



# Leadership Mini Series: Executive Summary

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Next Generation, Inc.<sup>™</sup> is a vehicle to assist both colleges and industry to respond to the urgent need to expand the number of BIPOC and women represented in clean energy careers.

# I Rationale for the Leadership Mini-Series (LMS)

New Jersey and Maryland offer important examples of progressive states that have established ambitious goals to reduce their greenhouse gas (GHG) emissions and are taking concerted action to reduce their carbon footprint. In 2022, the International Panel on Climate Change (IPCC) issued stark warnings that GHG emissions were continuing to rise, hurtling the world toward an irreversible climate change tipping point. Through the Executive Order in New Jersey and passage of the Climate Solutions Now Act of 2022 in Maryland, both states stepped up with accelerated GHG reduction goals and plans to rapidly transform their energy infrastructure and consumption patterns.

These initiatives were accompanied by substantial funding to swiftly expand solar and wind installations, expedite the shift toward electric vehicles, and promote energy efficiency in residential buildings. These policies and investments are stimulating the green economy and generating thousands of good-paying jobs to achieve the rapid transformations required to meet state goals. They also represent a unique opportunity to advance economic equity for historically marginalized low-income and Black, Indigenous, People of Color (BIPOC). However, fulfilling this promise requires alerting these communities to the opportunities at hand, connecting them to emerging workforce development resources, and helping them navigate prevalent barriers.<sup>1</sup> **The LMS program provided a bridge that helps connect low-income and BIPOC youth and young adults to the unique opportunities in the expanding green economy, in general and clean energy, in particular.**

## I Objectives of the LMS Program

The LMS team<sup>2</sup> established five core objectives to anchor the program design. The objectives were framed in a clean energy context and centered on the following themes:

### Clean Energy

Emerging Landscape and Opportunities

### Networking and Mentor Connection

### Essential Soft Skills

Critical Thinking, Active Listening, and Communication

### Next Steps Toward Your Career Goal

### Career Exploration

Self-Aware, Inspired, Empowered

The Leadership Mini-Series (LMS) program was developed to help young BIPOC adults understand and access the unique opportunities offered by a rapidly expanding green economy.

<sup>1</sup> Woods B, et al. Barriers and Opportunities for Green Jobs in New Jersey. Applied Economics Clinic; Jun

<sup>2</sup> LMS team comprises: Urban League of Morris County, NJ; SGAP Leaders; NEXT GENERATION, INC.

## I Goals of the LMS Pilot

The LMS program was a pilot offering that was able to leverage existing curricular assets and the experienced team members associated with [SGAP Leaders](#) to jumpstart implementation. SGAP Leaders is a sister non-profit organization that has developed and implemented several programs for high school youth that address sustainability, climate change, and clean energy technologies as well as critical soft skills. The pilot offered an opportunity to test and adapt these materials for a distinct context. The LMS program also allowed the team to beta-test curricular elements on career exploration, mentorship, and resume development as well as a multiday in-person energy industry intensive.

The LMS program was evaluated using a mixed methods approach designed to maximize learning from the pilot experience. The assessments included baseline and final online surveys and an interview for participants, a paper-based survey for the briefly expanded cohort attending the energy industry intensive, and a digital survey of the core implementation team fielded immediately after the program. These instruments, combined with personal observation, provided the rich detail about participants, key outcomes, and processes needed to make targeted program improvements.

## I Design of the Six-week LMS program

The LMS program was constructed as a six week hybrid offering with a distinct theme for each week. Most of the program was delivered virtually using a Zoom platform. Online sessions ran from 10:00 am to 2:00 pm and included a 30-minute lunch and 2 short breaks. During the first few weeks, each virtual session typically included 1 or 2 instructor-led didactic elements along with a mix of guest speakers, short videos, whiteboard-based group activities, and jeopardy-style gaming.

The fourth week featured an [Energy Industry Intensive](#) that was held in-person and opened to a broader audience of individuals invited by NewarkWORKS. Representatives of large local Energy companies, motivational speakers and participants came together in the Rutgers University's Law School classroom for a deep dive into clean energy careers. During the week, participants met people engaged in different types of clean energy jobs and received first hand testimony about their day-to-day work. Participants also got to hear from human resources personnel who illustrated how to dissect a job description and discussed what they are looking for when evaluating applicants. The week culminated in a visit to Covanta's Essex County Waste-to-Energy facility.

