



YOUR GUIDE TO **Green and Blue Careers**

A step-by-step guide
to professional growth in
green and blue industries



About Waterfront Alliance

After more than a decade and a half of leading the charge in how the New York metropolitan region views and uses its harbor, and with more than 1,100 Alliance Partners committed to bringing real change to our region's 700+ miles of coastline, the Waterfront Alliance is leading the charge to inform and challenge the region's response to sea level rise and coastal storms. Our crucial, long-term focus is on increasing waterfront accessibility for all, advocating for a working waterfront that is a vital source of business activity, preparing our most-impacted communities for the climate crisis, and educating the next generation of waterfront stewards.

We achieve change through collaborations, education, our own initiatives and campaigns, and by inspiring others to become changemakers.

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Introduction

Who is this guide for?

This guide is for young people who care about their communities and the planet, especially high school students who are starting to think about their future. Whether you're dreaming about college, considering a trade, or unsure of your next steps, this guide is here to help you explore meaningful careers that make a real difference.

We know that climate change doesn't affect everyone equally, and that communities of color, Indigenous peoples, immigrants, and low-income families often bear the greatest burdens. That's why this guide centers equity and justice, helping ensure that everyone can access green and blue career opportunities.

Whether you're passionate about science, art, technology, or helping others, there's a place for you in the growing fields of sustainability and resilience. These careers are not just about protecting the environment - they're about building stronger, safer, and more just communities.



Connecting to Environmental Justice

This guide is grounded in the principle of environmental justice, which recognizes that the people most affected by environmental harm, especially Black, Brown, Indigenous, and low-income communities, must be at the center of the solutions. These communities have long been on the frontlines of climate change, pollution, and displacement, and they deserve not only protection, but power, opportunity, and leadership in shaping a sustainable future.

At the heart of environmental justice is a deep respect for Indigenous ways of being: ways that honor the land, water, and all living beings as interconnected. Indigenous communities have cared for the Earth for generations, guided by values of reciprocity, stewardship, and collective responsibility. These teachings remind us that sustainability is not just a career path. It's a way of life rooted in balance, respect, and community.

Environmental justice is not just about fixing what's broken—it's about reimagining what's possible, guided by Indigenous knowledge and community wisdom. It's about building a future where everyone has a role, a voice, and a chance to thrive.



Climate Change: A Catalyst for Change

Climate change is reshaping our world. Rising temperatures, stronger storms, and sea level rise are affecting our homes, health, and futures. But this crisis is also a catalyst for innovation, creativity, and leadership.

We need new systems. Clean energy, resilient infrastructure, sustainable food, and equitable economies. That means new jobs in green and blue sectors, and a chance for young people to lead the way.

Climate change is not just a science or technical problem. It's also a social, economic, and justice issue. Solving it requires artists, engineers, educators, organizers, and visionaries working together.



What are Green and Blue Careers?

Green and blue careers are jobs that help protect the environment, build climate resilience, and support sustainable communities. These careers are part of a growing movement to address the challenges of climate change while creating economic opportunities, especially for young people and communities that have historically been excluded from environmental decision-making.

Green Careers

Green careers focus on land-based sustainability. These jobs help reduce pollution, conserve natural resources, and support the transition to a low-carbon economy. They often involve working with energy systems, buildings, landscapes, and communities to create healthier environments.

Examples of green careers include:

- Solar panel installer
- Environmental engineer
- Urban farmer or food justice advocate
- Park ranger or conservation technician
- Sustainability educator
- Recycling and waste management specialist

Green careers can be found in industries like renewable energy, sustainable construction, environmental conservation, urban planning, and agriculture. They play a key role in making cities more livable, reducing greenhouse gas emissions, and restoring ecosystems.



Blue Careers

Blue careers focus on water-based sustainability. These jobs help protect oceans, rivers, lakes, and coastal areas, and are essential for adapting to climate change in waterfront and marine environments.

Examples of blue careers include:

- Marine biologist
- Aquaculture technician
- Offshore wind turbine operator
- Coastal restoration planner
- Port sustainability coordinator

Blue careers are part of the “blue economy,” which includes industries that depend on healthy marine and freshwater ecosystems. These jobs support clean energy, sustainable seafood, flood protection, and maritime innovation.



Green and Blue Infrastructure: Building Climate Resilience

As climate change intensifies, communities across the country are facing more frequent flooding, extreme heat, and rising sea levels. To stay safe and thrive, we need strong, adaptable infrastructure and; systems that protect people and the environment. This includes both green infrastructure and gray infrastructure, working together to build climate resilience.

Green Infrastructure

Green infrastructure uses natural systems to manage climate impacts. These solutions mimic or restore ecological processes to absorb stormwater, reduce urban heat, and improve air and water quality.

Examples include:

- Urban forests and tree canopies that cool neighborhoods and clean the air
- Wetlands and bioswales that absorb floodwaters and support biodiversity
- Green roofs and rain gardens that reduce runoff and insulate buildings

Blue careers are part of the “blue economy,” which includes industries that depend on healthy marine and freshwater ecosystems. These jobs support clean energy, sustainable seafood, flood protection, and maritime innovation.

Blue Infrastructure

Blue infrastructure uses natural systems to manage climate impacts. These solutions mimic or restore ecological processes to absorb stormwater, reduce urban heat, and improve air and water quality.

Examples include:

- Living shorelines that use plants and natural materials to stabilize coasts
- Restored marshes and estuaries that buffer storm impacts and support marine life
- Flood barriers and tidal gates that protect waterfront and low-lying communities

Career Opportunities in Green and Blue Infrastructure

As cities invest in climate resilience, there is a growing demand for skilled workers to design, build, maintain, and monitor these systems. These careers offer hands-on, purpose-driven work that directly benefits communities.

Examples of jobs include:

- Managing and restoring urban green spaces
- Inspecting and repairing levees, seawalls, and drainage systems
- Operating and maintaining advanced water treatment facilities
- Monitoring the performance of resilience infrastructure using data and technology

These careers are essential for protecting communities, especially those most vulnerable to climate impacts. They also offer pathways into public service, engineering, environmental science, and community planning.



Why are These Careers Important?

Green and blue careers are more than just jobs—they're part of a global movement to protect the planet, support communities, and build a better future. As climate change becomes one of the most urgent challenges of our time, these careers offer real solutions and exciting opportunities for young people to lead the way.

The World Needs You

There's a huge boom in jobs focused on protecting the environment, managing a changing climate, and making the world a better place. Think about it - everyone's talking about climate change and sustainability, and businesses, governments, and communities need people who can help them make eco-friendly choices.

This is creating tons of opportunities for people to step into meaningful, purpose-driven careers.



Why Are These Jobs So Hot Right Now?



People are waking up to the climate crisis

We need to act fast to protect the planet, and industries are starting to realize they need skilled workers to do it.



Cool new technologies need skilled hands

From solar panels and wind turbines to electric vehicles and underwater robots, there's a whole new world of tech that needs people to dream up solutions, build and, operate them, and continue to maintain them.



Governments are investing in a greener future

Public funding is flowing into clean energy, climate resilience, and sustainable infrastructure—creating thousands of new jobs and apprenticeships.

The Data Tells the Story

As climate change becomes a top priority for governments, businesses, and communities, the demand for workers who can help build a sustainable future is skyrocketing.

Between 2022 and 2023, LinkedIn reported that job postings requiring at least one green skill grew by 22.4%, nearly twice as fast as the growth in workers with those skills, which rose by 12.3% [1].

Meanwhile, Lightcast found that the demand for green jobs in the U.S. increased by more than 50% between 2019 and 2023 [2].

Globally, the International Labour Organization predicts that 100 million new jobs will be created as we transition to a more sustainable economy [3].

This means there are more opportunities than ever for young people to step into careers that protect the planet, support communities, and shape the future. This means there are more jobs than qualified people - and a huge opportunity for you to step in.



[1] Green jobs grow twice as fast as workers with green skills | World Economic Forum

[2] The Growth of Green Jobs | Blog | Lightcast

[3] Global Green Skills Report 2023 | LinkedIn

What Kind of Jobs Are Out There?

Traditional jobs are getting a green makeover

Construction workers are building energy-efficient buildings, mechanics are fixing electric cars, and factory workers are using recycled materials.

Brand new fields are emerging

You could work on a wind farm miles off the coast, design underwater robots to explore the ocean, or find new ways to grow food sustainably.

Professionals are needed to keep things running smoothly

Lawyers, consultants, accountants, and policymakers are all needed to support the shift toward sustainability.

