To our global network of students, alumni, friends and supporters:

The Executive Leadership Team (ELT) is pleased to report that, with your support, 2023 was an incredible year in service of our non-profit mission. Since 1991, we’ve been dedicated to training the clean energy workforce. We have always believed this must be a global and collaborative endeavor. In 2023 we intensified our efforts to create an inclusive and diverse solar industry, both extending our empowerment programs to better serve underserved communities, and restructuring our own organization to mirror these values with the creation of a shared leadership model in the Executive Leadership Team. The success of these initiatives prove what we’ve known all along; that the renewable energy revolution must include everyone, and it is stronger and more effective when it does.

This annual impact report is not only meant to share the work we’ve accomplished over the last year, but to set a mandate for all those who are part of the SEI network to be an active participant in this community. It is also a call to action for those who are not yet aware of our work. The time to act is NOW! We can’t meet the exponentially growing needs of the industry, and the urgent climate needs of the world, without you.

The actions we all take in the coming year will ensure SEI continues to lead the solar industry and the broader clean energy sector in workforce development and technical training. As we enter our 33rd year of service as an educational non-profit, and the world rallies more forcefully than ever behind renewables, the need for what we do has never been greater. We are witnessing a rebirth of focus and passion towards our mission.

For decades we have relied heavily on self-earned revenue from tuition, curriculum licensing, and contract training. Though this model provides us with stability, it cannot support the enormous workforce development needs the renewable sector is demanding. We have ambitious goals for 2024, but they are goals we must meet if we are to continue as the driving educational force in the solar industry, delivering on renewable energy’s economic and environmental promises.

We need your help. Are you with us?

Wendy Knapp  
VP Curriculum & Instruction

Monique Turek  
VP Student Services & Employer Relations

Kris Sutton  
Director Business Development Middle East/SR Tech

Denise Massart  
VP Administrative Services

Chris Turek  
VP Marketing & Business Development
At Solar Energy International, we train the global solar energy workforce to promote sustainable economic growth, mitigate climate change, and support energy independence. We’re working towards an ambitious goal: train 272,500 people by 2025 to fill the 11.9 million solar jobs vital to halting the global temperature rise.

2023 MILESTONES

Overview

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100,000+
Alumni Worldwide

12,683
Student Enrollments

64
Courses Offered

7,930
Students served in renewable energy introduction courses

3,960
Student enrollments in technical training & continuing education

2,251
Student enrollments in employer sponsored and contract training
EDUCATE

Our technical training helps start careers, grow businesses, and meet the urgent workforce development needs of the solar industry

2023 highlights:
- 50 online, 14 in-person lab and 28 Spanish language courses offered in 2023
- 220 students received in-person training in Paonia, Colorado
- 12,164 students completed an SEI online course; 2,555 were in Spanish language courses

Solar Apprenticeship Models

Creating the new technical training needed to meet Federal requirements. With the passage of the Inflation Reduction Act (IRA) in 2022, unprecedented funding was earmarked for developments in renewable energy. This funding came with restrictions, including workforce development and apprenticeship requirements in carbon-reducing fields. SEI immediately began developing curriculum to meet these specifications, maintaining its role as a leader in technical solar curriculum development.
- In 2023, SEI has created a 288-contact hour apprenticeship framework to meet IRA regulations.
- Developed a 4,000-hour on-the-job training rubric for a 2-year Department of Labor approved occupation apprenticeship program.
- Completed a Megawatt Design course, which was offered as a sold-out workshop at the nation’s premier renewable energy conference, RE+ 2023. Now available as an online course.
- Developed a Field Operations curriculum to meet the real needs of workers in the industry of today.

Thanks to Greenbacker and Nextracker for their support of these initiatives!
Teaching in the language our students speak.
SEI’s Spanish language programs address the imperative need for diversity and inclusion in the solar workforce, particularly with Hispanics and Latinx's projected to comprise 78% of new U.S. workers by 2030.

In 2023, SEI celebrated a significant achievement with its Hispanic and Latin American Program, having trained over 3,464 Spanish speakers globally. Recognizing the current 20% representation in the solar industry, SEI provides both online and in-person Spanish language education. In 2023, SEI provided 70 scholarships to Spanish speakers of 16 different countries.

