement opportunities around our region's quality-of-life issues while offering professional development and networking opportunities to create confident leaders in this space. It is currently housed at The Nonprofit Institute at the University of San Diego.