Why These Careers Matter to You

Make a difference

You'll be proud of the work you do, knowing you're helping protect the planet and uplift your community.

Job security: These careers are in high demand, offering stability and long-term growth.

Good pay

Many green and blue jobs offer competitive salaries, especially as demand increases.

Exciting work

You'll get to work with cutting-edge technology, innovative teams, and real-world challenges.

How can this Green and Blue Career Guide Help?

This guide is designed to help you take the next step. Inside, you'll find:

- Definitions and examples of green and blue careers across industries
- Tips for self-discovery to help you match your interests to career paths
- Real-world job examples and emerging fields in climate resilience
- Resources for education, training, and mentorship
- Tools to help you reflect, plan, and take action

Whether you're looking for inspiration, direction, or practical steps, this guide is here to support your journey into a career that matters.



Mapping Green Careers

Green careers are jobs that contribute to environmental sustainability, climate resilience, and community well-being. These careers exist across many sectors and disciplines, offering opportunities for people with diverse interests, talents, and educational backgrounds. Whether you're passionate about science, storytelling, design, or public service, there's a green career path for you.



Clean Energy & Renewable Power

Careers in this sector focus on generating energy from sustainable sources like solar, wind, geothermal, and hydroelectric power. These roles are essential to transitioning away from fossil fuels and building a low-carbon future, mitigating greenhouse gas emissions. Many positions are hands-on and accessible through vocational training, apprenticeships, or technical certifications, making them ideal for students interested in engineering, trades, or environmental science.



Solar Panel Installer

What They Do

Solar panel installers set up and maintain photovoltaic (PV) systems that convert sunlight into electricity. They work on rooftops, open fields, and commercial buildings, ensuring panels are securely mounted and properly connected to electrical systems.

Where They Work

Residential, commercial, and industrial sites; solar energy companies

Pathways

Vocational training, apprenticeships, certifications (e.g., NABCEP)

Skills Needed

Electrical systems, safety protocols, physical stamina, teamwork

Wind Turbine Technician

What They Do

Wind turbine technicians inspect, maintain, and repair wind turbines to ensure they operate efficiently and safely. They often work at great heights and in remote locations, using diagnostic tools and mechanical expertise.

Where They Work

Wind farms, energy companies, turbine manufacturers

Pathways

Technical programs, associate degrees, on-the-job training

Skills Needed

Mechanical systems, climbing safety, troubleshooting, electrical repair

Clean Energy & Renewable Power

Energy Storage Specialist

What They Do

These professionals design, install, and manage systems that store renewable energy, like batteries or thermal storage, so it can be used when the sun isn't shining or the wind isn't blowing. They help balance energy supply and demand.

Where They Work

Utilities, clean tech companies, research labs

Pathways

Engineering degrees, certifications in battery systems, internships

Skills Needed

Electrical engineering, chemistry, data analysis, safety standards

Renewable Energy Engineer

What They Do

Renewable energy engineers develop and improve technologies that generate power from solar, wind, hydro, and geothermal sources. They work on system design, performance optimization, and integrating renewables into the grid.

Where They Work

Engineering firms, energy companies, government agencies

Pathways

Bachelor's or master's in engineering (electrical, mechanical, environmental)

Skills Needed

Engineering design, problem-solving, software modeling, project management

Microgrid Designer

What They Do

Microgrid designers create localized energy systems that can operate independently or alongside the main power grid. These systems are especially useful for remote areas or communities seeking energy resilience.

Where They Work

Energy consultancies, utilities, nonprofits, disaster recovery agencies

Pathways

Engineering or energy systems degrees, GIS and grid modeling training

Skills Needed

Systems thinking, electrical design, climate resilience planning, software tools

Clean Energy & Renewable Power



Solar PV Systems Designer

What They Do

These professionals design solar energy systems tailored to specific buildings or sites. They calculate energy needs, select appropriate technologies, and create installation plans using specialized software.

Where They Work

Solar companies, architecture firms, engineering consultancies

Pathways

Engineering or design degrees, solar certifications, CAD training

Skills Needed

Software design (e.g., AutoCAD, PVsyst), electrical knowledge, client communication, sustainability principles

Sustainable Construction & Energy Efficiency

These careers involve designing, building, and retrofitting structures to minimize energy use, carbon emissions, and environmental impact. Professionals in this field work on green buildings, energy audits, and high-performance systems. The sector blends architecture, engineering, and construction with sustainability principles, offering pathways for both creative and technical learners.



Green Building Architect

What They Do

Designs buildings that use sustainable materials and energy-efficient systems. Architects in this field prioritize low-carbon construction and occupant health.

Where They Work

Architecture firms, design studios, green building consultancies

Pathways

Architecture degree, LEED accreditation, internships

Skills Needed

Design software (AutoCAD, Revit), sustainability principles, client communication

Energy Efficiency Auditor

What They Do

Evaluates buildings to identify energy waste and recommends improvements. Auditors use tools to measure insulation, HVAC performance, and lighting efficiency.

Where They Work

Energy consulting firms, utilities, government agencies

Pathways

Environmental science or engineering degree, BPI certification

Skills Needed

Diagnostics, data analysis, building systems knowledge

Sustainable Construction & Energy Efficiency

HVAC Technician

What They Do

Installs and maintains heating, ventilation, and air conditioning systems with a focus on energy efficiency.

Where They Work

Construction companies, maintenance firms, residential services

Pathways

Technical school, apprenticeships, EPA certification

Skills Needed

Mechanical systems, safety protocols, troubleshooting



Passive House Designer

What They Do

Specializes in ultra-efficient building design that minimizes energy use through insulation, airtightness, and ventilation.

Where They Work

Architecture firms, sustainability consultancies

Pathways

Architecture or engineering degree, Passive House certification

Skills Needed

Building science, energy modeling, design software

Environmental Conservation & Natural Resource Management

Careers in this category focus on protecting ecosystems, biodiversity, and public lands through research, restoration, and stewardship. These roles often involve fieldwork, data analysis, and community education. They are ideal for students passionate about nature, wildlife, and science, and can lead to work in government, nonprofits, or environmental consulting

Conservation Scientist

What They Do
Conducts research and develops plans to manage forests, wetlands, and other ecosystems sustainably.

Where They Work
Government agencies, nonprofits, research institutions

Pathways
Environmental science or ecology degree, fieldwork experience

Skills Needed
GIS, data analysis, field monitoring



Park Ranger

What They Do
Protects public lands, enforces regulations, and educates visitors about conservation.

Where They Work
National and state parks, wildlife refuges

Pathways
Environmental studies, criminal justice, ranger academies

Skills Needed
Public speaking, safety enforcement, naturalist knowledge

Environmental Conservation & Natural Resource Management

Urban Forester

What They Do
Manages trees and green spaces in cities to improve air quality, reduce heat, and support biodiversity.

Where They Work
City governments, nonprofits, landscape firms

Pathways
Forestry, urban planning, arborist certification

Skills Needed
Plant science, GIS, community engagement



Restoration Ecologist

What They Do
Restores damaged ecosystems such as wetlands, forests, and rivers through planting, erosion control, and habitat design.

Where They Work
Environmental NGOs, consulting firms, government agencies

Pathways
Ecology or environmental science degree, field experience

Skills Needed
Soil science, hydrology, project planning

Waste Management & Circular Economy

These careers aim to reduce waste and pollution through recycling, composting, and sustainable materials management. Professionals in this field design systems for reuse, recovery, and regeneration across industries. It’s a growing sector that combines environmental science, logistics, and innovation, and is accessible through both technical and policy-oriented pathways.

Recycling Coordinator

What They Do

Designs and manages recycling programs for schools, cities, or businesses.

Where They Work

Municipal governments, sustainability departments

Pathways

Environmental studies, public administration

Skills Needed

Logistics, public outreach, data tracking



Compost Program Manager

What They Do

Oversees composting operations and educates the public on food waste reduction.

Where They Work

Community organizations, farms, city programs

Pathways

Environmental science, agriculture, sustainability training

Skills Needed

Soil science, operations management, education

Waste Management & Circular Economy

Wastewater Treatment Operator

What They Do
Treats and cleans water before it returns to the environment, ensuring public health and environmental safety.

Where They Work
Municipal water facilities, industrial plants

Pathways
Technical training, certifications, environmental engineering

Skills Needed
Chemistry, safety protocols, monitoring systems



Circular Economy Analyst

What They Do
Designs systems to reuse materials and reduce waste across industries, often using data to optimize sustainability.