“Training with SEI helps me meet my goals that I have set for myself since I had the fortune to delve into photovoltaic solar energy: to be certified as an installer, to carry out my own installations and, together with a few more years working in the field, to allow me to start my own design company.” –Ana Sofia Lanza Martinez | Honduras

“I have constructed small isolated solar installations with batteries in places where they didn’t have electricity at all, providing an opportunity for people to connect a light bulb or a small refrigerator – and that has given me the motivation to continue in all of this. The high quality training of [SEI’s Solar Professional Certificate in Spanish] impacted me the most. The truth is that, although I had taken other courses outside of SEI, nothing was comparable – the detail, the knowledge of the instructors, the best practices they shared, the networking possibilities, the professional relationships that I formed with my colleagues and instructors – all of this allowed me to learn how the market works in other countries and how to create new businesses therein. Add to that the world class lab-yard – I never imagined being in a laboratory that was so modern, so fully equipped.”
–Jorge Fernández | Mexico
Bringing solar education to the global community.
SEI’s dedicated Middle East program served the needs of emerging markets in the region this year, training 100+ people including integrators, PV installers, technical salespeople, system designers, PV system developers and more. The audience for our trainings ranges from electrical, mechanical and civil engineers, to members of academia and educators, and to distribution company employees, electricians and technicians.

SEI also partnered with World Wildlife Fund in Bhutan and Cambodia to provide solar education to 46 students as a part of greater efforts to build renewable resources, protecting each location from climate change and promising major positive steps forward in securing each nation’s future energy sustainability needs.
ENGAGE

Partnering with education providers, community organizations, industry leaders and solar employers, SEI provides specialized training to move renewable energy forward

2023 highlights:
• 274 students trained through Engage contracts
• 519 students served through contract trainings
• 15 companies provided employer-sponsored training through SEI
• 4 higher education institutions licensed SEI Curriculum
• 910 elementary through high school students reached with Solar in the Schools

Coalfield Development Corporation Contract Training

Training Appalachian workers for a transition from coal to renewable energy. The Coalfield Development Corporation has a mission to develop the potential of Appalachian places and people as they experience challenging moments of economic hardship. In 2023 they launched and ran a month-long skills and employment prep experience for people in regions transitioning from coal industries. SEI instructors provided a full week program of technical content in Huntington, West Virginia, offering community members a pathway to a career in solar.
Supporting solar research in extreme environments and rural communities.
The University of Alaska’s Alaska Center for Energy and Power (ACEP) Solar Technologies Program works to support responsible and equitable development of solar photovoltaic (PV) technology in Alaska and other cold regions and high latitude areas where it is technically and economically warranted. SEI curriculum licensing allowed technical training to be key part of this program in 2023, extending solar education to communities throughout the region and continuing the development of local solar research.

Solar in the Schools
Starting early with solar education for elementary through high schoolers.
Solar in the Schools (SIS) delivered 18 in-person classroom experiences including presentations and hands-on solar energy activities, reaching 320 Elementary Students, 240 Middle School Students, and 350 High School Students. 2023 marked a targeted expansion of SEI's offerings to high schools offering career, technical or trades skills educational programs. The program expanded to 8 high schools in Montana, and received funding to provide classes to 5 local high schools on Colorado’s Western Slope.

Thanks to NorthWestern Energy and Elevate Internet for supporting the Solar in the Schools Program!
2023 highlights:
• 264 scholarships awarded in 2023, representing students from 51 different countries
• $195,328 scholarship funds distributed
• 2,555 students served by SEI international programs

International Scholarships

Making solar education accessible to all.
SEI's scholarship program provides tuition coverage and travel and lodging stipends, allowing students from around the world to access both our online training and attend in-person labs at the SEI facility in Paonia, Colorado.

“My name is Adetutu Adelekan. I have over 10 years’ experience in the power sector. Since 2014, I have developed keen interest in renewable energy power solutions as the way to improve the terrible power shortage in my country, Nigeria, and Africa as a whole. [I want to use my SEI education] to improve clean green energy production versus the conventional use of fossil fuels.

Renewable Energy is the future of power generation and Solar PV Systems provides the most flexible way of locally deploying standalone projects. SEI’s scholarship program positions me for better understanding of international standards of delivering solar projects [so] I can be of more impact to the world at large.” —Adetutu Adelekan | Nigeria

Thanks to the Walt Ratterman Scholarship Fund for making these and 8 other full international scholarships possible!
Breaking the (PV) Glass Ceiling.

The Women in Solar Power (WISP) program is a highly innovative approach to creating empowering learning communities for all those identifying as women+, with women instructors leading women/non-binary only labs, and creating networking communities that support women into solar careers and leadership positions.

With a focus on global outreach, this year the program has connected 462 women through solar energy training. SEI provided 70 scholarships, addressing barriers to entry, retention, and advancement in the solar PV workforce. The program emphasizes the broader goal of diversifying the entire workforce and has trained 29 women in a hands-on, grid-tied lab week in Paonia, Colorado, with both English and Spanish sessions.

The SEI Women in Solar Power online communities, mentorship webinars, and networking events have garnered significant participation, with 656 women in the English community and 199 in the Spanish community.