The final weeks were dedicated to resume development and a culminating [Capstone Project](#). The Capstone built on the programming delivered to date by having participants research two different energy companies. The project encouraged participants to compare in terms of their profile (size, location, core products and services) and the types of job positions they offered. Participants also evaluated through the lens of a prospective job applicant to determine whether these would be satisfying places to work. On the final day, participants presented their findings to a panel of judges as part of a friendly competition.

Upon completion of the [Global Solutions Lab](#) - Leadership Mini Series (GSL-LMS) program, participants received an Emerging Leaders Digital Badge recognizing their dedication to advancing sustainable solutions.

# I Participant Cohort

## Cohort Size

The LMS pilot was designed to accommodate 20 young adults ages 18-24 years who were entering or continuing college students. The SYEP staff promoted the program through social media channels, fliers, and a virtual information session. Although roughly 25 individuals expressed interest in joining the program, only 10 progressed through the enrollment process to begin the first part of the tandem GSL-LMS program.

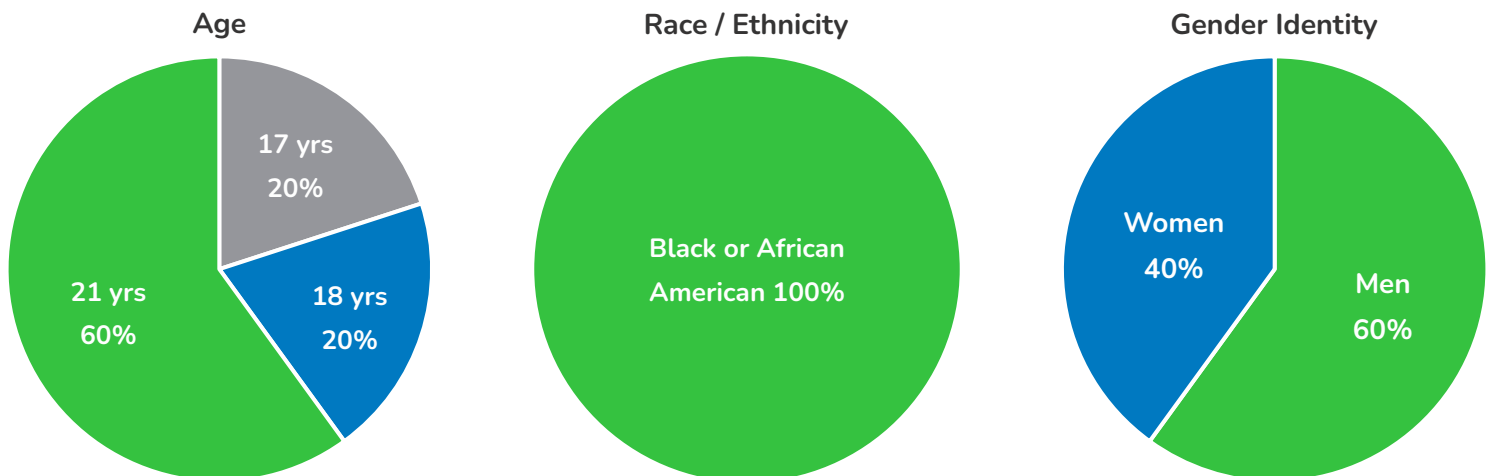
## Cohort Characteristics

The final LMS cohort identified as 100% Black or African American and ranged in age from 17 to 21 years. Twenty percent of the participants were still in high school. Of the total participants, 40% were recent high school graduates with college acceptances, and 40% were continuing college students.

All participants had career interests that related to STEM. However, 60% of the participants were oriented towards the physical sciences, computers, and engineering, while 40% of the other participants were drawn toward animal science or clinical care.