Where They Work
Consulting firms, corporations, think tanks

Pathways
Business, sustainability, industrial design

Skills Needed
Lifecycle analysis, systems thinking, data analysis

Green Infrastructure & Urban Resilience

Careers here focus on integrating nature-based solutions into urban environments to manage stormwater, reduce heat, and improve public health. These roles involve planning and designing green roofs, bioswales, rain gardens, and more. They combine landscape architecture, civil engineering, and community planning, and are especially relevant in cities facing climate stress.



Landscape Architect

What They Do

Designs outdoor spaces that incorporate ecological principles, such as native plants and water-efficient systems.

Where They Work

Design firms, city planning departments

Pathways

Landscape architecture degree, licensure

Skills Needed

CAD, plant science, urban ecology

Green Infrastructure Designer

What They Do

Plans features like green roofs, bioswales, and rain gardens to manage stormwater and improve urban resilience.

Where They Work

Engineering firms, nonprofits, city agencies

Pathways

Civil engineering, landscape design, sustainability training

Skills Needed

Hydrology, GIS, design software

Green Infrastructure & Urban Resilience

Stormwater Management Specialist

What They Do

Develops systems to manage runoff and prevent flooding, often using nature-based solutions.

Where They Work

Environmental agencies, engineering firms

Pathways

Environmental engineering, urban planning

Skills Needed

Water systems, modeling tools, policy knowledge



Urban Planner

What They Do

Integrates sustainability into city planning and development, including zoning, transportation, and green space.

Where They Work

City governments, planning firms

Pathways

Urban planning degree, GIS training

Skills Needed

Policy analysis, community engagement, spatial planning

Climate Preparedness & Resilience

These careers help communities anticipate, respond to, and recover from climate-related disasters such as floods, heatwaves, wildfires, and hurricanes. Professionals in this field use data, planning tools, and community engagement to build resilience and mitigate impacts. These roles are especially important in frontline communities and require a mix of technical expertise and relationship-building.



Climate Resilience Planner

What They Do

Works with cities and communities to develop strategies for adapting to climate risks like flooding, heatwaves, and sea level rise. They integrate climate data into infrastructure and land-use planning.

Where They Work

City agencies, planning firms, nonprofits

Pathways

Urban planning, environmental science, climate adaptation training

Skills Needed

GIS, risk assessment, community engagement

Emergency Management Specialist

What They Do

Coordinates disaster response and recovery efforts, often integrating climate forecasts and hazard data into emergency plans.

Where They Work

Government agencies, hospitals, humanitarian organizations

Pathways

Public administration, emergency management, certifications (FEMA, ICS)

Skills Needed

Crisis communication, logistics, leadership

Green Infrastructure & Urban Resilience

Community Preparedness Coordinator

What They Do
Engages residents in planning for extreme weather events and building local resilience through workshops, drills, and resource distribution.

Where They Work
Community organizations, local governments

Pathways
Public health, social work, environmental education

Skills Needed
Facilitation, public speaking, cultural competency, coordination



Climate Risk Analyst

What They Do
Assesses vulnerabilities and models future climate impacts to inform infrastructure, insurance, and policy decisions.

Where They Work
Consulting firms, research institutions, government agencies

Pathways
Data science, environmental science, climate modeling

Skills Needed
Data analysis, GIS, scenario planning

Climate Activism & Environmental Justice Advocacy

Careers in this sector mobilize communities, shape policy, and advocate for equitable climate solutions that center historically marginalized voices. These roles often involve organizing, campaigning, and storytelling. They are rooted in social justice and systems change, and are accessible to students from diverse backgrounds, especially those passionate about advocacy, communication, and community leadership.



Climate Organizer / Campaigner

What They Do

Builds grassroots movements to push for climate action and environmental justice through rallies, petitions, and education.

Where They Work

Nonprofits, advocacy groups, youth organizations, neighborhood coalitions

Pathways

Political science, communications, community organizing

Skills Needed

Public speaking, social media, coalition-building

Environmental Justice Advocate

What They Do

Coordinates disaster response and recovery efforts, often integrating climate forecasts and hazard data into emergency plans.

Where They Work

Government agencies, hospitals, humanitarian organizations

Pathways

Public administration, emergency management, certifications (FEMA, ICS)

Skills Needed

Crisis communication, logistics, leadership

Climate Activism & Environmental Justice Advocacy

Policy Strategist / Legislative Aide

What They Do

Supports the development and passage of climate-related laws and regulations by conducting research and advising lawmakers.

Where They Work

Government offices, think tanks, advocacy organizations

Pathways

Public policy, law, political science

Skills Needed

Legislative writing, research, negotiation



Youth Climate Leader / Program Facilitator

What They Do

Leads youth engagement efforts in climate activism and education, often through workshops, campaigns, and mentorship.

Where They Work

Schools, nonprofits, youth networks

Pathways

Education, environmental studies, leadership programs

Skills Needed

Facilitation, mentorship, digital and interpersonal communication

Arts, Humanities & Cultural Work

These careers use creative expression, storytelling, and cultural knowledge to inspire climate action and deepen public understanding. Professionals in this field work across visual arts, media, museums, and journalism to connect people emotionally and intellectually to environmental issues. These roles are ideal for students interested in creativity, history, and public engagement.



Eco-Artist / Environmental Artist

What They Do

Creates visual or performance art that explores environmental themes and inspires climate awareness.

Where They Work

Galleries, public spaces, community centers

Pathways

Fine arts, environmental humanities

Skills Needed

Artistry, storytelling, sustainability concepts

Filmmaker / Documentarian

What They Do

Tells stories of climate justice, resilience, and community leadership through film and video.

Where They Work

Production companies, nonprofits, independent projects

Pathways

Film studies, journalism, environmental communication

Skills Needed

Video production, narrative development, editing

Arts, Humanities & Cultural Work

Climate Journalist

What They Do

Reports on environmental issues, policies, and local impacts through articles, podcasts, or broadcasts.

Where They Work

News outlets, magazines, digital media

Pathways

Journalism, environmental studies

Skills Needed

Writing, research, interviewing, organizational



Museum Curator / Exhibit Designer

What They Do

Develops public programs and exhibitions that connect art, science, and sustainability.

Where They Work

Museums, science centers, cultural institutions

Pathways

Museum studies, art history, environmental education

Skills Needed

Curation, design, public engagement

Education & Public Engagement

Careers in this category focus on teaching and empowering others to understand and act on environmental issues. Educators, guides, and program coordinators work in schools, parks, museums, and community centers. These roles are accessible to students who enjoy working with people, facilitating learning, and building relationships across generations.



Environmental Educator

What They Do
Leads programs in schools, parks, and community centers to teach about sustainability and climate change.

Where They Work
Schools, nonprofits, nature centers

Pathways
Education, environmental studies, teaching credentials

Skills Needed
Facilitation, curriculum design, public speaking

Curriculum Developer

What They Do
Designs climate-focused learning materials for classrooms and informal education settings.

Where They Work
Education departments, nonprofits, publishers

Pathways
Education, instructional design, environmental science

Skills Needed
Writing, pedagogy, evaluation

Education & Public Engagement

Outdoor Educator / Nature Guide

What They Do

Facilitates hands-on learning experiences in natural settings, often through hikes, camps, and field trips.

Where They Work

Parks, camps, environmental centers

Pathways

Environmental education, recreation, biology

Skills Needed

Naturalist knowledge, safety, storytelling



Youth Program Coordinator

What They Do

Develops and manages sustainability programs for young people, including leadership development and climate action projects.

Where They Work

Schools, nonprofits, youth organizations

Pathways

Education, youth development, environmental studies

Skills Needed

Mentorship, program planning, communication

Advocacy, Policy & Climate Communication

These careers shape public policy, mobilize communities, and communicate climate science and solutions. Professionals in this field translate complex data into accessible content, advise decision-makers, and lead campaigns. It's a dynamic sector that intersects with law, media, and organizing, and is ideal for students interested in writing, public speaking, and systems thinking.

Sustainability Consultant

What They Do

Advises organizations on reducing their environmental impact through audits, strategy, and reporting.

Where They Work

Corporations, consultancies, nonprofits

Pathways

Business, environmental science, sustainability management

Skills Needed

Data analysis, communication, project management



Science Communicator

What They Do

Translates complex climate data into accessible, engaging content for the public, media, or policymakers.

Where They Work

Research institutions, media outlets, nonprofits

Pathways

Science, journalism, communication

Skills Needed

Writing, public speaking, data visualization

Advocacy, Policy & Climate Communication

Policy Analyst

What They Do

Researches and shapes environmental laws and regulations by analyzing data, trends, and stakeholder input.