“SEI’s training programme has a great importance to me, because it is an important step in achieving my professional goal: working on projects as a technical consultant for renewable energy sources. I would also like to specialize in the development of renewable energy systems which are gaining more and more significance in the parts of the world which are remote and far from other energy resources.

The international experience provided by my SEI training provides me with a huge benefit: the opportunity to work for international companies, which are highly involved in the energy sector of the country. Currently I am working with a number of solar companies as an installer and solar trainer. And this increase in my monthly income makes my life easier than before.”

−Tariku Lemi | Ethiopia
“Being a part of SEI is so much more than mastering content. Putting in the hours to understand the content is only half of the goal. The more impactful part is the dedication and space you are giving back to you. That’s what the [Women in Solar Power] program is doing for me. Giving space and resources for me to spread my wings and become the individual I am striving to become.” –Donya Hadder | Arizona

“I am so grateful for the opportunity to work with smart and innovative minds. The [SEI WISP] scholarship upgrades my skills and makes me more valuable. I am so honored as a single woman to successfully graduate in a male-dominated industry and pursue my dreams.” –Yagmur Marangozoglu | Texas

“I believe we can use renewable energy to help benefit the living conditions of today and into the future. Thanks to SEI training/ the WISP scholarship, I plan on diligently working towards constructing a utility scale solar project. This small step is yet a large leap in ensuring that I take the initiative in doing my part to help society.” –Krystal Harden | Georgia

“It has always been my dream to build on the nexus of indigenous culture and regenerative ways of living. SEI’s WISP program training demonstrates my professional commitment to my employer, my clients, and my distributors; and allows me to be an example of what is possible for a Native Hawaiian woman in the caucasian male-dominated renewable energy industry.” –Ella Aki | Hawaii
Ensuring the solar industry serves those who have served.
SEI launched its first Solar Ready Veterans Program in 2015. In 2023, we reinvigorated our efforts to serve veterans and partnered with the Interstate Renewable Energy Council (IREC) to engage with the Department of Energy (DOE) - Solar Ready Veterans initiative. SEI is developing an official Skillbridge training program to serve military service members in their final 180 days of active duty. This transitional training program will set a new standard, aligning with current employer needs and creating a clear pathway from active service to a solar career!
Partnering with Tribal energy leaders for community-based education.
In coordination with SEI’s longtime partner Red Cloud Renewables and Remote Energy, the Tribal Train the Trainer program partners with Indigenous Nations across the US, training tribal renewable energy experts to bring SEI curriculum to their communities, supporting workforce development and solar solutions in Indian Country.

In 2023, SEI partnered with the Diné nonprofit education organization Purpose Focused, offering scholarships and free curriculum licensing in support of their mission to advance a Navajo-based solar workforce deploying solar systems by and for the Diné people. Purpose Focused is developing a Continuing Education Center in coordination with Diné College, teaching SEI’s PV101 and PV203 courses. SEI also provides scholarships for tribal members to attend SEI online and in-person courses.

“I was introduced to Solar Energy International by taking part in the SEI/ Red Cloud Renewable Energy’s Tribal Train the Trainer Program. The Tribal Train the Trainer Program gave me the opportunity to meet and learn alongside other like-minded Native individuals striving to become solar educators, and to build my confidence to take and pass the NABCEP entry-level exam to earn my NABCEP Associates in Photovoltaics.

My Solar Energy International training is supporting my goal to continue my solar education and work towards my PV Installation Professional and Solar Heating Installer certificates to ultimately help my people, my reservation’s economy, and Unci Maka (Mother Earth).”
−Cassandra Valandra | South Dakota

Thanks to REC Group LLC for sponsoring 8 Native American Scholarships in 2023!
FINANCIALS

The current state of support and funding

Income
- Tuition: $2,192,065
- Contract Revenue: $631,895
- Donations & Sponsorships: $424,650
- Other Income: $168,080
- Merchandise: $163,605
- Grants - Other: $32,000
- Curriculum Licensing: $31,050

Total Income: $3,643,345

Expense
- Payroll: $1,653,665
- Business: $412,495
- Instructors: $378,140
- Professional Fees: $348,222
- Training/Curriculum: $266,908
- Travel: $154,792
- Insurance: $68,503
- Cost of Sales: $33,944
- Mailing & Printing: $21,615
- Occupancy: $13,840
- Vehicle/Equipment: $4,317

Total Expense: $3,356,441

Net Income: $286,904

Thank you to the supporters from around the world that make SEI's mission possible. You bring the sunlight to our work!
Thanks to our 2023 Donors

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STUDENT LOCATIONS
In 2023, SEI had students from around the world attend online and in-person training.