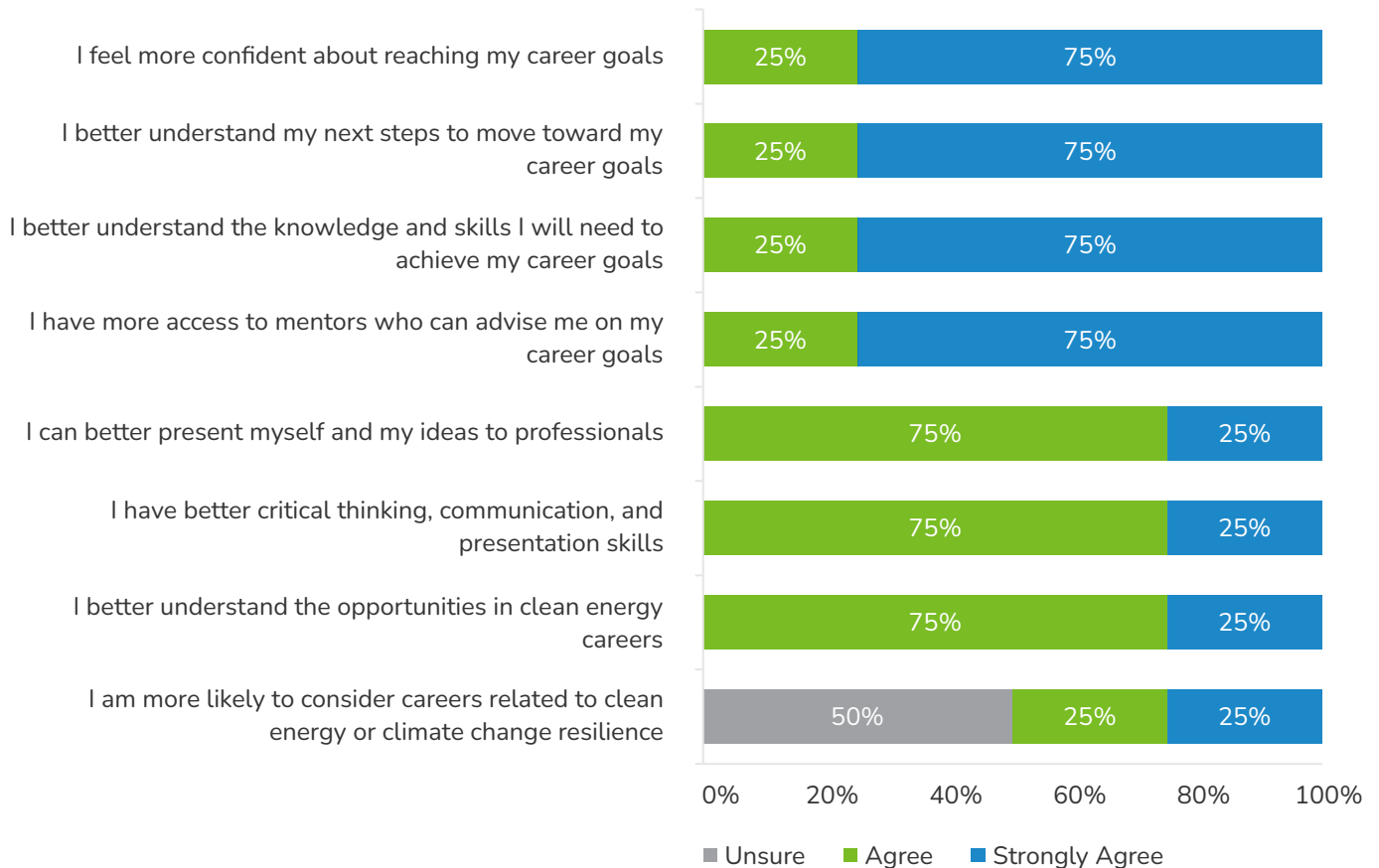
Participants applied to the program largely because it offered a learning experience with leadership development and networking opportunities.



# I Key Evaluation Findings

## Outcomes:

*As a result of participating in the LMS Program, ...*



The final evaluation survey (n=4) and individual interviews (n=4) revealed that the program had multiple positive impacts. **The collective findings point to greater confidence, enhanced awareness of personal strengths, and broader insight into the diverse jobs associated with the green economy among participants.**

The LMS program was especially impactful for participants oriented toward the physical sciences and technology. These individuals discovered appealing clean energy careers and learned how to evaluate these relative to their passions, strengths, and values. They were also motivated to actively pursue mentorship opportunities and initiate conversation and connection with energy industry representatives.

The program seemed less impactful for the participants aspiring to animal science and clinical careers. These participants periodically commented that the clean energy content seemed disconnected from their career interests. The LMS team identified mentors pursuing careers that aligned with each of these participants, but the participants did not respond when potential mentors reached out to them. Nevertheless, these participants still derived benefit from the program, particularly the content designed to empower participants to successfully navigate their chosen paths.