Where They Work

Government agencies, think tanks, advocacy groups

Pathways

Public policy, law, environmental studies

Skills Needed

Research, writing, policy evaluation



Climate Risk Communicator

What They Do

Helps communities understand and prepare for climate risks through public campaigns and educational materials.

Where They Work

NGOs, government agencies, media

Pathways

Communication, public health, environmental science

Skills Needed

Storytelling, public engagement, crisis communication

Design & Innovation

Careers in this sector focus on creating sustainable products, systems, and experiences that reduce environmental impact and improve quality of life. Designers and engineers work on everything from climate tech apps to circular economy solutions. These roles blend creativity, technology, and problem-solving, and are accessible to students interested in design thinking and innovation.

Sustainable Product Designer

What They Do

Designs goods with minimal environmental impact, focusing on materials, durability, and lifecycle.

Where They Work

Design firms, startups, manufacturing companies

Pathways

Industrial design, sustainability, materials science

Skills Needed

Prototyping, lifecycle analysis, creativity

UX Designer for Climate Tech

What They Do

Creates user-friendly tools and apps for energy, mobility, or conservation, ensuring accessibility and impact.

Where They Work

Tech companies, startups, nonprofits

Pathways

UX/UI design, computer science, environmental studies

Skills Needed

Design thinking, coding, user research

Green Mobility Designer

What They Do

Designs sustainable transportation systems and infrastructure, including bikes, EVs, and transit networks.

Where They Work

Urban planning firms, transportation agencies

Pathways

Engineering, design, urban planning

Skills Needed

CAD, mobility systems, sustainability principles

Mapping Blue Careers

Blue careers are jobs that support the sustainable use, protection, and restoration of ocean and coastal resources. These careers span a wide range of sectors and disciplines, offering opportunities for people with diverse interests, talents, and educational backgrounds. Whether you're drawn to science, engineering, education, storytelling, or community advocacy, there's a blue career path that connects your passions to the health and resilience of our waters and coastal communities.



Marine Science & Conservation

These careers focus on studying and protecting ocean ecosystems, marine species, and coastal environments. Professionals conduct research, monitor biodiversity, and develop conservation strategies to support ocean health and resilience.



Marine Biologist

- What They Do**
Studies marine organisms and ecosystems through fieldwork and lab analysis.
- Where They Work**
Universities, research labs, conservation NGOs
- Pathways**
Marine biology or environmental science degree
- Skills Needed**
Fieldwork, data analysis, scuba diving, lab techniques

Oceanographer

- What They Do**
Investigates ocean currents, chemistry, and climate interactions.

- Where They Work**
Government agencies, research institutions
- Pathways**
Oceanography, earth science, physics
- Skills Needed**
GIS, modeling software, data interpretation

Coral Reef Ecologist

- What They Do**
Restores and protects coral reef ecosystems through monitoring and intervention.
- Where They Work**
Conservation organizations, marine parks
- Pathways**
Marine ecology, environmental science
- Skills Needed**
Underwater surveying, restoration techniques, community outreach

Maritime Technology & Engineering

These careers involve designing and maintaining technologies for ocean exploration, renewable energy, and coastal infrastructure. They blend engineering, innovation, and sustainability.



Coastal Engineer

What They Do

Designs structures like seawalls, piers, and flood barriers to protect coastal areas.

Where They Work

Engineering firms, government agencies

Pathways

Civil or environmental engineering

Skills Needed

Hydrodynamics, CAD, climate adaptation

Marine Robotics Technician

What They Do

Builds and maintains underwater robots (ROVs) used for exploration and maintenance.

Where They Work

Research labs, energy companies, marine tech firms

Pathways

Robotics, mechanical engineering, marine technology

Skills Needed

Electronics, programming, mechanical repair

Aquaculture & Sustainable Fisheries

These careers manage seafood production and protect fish populations through sustainable practices. They combine biology, agriculture, and food systems.

Aquaculture Technician

What They Do

Manages fish farms and hatcheries, monitoring water quality and animal health.

Where They Work

Aquaculture facilities, research labs

Pathways

Aquaculture, marine science, vocational training

Skills Needed

Water chemistry, biology, equipment maintenance

Fishery Biologist

What They Do

Researches sustainable aquaculture and fish stock health.

Where They Work

Government agencies, fisheries, NGOs

Pathways

Marine biology, fisheries science

Skills Needed

Policy knowledge, data analysis, stakeholder engagement

Sustainable Fisheries Manager

What They Do

Develops long-term plans for fishery sustainability.

Where They Work

Regulatory agencies, conservation groups

Pathways

Environmental policy, marine science

Skills Needed

Resource management, policy development, data tracking

Ocean and Offshore Wind Energy

Careers in ocean energy harness the power of waves, tides, and offshore wind for renewable energy. These roles support the transition to clean energy.

Offshore Wind Engineer

What They Do

Designs and installs wind turbines in marine environments.

Where They Work

Renewable energy companies, engineering consultancies

Pathways

Mechanical or electrical engineering, renewable energy programs

Skills Needed

Structural design, marine safety, energy systems



Offshore Wind Farm Technician

What They Do

Maintains ocean-based wind turbines.

Where They Work

Offshore wind farms, energy companies

Pathways

Technical training, renewable energy programs

Skills Needed

Electrical systems, marine safety, troubleshooting

Ocean and Offshore Wind Energy

Offshore Wind Technician

What They Do

Offshore wind technicians maintain and repair wind turbines located in bodies of water. They ensure these massive structures are functioning properly and safely, often working in marine environments.

Where They Work

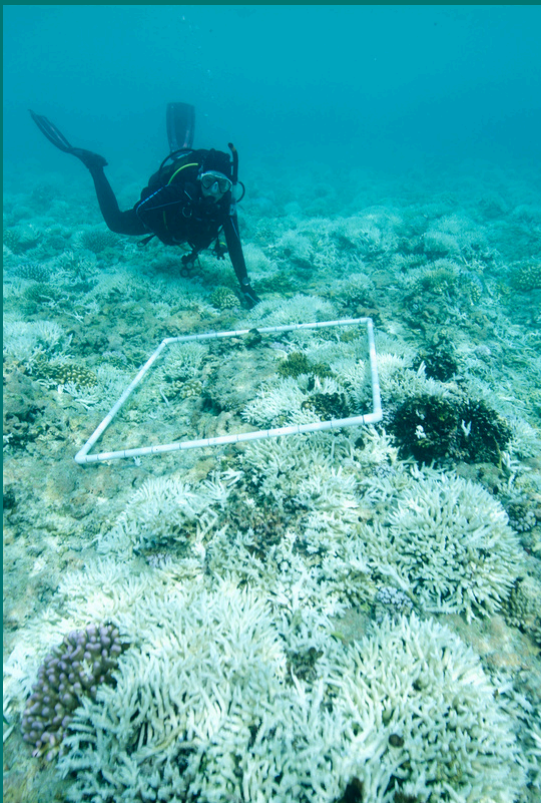
Offshore wind farms, marine engineering firms

Pathways

Maritime or technical training, certifications, safety and diving courses

Skills Needed

Mechanical and electrical systems, marine safety, teamwork, problem-solving



Wave Energy Engineer

What They Do

Develops technology to capture energy from ocean waves.

Where They Work

Clean tech startups, research labs

Pathways

Mechanical or ocean engineering

Skills Needed

Energy modeling, prototyping, systems design

Marine Biotechnology

Marine biotechnology uses marine organisms and ecosystems for research, innovation, and environmental solutions.



Bioremediation Specialist

What They Do

Uses marine microbes to clean pollution and restore ecosystems.

Where They Work

Environmental labs, biotech firms

Pathways

Biotechnology, marine biology

Skills Needed

Microbiology, chemistry, lab techniques

Shipbuilding & Maritime Transport

These careers support the design, construction, and operation of ships and ports with a focus on sustainability and efficiency.

Green Ship Designer

What They Do
Creates fuel-efficient, low-emission vessels.

Where They Work
Shipyards, design firms

Pathways
Naval architecture, marine engineering

Skills Needed
CAD, sustainability principles, mechanical design



Port Sustainability Manager

What They Do
Implements eco-friendly practices at ports.

Where They Work
Port authorities, logistics companies

Pathways
Environmental management, logistics

Skills Needed
Operations planning, environmental compliance

Coastal Infrastructure & Climate Resilience

These careers help communities adapt to climate change through infrastructure, restoration, and water system management.



Flood Control Technician

- What They Do**
Maintains levees, pumps, and drainage systems.
- Where They Work**
Municipal agencies, engineering firms
- Pathways**
Civil engineering, public works training
- Skills Needed**
Hydrology, mechanical systems, emergency response

Coastal Restoration Technician

What They Do
Restores wetlands and dunes to protect against storm surge.

- Where They Work**
Environmental NGOs, government agencies
- Pathways**
Ecology, environmental science
- Skills Needed**
Fieldwork, plant science, erosion control

Coastal Infrastructure & Climate Resilience



Seawall Inspector

What They Do

Assesses the condition of seawalls and recommends repairs.

Where They Work

Coastal engineering firms, municipalities

Pathways

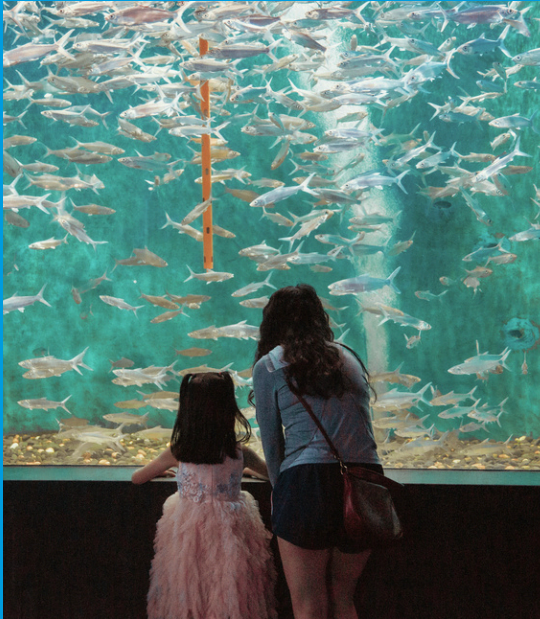
Civil engineering, construction management

Skills Needed

Structural analysis, safety inspection, reporting

Marine Education & Interpretation

These careers teach others about ocean ecosystems and climate impacts through hands-on learning and storytelling.



Marine Educator

What They Do

Leads programs in aquariums and schools.

Where They Work

Aquariums, museums, nonprofits

Pathways

Education, marine biology

Skills Needed

Teaching, public speaking, curriculum design

Eco-Tour Guide

What They Do

Leads tours that promote responsible coastal tourism.

Where They Work

Tour companies, parks, nonprofits.

Pathways

Outdoor education, marine science

Skills Needed

Naturalist knowledge, safety, storytelling, public speaking

Ocean Policy, Law & Advocacy

These careers shape laws and policies that protect oceans and coastal communities through legal research, international cooperation, and advocacy.



Marine Policy Advisor

What They Do

Develops conservation and fisheries policies.

Where They Work

Government agencies, international organizations

Pathways

Public policy, marine affairs

Skills Needed

Policy analysis, legal writing, negotiation

Coastal Justice Advocate

What They Do

Addresses inequalities in coastal access and climate impacts.

Where They Work

Advocacy groups, legal aid organizations

Pathways

Environmental justice, law

Skills Needed

Community engagement, storytelling, policy research

Arts, Humanities & Cultural Work

These careers use creative expression and cultural storytelling to connect people to the ocean and inspire climate action.



Ocean-Focused Filmmaker

What They Do

Tells stories of marine life and coastal communities through film.

Where They Work

Independent studios, nonprofits

Pathways

Film studies, journalism

Skills Needed

Video production, storytelling, editing

Maritime Museum Curator

What They Do

Develops exhibits on maritime history and ocean science.

Where They Work

Museums, cultural institutions

Pathways

Museum studies, history

Skills Needed

Curation, research, public engagement

SELF-AUDIT QUIZ

DISCOVER YOUR PATH

WHO DO YOU WANT TO WORK WITH OR IMPACT?

Select all that apply:

- A. My family or local community
- B. My neighborhood or city
- C. My state or country
- D. Indigenous or tribal communities
- E. Faith-based or cultural groups
- F. Scientists, artists, educators
- G. Global organizations or movements
- H. The planet or future generations

WHAT DO YOU LOVE TO DO?

Choose your top 5-10 “verbs” — the actions that bring you joy or energy:

- A. Write, Read, Edit, Act, Draw, Paint, Create, Sculpt
- B. Design, Talk, Sing, Listen, Walk, Run, Dance, Fly
- C. Organize, Advocate, Troubleshoot, Calculate, Program
- D. Negotiate, Digitize, Laugh, Think, Nurture, Steward
- E. Imagine, Teach, Legislate, Document, Research
- F. Interpret, Translate, Analyze, Curate, Cook, Eat
- G. Farm, Plant, Prune, Photograph, Learn, Watch, Smell
- H. Heal, Lead, Train, Clean, Travel, Buy, Sell, Trade
- I. Other (Write your own): _____

WHEN DO YOU FEEL MOST PRODUCTIVE?

Select all that apply:

- A. Early Morning
- B. Afternoon
- C. Late at night
- D. Weekdays
- E. Weekends
- F. During the school year
- G. During the Summer
- H. When I’m part of a team
- I. When I’m alone
- J. When I’m online or working remotely



SELF-AUDIT QUIZ

DISCOVER YOUR PATH

WHERE DO YOU LIKE TO WORK?

Select all that apply:

- | | |
|---------------------------|---|
| A. Indoors | E. In a quiet, focused space |
| B. Outdoors | F. In a creative or artistic setting |
| C. In nature | G. In a lab or technical space |
| D. In a busy public space | H. In a classroom or learning environment |

WHY DO YOU WANT TO WORK OR LEARN?

Choose your top 5 “verbs” — the actions that bring you joy or energy:

- A. Personal fulfillment or joy
- B. Making a difference in the world
- C. Helping my family or community
- D. Gaining respect or recognition
- E. Earning money or financial security
- F. Having a powerful title or leadership role
- G. Learning new things
- H. Building something meaningful
- I. Protecting the planet or future generations

WHAT ARE YOUR CURRENT STRENGTHS?

Select all that apply:

- | | |
|--------------------|--------------------------|
| A. Communication | F. Technical skills |
| B. Creativity | G. Artistic expression |
| C. Problem-solving | H. Scientific thinking |
| D. Leadership | I. Empathy and care |
| E. Organization | J. Research and analysis |

SELF-AUDIT QUIZ

DISCOVER YOUR PATH

WHAT SKILLS WOULD YOU LIKE TO GROW?

Select all that apply:

- | | |
|---------------------------------|--------------------------------|
| A. Public Speaking | F. Collaboration & Teamwork |
| B. Writing or Storytelling | G. Leadership & Organizing |
| C. Science or Data Analysis | H. Digital or Tech Skills |
| D. Engineering or Design | I. Environmental Knowledge |
| E. Cultural or Language Fluency | J. Creative or Artistic Skills |