An important secondary outcome was the significant shifts in participants' perceptions of climate change and strategies to slow global warming. Before entering the program, several participants poorly understood these issues and saw them as distant, abstract, and even laughable topics. However, the program helped them better understand why climate change is occurring and the importance of rapid transition from fossil fuels to clean energy. It further **prompted participants to reflect on their own roles, and how they could help mitigate climate change through their chosen careers and through their day-to-day actions.**

## I Participant Feedback

All participants indicated that the topics covered in the LMS program were helpful - although to varying degrees - and provided new and valuable insights. When asked during interviews to describe the program in a single word, participants chose: **INFORMATIVE, EDUCATIONAL, NETWORKING, and GREAT EXPERIENCE.**

The **Energy Industry Intensive**, held during the fourth week, was universally considered the highlight of the program. Participants valued the opportunity to finally meet each other face-to-face and to directly interact with energy industry representatives. The settings allowed participants to be more conversant, to touch and explore equipment provided by the energy companies, and to tour an energy facility. **In short, the intensive was a highly-engaging multisensory learning experience that efficiently delivered a lot of new information.**

Participants also provided feedback about where the amount of time spent on different elements might be reduced or expanded to improve future programming. They also called for more hands-on learning to improve understanding of energy principles and the different clean energy modalities.

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*Because of the LMS, I was able to find new types of jobs that I wasn't even thinking of before. One of them was the solar panel engineer, and also environment and substation engineers. Jobs I never even thought of before. Definitely appealing and broadened my perspective.*

**- LMS Participant**

## I Barriers

Although all participants in the pilot's small cohort completed the program, they faced relevant barriers that colored their experience. All participants were able to connect to the virtual sessions, but typically lacked the ideal combination of a personal computer and robust home internet service. Rather, participants joined using myriad digital devices and some had to leave home to reliably access the internet. Participants connecting with a cell phone or who had limited internet bandwidth were often less visible to the group and had less visibility and access to the full Zoom environment and its tools, diminishing their overall experience.

Several LMS participants lacked easy access to a car. In this respect, the virtual program offered an advantage by minimizing transportation costs and lengthy public transportation commutes. However, participants had to navigate transportation for the in-person **Energy Industry Intensive**. SYEP distributed bus passes to defray transportation costs. These proved helpful to join the sessions held on the Rutgers University campus. They were less useful to reach the Covanta Essex tour site, which was a 30-minute walk from the nearest bus stop. LMS participants instead carpooled or took a shared UBER ride to the tour site. In the future, the LMS program may need to budget funds to mitigate transportation costs, particularly for travel to more remote sites.

Participants in the LMS cohort had varying levels of English language and science proficiency. The pilot program lacked tools to determine baseline proficiency in these areas, but gained insight into proficiency gaps as the program unfolded. Limited language proficiency manifested in different ways. One participant with limited English proficiency was a recent immigrant and was reluctant to speak until they felt safe and accepted. The extent of language proficiency gaps became apparent late in the program as participants worked on resumes and their Capstone Project. The LMS team responded by simplifying the planned activities and providing more hands-on support as participants worked through assigned tasks.

Participants also had varying levels of science proficiency. Some participants found the Week 2 Science/Clean Energy & Technology content too challenging, prompting them to tune out. Others rapidly absorbed this content, but were hungry for more to consolidate their understanding. These varying proficiency levels suggest that the LMS curriculum will need a broader repertoire to engage learners at both foundational and more advanced levels.

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*This program has connected me to so many people that I wouldn't have been able to. ...I'm a high school student, so the people that I network with are teachers, and people of that nature.*

*A lot of the people that I talked to are willing to give me a chance, whether that's to mentor, or give me life-changing advice — advice that will help me and push me forward, ...push me to be better.*

**- Interviewed LMS Participant**

# I Lessons Learned and Implications

The overall findings from the LMS pilot program offered numerous lessons learned that can be grouped into the following themes: **Beneficiary Population, Program Design, Recruitment, Enrollment, On-Boarding,** and **Program Implementation.**

## Beneficiary Population

1. There are at least three distinct populations of youth and young adults who could all benefit from an empowering program that explores an expanding green economy and offers novel tools and lenses to evaluate potential career paths. These groups are sufficiently different to warrant programming that is specifically tailored to their needs.
  - a. High school students (rising 10<sup>th</sup> or 11<sup>th</sup> graders)
  - b. High school graduates who are enrolling or ongoing college students
  - c. Vocationally-oriented young adults age 18-24 who are not in high school nor college
2. Program planning should anticipate challenges that are common in low-income and BIPOC communities that might deter enrollment or diminish participants' learning experience and device strategies to navigate these. During this pilot, barriers related to internet connection, transportation, and Science and English proficiency were identified. The program schedule ran from 10:00am-2:00pm, overlapping both morning and afternoon windows. This timing presented challenges for some participants who needed to work second jobs. An earlier start time may be needed to better support participants juggling multiple commitments.