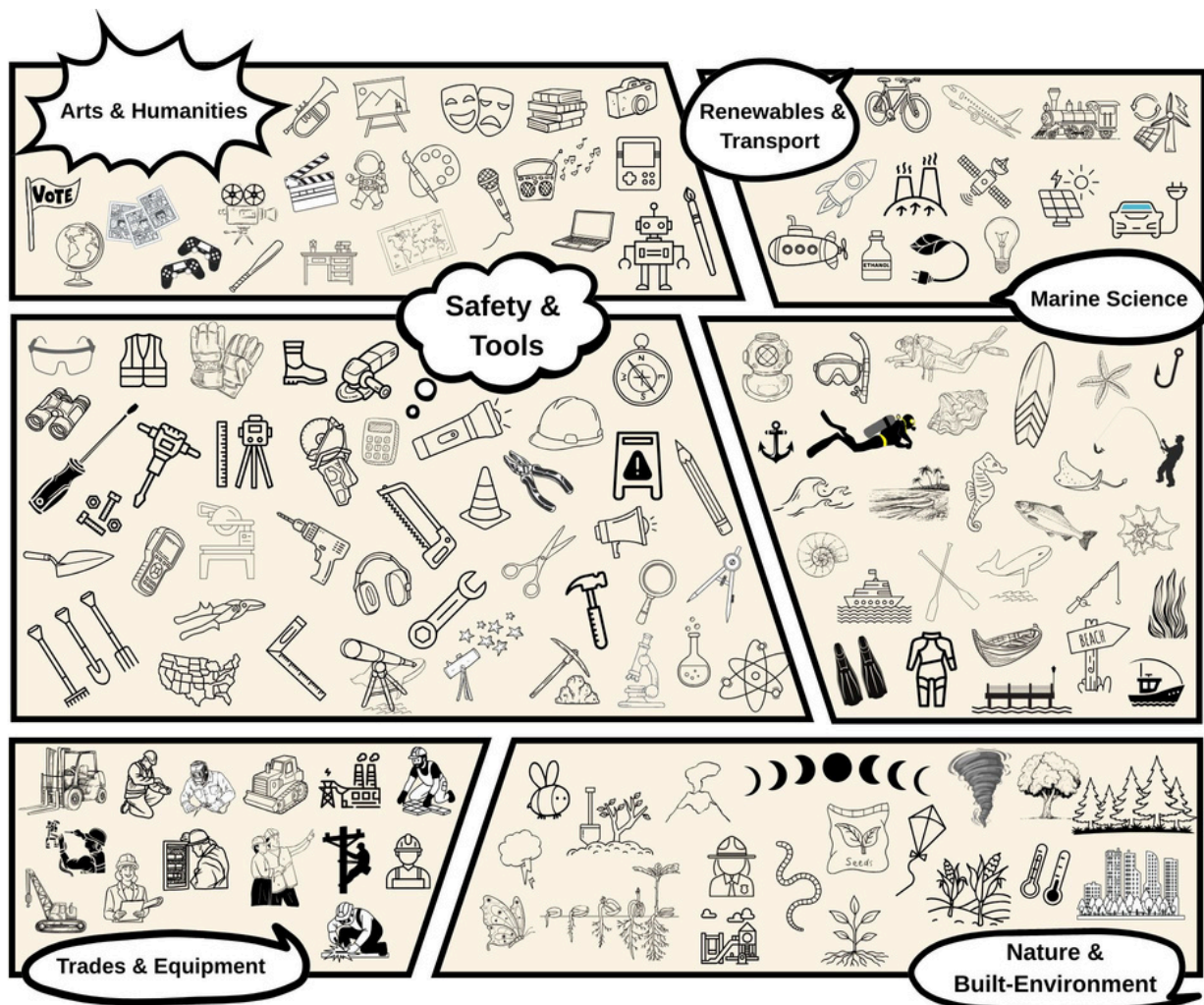
WHAT DID YOU DISCOVER FROM THIS QUIZ?



SELF-AUDIT QUIZ

DISCOVER YOUR PATH

WHAT KIND OF WORK DO YOU SEE YOURSELF DOING?



SELF-AUDIT QUIZ

DISCOVER YOUR PATH

WHAT DOES YOUR CAREER PATH LOOK LIKE?

What's next? Where do you want to go?
Map out milestones you want to reach in your career.



SELF-AUDIT QUIZ

DISCOVER YOUR PATH

WHAT ARE NEXT STEPS YOU WILL TAKE?

Charting Your Course:

High School Prep for Green and Blue Careers

There is an urgent need for a skilled workforce to tackle climate change and build a more sustainable future. This means exciting opportunities for young people interested in green and blue careers, which focus on climate change, environmental protection, conservation, and sustainable development. Here's a roadmap to help you prepare for a future in these fields:



Building Your Academic Toolkit

Science, Technology, Engineering and Math is the foundation for understanding environmental challenges and creating solutions:

Biology

Understand ecosystems and how pollution and climate change affect living things—essential for conservation, restoration, and resource management.

Chemistry

Learn the science behind pollution and environmental health—important for careers in remediation and water quality.

Physics

Explore energy systems, especially renewable sources like solar, wind, and ocean energy.

Earth Science

Gain a broad view of planetary systems, including climate, geology, and oceanography.

Environmental Science

Integrate multiple disciplines to directly address environmental problems and solutions.

Geography

Understand spatial relationships, land use, and human-environment interactions—key for urban planning and coastal resilience.

Math

Algebra, geometry, statistics, and calculus are used in engineering, climate modeling, and resource management. Math is critical for analyzing data, designing systems, and solving problems.

Computer Science is increasingly important in green and blue careers. Coding, data analysis, and modeling are used by scientists, engineers, and policymakers to study climate change, design energy systems, and manage resources.

Technical Education offers hands-on skills for high-demand jobs. Courses in welding, carpentry, electrical work, plumbing, and renewable energy technology prepare you for careers in installation, green building, and infrastructure maintenance.

Green and blue careers aren't just about science. They're about people, communities, and justice. Social sciences and humanities help you understand how societies work and how to make change.

Psychology

Learn what motivates people—useful for designing sustainability campaigns.

Sociology

Understand how communities function and how to promote equity and inclusion.

Economics

Explore how resources and markets work—key for sustainable business and policy.

Political Science

Learn how governments operate and how to advocate for environmental laws and policies.

History

Study how humans have responded to environmental challenges in the past.

English & Communications

Build skills in writing, speaking, and storytelling—essential for advocacy, education, and public engagement.

World Languages

Enhance cross-cultural communication and global collaboration.

Graphic Design

Supports careers in climate communication and public education.

Media Studies / Film Production

Prepares students to tell environmental stories through video and digital platforms.

Creative Writing

Builds storytelling skills for journalism, education, and advocacy.

Public Speaking / Debate

Strengthens communication for leadership, organizing, and policy work.

Health & Wellness

Connects to environmental health and climate impacts on public health.

Leadership / Peer Mentoring

Builds skills for organizing, advocacy, and youth engagement.

Service Learning / Community-Based Projects

Offers hands-on experience in sustainability and civic action.

The most successful green and blue professionals combine STEM expertise with insights from the social sciences and humanities. This well-rounded approach allows them to solve complex environmental challenges while understanding the human and community impacts of their work.

For example, a marine engineer designing offshore wind turbines needs strong physics and engineering skills - but also must consider how the project affects local ecosystems and nearby communities.

Similarly, a climate communicator needs a solid understanding of environmental science- but also the ability to craft compelling stories that inspire public awareness and action.



Beyond the Textbook: Exploring Green and Blue Opportunities

While a good education is important, you can start exploring these exciting career paths right now through hands-on experiences beyond your textbooks. Consider the following options.

Environmental Clubs

These clubs are all about taking action. You'll learn about local environmental issues, join advocacy campaigns to make a difference, and participate in projects that have a real impact, like cleaning up your community or restoring natural habitats. Plus, you'll gain valuable leadership skills and learn how to work effectively in a team – essential skills for any career.



Science Clubs

Want to solve problems and think creatively? Science clubs, whether they focus on robotics, science competitions, or specific scientific fields, are the perfect place to sharpen your critical thinking skills, which are essential for any STEM career. These clubs often involve hands-on projects and experiments, giving you a chance to apply your knowledge and maybe even spark a passion for a specific area of science. Many of the skills you develop in science clubs are highly transferable to green and blue careers.



Outdoor Adventure Clubs

Connecting with nature is key to understanding why protecting it is so important. Hiking, camping, and other outdoor activities can help you develop a deep appreciation for the natural world, inspiring you to pursue a career dedicated to conservation. These experiences also teach you valuable skills like adaptability, resilience, and problem-solving, which are useful in any career, especially those that involve working outdoors.



Volunteering

Volunteering is one of the best ways to explore different career options and gain practical experience. You could volunteer with environmental organizations, community gardens, parks, or government agencies involved in sustainability initiatives. Not only will you be giving back to your community, you'll also learn new skills, connect with professionals in the field, and get a firsthand look at what working in a green or blue career is really like. You might even discover hidden opportunities you never knew existed!



Navigating Your Path

Career Fairs, Workshops, and Conferences

Attending career fairs and workshops focused on sustainability, green, and blue careers can give you a broad overview of the field and the diverse opportunities available. You can meet professionals, learn about specific job roles, ask questions, and start building your network.

Job Shadowing

Shadowing someone working in a green or blue career can give you invaluable insights into the day-to-day realities of the job. Reach out to people working in fields you're interested in and ask if you can spend a day observing their work.

Internships and Part-time Jobs

Hands-on experience is critical! Internships and part-time jobs in related fields can provide this experience while you're still in high school. You might look for opportunities with environmental organizations, government agencies, research labs, or sustainability-focused businesses.

The specific skills and knowledge you'll need will depend on your interests and the particular career path you choose. Research different green and blue careers to get a better understanding of the educational requirements and job outlook. Talk to your guidance counselor, teachers, and people working in the field to get advice and explore your options.

Vocational Training, Apprenticeships, and Certifications for High School Graduates in Green and Blue Industries

There are several vocational programs, apprenticeships, fellowships and certifications that can equip high school graduates with the skills needed to enter green and blue industries directly.





Vocational Programs

Training programs are a wonderful way to help you get jobs in green and blue industries. If you're a high school student thinking about going right into a green or blue job after you graduate, there are definitely options for you. Vocational programs are a great way to learn specific skills for these jobs.



Solar One Green Workforce Program

They train you in things like green construction, keeping buildings running in eco-friendly ways, and installing solar panels. They even offer important certifications like OSHA 30 for construction safety and NYC DOB Site Safety Training. This program seems perfect for new grads!



NYC CoolRoofs

This program will pay you while you learn how to install special reflective roofs that help save energy. It's run by different city groups, which might mean high school students can join, but you'd want to check.



Green City Force

This one's for young people (18-24) living in NYCHA housing, and they teach you all about sustainability. If you live in NYCHA and are graduating soon, check this out!

Don't forget about regular programs at your school:

Career and Technical Education (CTE) Programs

Your high school might have programs in environmental design, advanced manufacturing, or health sciences. These could give you a good start for green and blue jobs. Check out: [NYC CTE](#) | New York City Career and Technical Education for more information.

P-TECH Brooklyn:

This program combines high school and college courses. They have areas like computer systems technology and electromechanical engineering technology, which could be helpful for some green and blue jobs.

The Stephen T. Mather Building Arts & Craftsmanship HS

The program founded in partnership with the National Park Service, offering hands-on training in building arts and historic preservation alongside college preparatory academics.

There are also national programs you can look into:

Job Corps

This is a live-in program for young people (16-24) who want to learn job skills and get their high school diploma. They have training for green jobs too!

For women interested in construction and similar fields:

Nontraditional Employment for Women (NEW)

You need your high school diploma for this one, but they help women get into construction, utilities, transportation, and green jobs. They even help with things like union fees and work clothes.

Apprenticeships are another way to go:

Apprenticeship Readiness Collective (ARC)

They help people find apprenticeships, especially in construction, which is really important for green building. You'll need to see if they work with high school students.

Registered Apprenticeship Programs (RAPs)

The Department of Energy runs these programs all over the country. They teach you about energy, including renewable energy.

Certifications can make you stand out:

Global Wind Organisation (GWO) Certification

This is a must-have if you want to work with wind turbines, especially offshore. They have different levels, starting with Basic Safety Training (first aid, working at heights, even sea survival!), and then Advanced Rescue Training, where you learn how to do rescues in tricky situations. They have locations for training in New York City.

Building Performance Institute (BPI) Certification

If you're into green buildings, this certification shows you know how to make buildings energy-efficient.

Solar Photovoltaic Installer Certification

Want to install solar panels? You can get certified at community colleges and technical schools.



Before diving into specific programs, it's super important to do your research and make sure you meet the requirements. The age limits and what you need to qualify can be different for each program.

Start by checking out [High School Green Academies](#). These programs give you a basic understanding of the green economy and can help you figure out what kind of career you might like. They also often connect you with businesses and organizations in the field, which can be great for internships or even jobs!

[Green Careers NY](#) is another great resource. They have training programs specifically designed to teach high school students about energy efficiency and building science.

Think of this list as just the beginning! There are many other programs out there, and these organizations can help you find the perfect fit for your interests and goals. The main takeaway is: If you want a green or blue job right after high school, there are programs to help you get there.



College Degrees and Specialized Programs: Your Guide to Green and Blue Careers

You're thinking about college and want a career that makes a difference, right? Green and blue jobs are all about protecting the planet and creating a sustainable future. Here's a look at some cool college programs that can get you there!

Science Superstars

Environmental Science

Do you care about clean air and water, protecting wildlife, and fighting climate change? Environmental science is like a detective agency for the planet! You'll learn about how ecosystems work, what causes pollution, and how to find solutions. Colleges like [SUNY College of Environmental Science and Forestry \(ESF\)](#) have great programs for this. New York University (NYU) - Environmental Studies Major: Includes courses on climate change, environmental policy, and sustainable development

Intersections in Climate Change

[The CUNY Immersive Research Experience - Climate Scholars \(CIRE-CS\)](#) program offers undergraduate students hands-on research opportunities and internships focused on climate change. It emphasizes interdisciplinary learning, community engagement, and climate justice to prepare students for leadership roles in addressing climate challenges.

Marine Biology

If you're obsessed with the ocean, marine biology is your calling! You'll study everything from tiny plankton to giant whales and learn how to protect delicate ocean ecosystems. Check out organizations like [NYSMEA](#) and [BOP](#), and places like [Stony Brook University](#) or [SUNY Maritime](#) for their marine science programming.

Engineering for a Better World

Sustainable Engineering

This is where engineering brains meet environmental passion! You'll learn to design and build stuff that's good for the planet, like energy-efficient buildings and eco-friendly transportation systems. Look into [Columbia University](#) for a program like this.

Environmental Engineering

Ever wonder how to clean up pollution or make sure we have enough clean water for everyone? Environmental engineers are the heroes who solve those problems! [Cornell University](#) has a program for this.

Powering the Future

Forget fossil fuels—it's all about solar, wind, and other clean energy sources! You can learn to install solar panels, design wind farms, or work on other cool green energy projects. Community colleges, like [Hudson Valley Community College](#), often offer hands-on training in these areas.

Creating Sustainable Cities

Urban Sustainability

Want to make cities greener, healthier, and more awesome places to live? Urban sustainability programs teach you how to design cities that are good for people and the planet. CUNY has programs that cover this.

Beyond Science and Engineering – Graduate Programs in Humanities

Climate Education

We need passionate people to teach others about climate change! You can become a teacher, work for an environmental organization, or create cool educational programs. Teachers College at Columbia University has an Environmental and Sustainability Education program that focuses on integrating sustainability into educational practices and curricula.

Climate Public Health Support

Climate change can have multiple impacts on both physical and mental health of communities. Two great examples of programs that focus on the intersection between public health and the environment include:

- Environmental Public Health | NYU School of Global Public Health
- MPH in Environmental and Occupational Health Sciences - CUNY Graduate School of Public Health & Health Policy



Certifications and Licenses: Proof You Know Your Stuff

Some green and blue jobs require specific certifications or licenses. They show employers you have the skills and knowledge to do the job right.

Green Building Superstar (LEED)

This certification shows you know how to design and build eco-friendly buildings.

Solar Pro (NABCEP)

This certification shows you're an expert in solar energy systems.

Offshore Wind Technician (GWO)

This certification shows you're trained to work safely on offshore wind farms.

WEDG® (Waterfront Edge Design Guidelines)

WEDG is a national rating system and set of guidelines to create resilient, ecological, and accessible waterfronts.



GRP (Green Roof Professional)

This is an accreditation affirming you've been trained in competencies necessary for green roof success- from building science, horticulture, irrigation, waterproofing, plant physiology, structural engineering and beyond.

Resume and Portfolio: Show Off Your Skills!

Think of your resume and portfolio as your personal highlight reel. They're tools that help you stand out to employers, programs, and mentors by showing what you've done, what you care about, and what you're capable of. Whether you're applying for a job, internship, scholarship, or leadership opportunity, these materials tell your story—and they should reflect your passion for sustainability, climate action, and community impact.

Resume Tips

Your resume is a snapshot of your experience, skills, and goals. Here's how to make it shine:

Keywords Are Key

Use words from the job or internship description. This helps your resume get noticed—especially if employers use digital tools to search for candidates.

Numbers Talk

Quantify your impact. Did you help reduce waste, save energy, or lead a project? Use numbers to show results (e.g., “Diverted 200 lbs of compost from landfill”).

Do Your Homework

Research the organization you're applying to. What are their values and goals? Tailor your resume to show how your experience aligns with their mission.

Action Verbs Make It Pop

Start each bullet point with a strong verb like “Led,” “Created,” “Organized,” “Designed,” or “Advocated.” It makes your accomplishments clear and dynamic.

Resume Example

NAME SURNAME

JOB TITLE HERE

PROFILE__

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim minim veniam, quis nostrud exercitation ullamco laboris

EXPERIENCE__

Job Position - Present

Company Name / Location

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Job Position - 2020

Company Name / Location

Lorem Ipsum is simply dummy text of the printing and typesetting industry. Lorem Ipsum

Job Position - 2018

Company Name / Location

Lorem Ipsum is simply dummy text of the printing and typesetting industry. Lorem Ipsum

REFERENCE__

Job Position Here

Name Surname

Company name here

P: +00 000 000 000

Job Position Here

Name Surname

Company name here

P: +00 000 000 000

Phone

+00 0000 000 000

Email

info@name.com

Address

Your Street Address.