## Program Design

1. During the 2023 year, the LMS program was offered in tandem with the Global Solutions Lab (GSL), a 2-week program that was independently operated. The GSL program uses a long-standing model that centers on climate change. In theory, the content of the GSL and LMS programs was complementary, but in actuality, had limited insight into the program and there was no viable mechanism to meaningfully compare and align the two programs. Given these limitations, the LMS curriculum will add new modules addressing multiple dimensions of climate change and the program will be offered as a stand-alone entity.
2. The LMS program used mixed formats that included several weeks of virtual only sessions and a contrasting week of in-person learning. Although participants noted that the virtual sessions were convenient, they wanted more of the type of experiential learning offered by the Energy **Industry Intensive**. Future adjustments are needed to the program design that either increase the amount of in-person learning time or that intersperse this throughout the program. One approach might be to dedicate one day of the week to field trips, tours, or hands-on learning lab experiences.
3. Participants also voiced a need for more in-person interaction with motivating speakers and professionals representing diverse jobs who are also people of color or have background stories that participants can relate to.



4. The Week 2 curriculum, which focused on principles of climate change, energy, and clean energy technologies, is considered an essential program element, but is also in need of improvement. Specifically, this science-focused curriculum needs extensive revision and should provide more hands-on and interactive group activities and possibly field trips that consolidate learning in future programs.
5. The initial concept for the culminating **Capstone Project** was based on assumptions about participant's career interests and skill level. The LMS team belatedly understood that the planned Capstone project had too many components and that the schedule offered insufficient time to complete the requisite research and synthesize findings. The project also assumed all participants would want to pursue clean energy jobs, and could not be tailored to participants with other career interests. In the future a culminating Capstone project that ties together the program's different threads should still be offered, but the current Capstone model should be reconfigured and allow participants greater flexibility in choosing a focus.

## Program Recruitment, Enrollment & On-Boarding

1. The 2023 LMS program was offered through a new partnership between the SYEP and NEXT GENERATION, INC. The program was presented to SYEP in the spring, resulting in a relatively short window for the LMS team to learn the details of the SYEP program and to conduct a recruitment campaign. The LMS team now has greater insight into the SYEP's recruitment and enrollment processes. For the 2024 summer program, the LMS team will connect with the SYEP mid-winter and develop recruitment materials that SYEP can disseminate through their usual channels. Recruitment materials will be refined to better reach participants likely to benefit from the program's clean energy focus.
2. Participants who ultimately began the tandem GSL-LMS program started their eight-week journey with the GSL component. The participant onboarding process was chaotic. Multiple factors contributed to the mayhem including the late arrival of participant names from SYEP, limited sharing of participant contact information, and incomplete instructions about how the SYEP participants should navigate the GSL program's gateway registration form. As a result, many participants were unable to join the GSL program when it launched. Although a modest number of participants successfully connected to the GSL and continued into the LMS program, how many other participants were also able to connect is unclear. Going forward, NEXT GENERATION, INC. will establish a streamlined on-boarding process so that enrolled SYEP participants will easily embark on the LMS program.
3. During the 2023 LMS program kick-off, participants completed a survey that captured essential data about demographic characteristics, school and work status, and career aspirations. This data was vital, but provided insufficient detail to tailor the program. While the LMS team recognizes that assessments are burdensome, they will pursue additional baseline assessments in the future to elicit greater detail about language and science proficiency, work and school status, career direction, and barriers that might impact or impede their learning experience.

# I Conclusion

The 2023 LMS program was a new undertaking designed to position and empower young adults to participate in a rapidly expanding green economy. The pilot achieved several successes as it evolved from concept to SYEP offering, then undertook implementation, and finally looked back to reflect on the experience. The program achieved several intended outcomes as it led a small cohort on a journey to explore clean energy, elevate soft skills, apply new lenses and tools to career choices, and connect with potential mentors.

The program demonstrated the competency of NEXT GENERATION, INC. which effectively assembled and led a new collaboration through the design and implementation of the LMS program. The pilot was accompanied by a thoughtfully designed evaluation, which provided rich detail about what worked well and what didn't and documented Lessons Learned to inform subsequent iterations of the program.



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