EDUCATION__

2018 - 2020

Degree / Major Name

University name here

2018 - 2020

Degree / Major Name

University name here

2018 - 2020

Degree / Major Name

University name here

LANGUAGE__

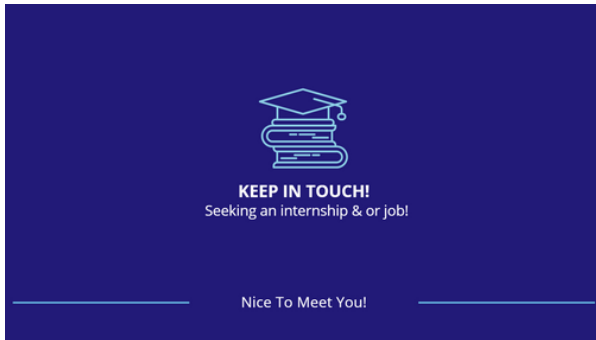
- Language-01
- Language-02
- Language-03

SKILLS__

- Skills-01
- Skills-02
- Skills-03
- Skills-04

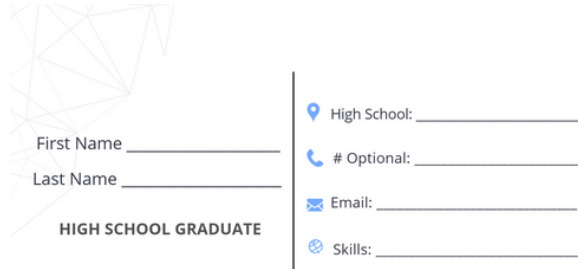
Business Card Templates

Print out this page and use the template business cards below to start networking. Just print, cut, fill in, and use!



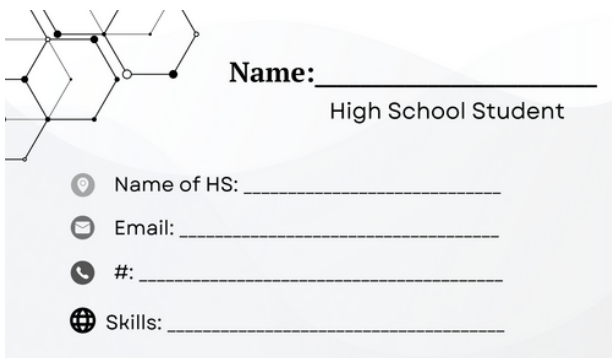
KEEP IN TOUCH!
Seeking an internship & or job!

Nice To Meet You!



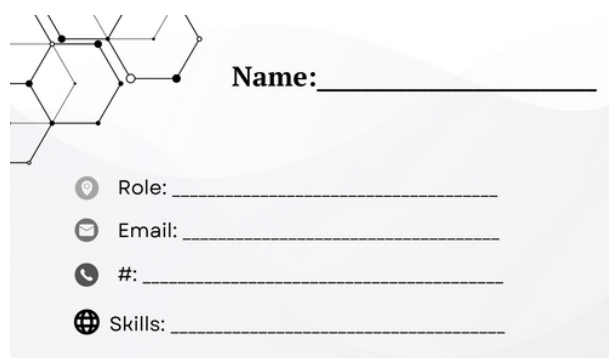
First Name _____
Last Name _____
HIGH SCHOOL GRADUATE

High School: _____
Optional: _____
Email: _____
Skills: _____

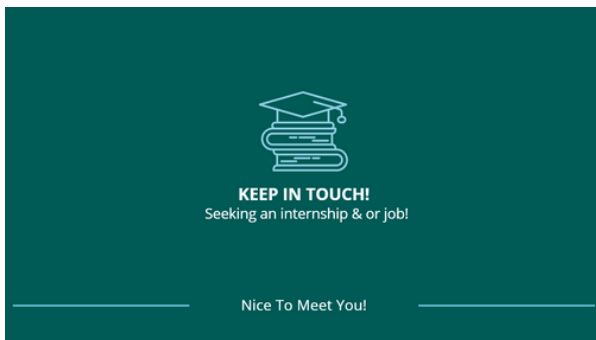


Name: _____
High School Student

Name of HS: _____
Email: _____
#: _____
Skills: _____

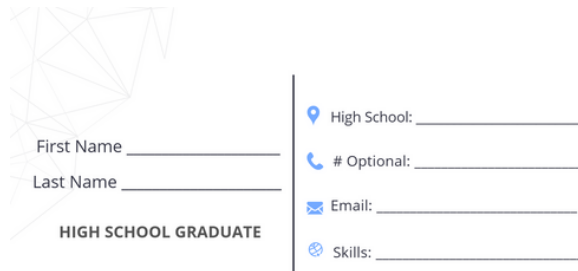


Name: _____
Role: _____
Email: _____
#: _____
Skills: _____



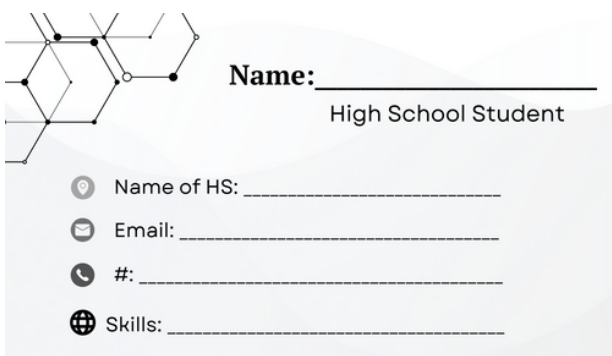
KEEP IN TOUCH!
Seeking an internship & or job!

Nice To Meet You!



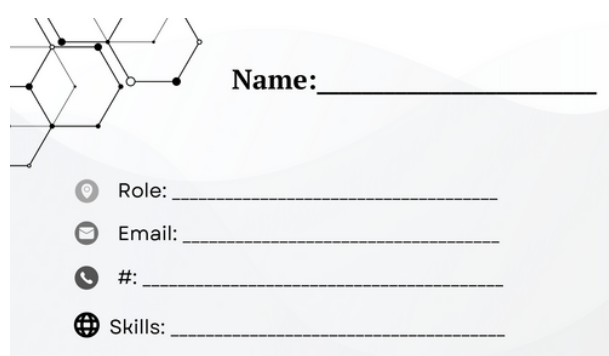
First Name _____
Last Name _____
HIGH SCHOOL GRADUATE

High School: _____
Optional: _____
Email: _____
Skills: _____



Name: _____
High School Student

Name of HS: _____
Email: _____
#: _____
Skills: _____



Name: _____
Role: _____
Email: _____
#: _____
Skills: _____

Portfolio Power

Your portfolio is a visual and narrative showcase of your work. It's especially useful for creative, technical, or project-based roles.

Project Showcase

Include examples of your work—school projects, volunteer efforts, club activities, or independent initiatives that demonstrate your green or blue skills.

Certification Celebration

Highlight any certifications you've earned (e.g., OSHA, GIS, CPR, Solar Installation, Climate Literacy).

Passion Projects

Share what you do outside of school—volunteering with an environmental group, organizing a beach cleanup, or leading a sustainability club.

Online Presence

Create a digital portfolio using platforms like LinkedIn, Linktree, Wix, or Google Sites. Include photos, videos, writing samples, or project summaries to make it easy for employers to learn more about you.



Your Green and Blue Future Awaits!

As we've explored, green and blue careers are becoming more and more important as the world faces environmental challenges like climate change. These careers offer incredible opportunities to make a real difference while building a fulfilling and sustainable future.

Now is the time to explore these pathways and discover your passion. Take a moment to reflect on your strengths and interests – explore the self-audit in this guide, talk to a mentor or guidance counselor, or find a professional that can help to explore your passion.

Whether you're interested in renewable energy, sustainable construction, protecting ocean life, ensuring clean water for everyone, or starting your own business, there's a green or blue career out there for you.



Remember

1

Resources are Available!

Check out organizations like Solar One, Green City Force, NYC CoolRoofs, the Building Energy Exchange, the Urban Tech NYC Green Incubator, RiSC: Resilient Schools & Communities, CRETf Youth Steering Committee, Project Petals, and programs on Governors Island.

2

Education is Key!

Look into high school courses, vocational training, college degrees, and online resources that align with your interests.

3

Network and Connect!

Reach out to professionals in these fields, attend career fairs, and join relevant organizations.

You have the power to create a better world. By choosing a green or blue career, you're not just choosing a job – you're choosing to be a part of the solution. Your individual actions can have a ripple effect, inspiring others and driving positive change. Let's build a brighter future together!



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