Capacity Building and Skills for Tomorrow’s Solar Jobs

Dr. Paulette Middleton
**Vision:** 100% renewable energy for all, used efficiently and wisely.

**ISES** is a non-profit UN-accredited membership NGO with national sections like **ASES**

- Represents a diverse membership of academics, researchers, energy practitioners, consultants, students, businesses and advocates.

- Works together with like-minded organizations like GSC from countries all around the world to advance the renewable energy transformation.

- Helps build capacity through diverse publications, webinars, conferences, and other activities.
Sustainability (efficiency, wise use, circular economy), Quality Assurance, and DEIJ (diversity, equity, inclusion, and justice) professionals are central to all industries.

Energy Transformation Creates JOBS

SOLAR Industry
- PV
- Energy Efficiency
- Resource Assessment
- Solar Thermal
- Storage
- ...and more

Solar Enabling Industries
- Financial Advisors
- City Planners
- Architects
- Utilities
- ...and more

Sustainability
- Quality Assurance
- DEIJ

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SKILLS for Tomorrow’s Solar Jobs

Technical Skills
Skill sets vary for different job categories. Certifications and degrees acknowledge skills.

Interpersonal Skills
These are important for all jobs.
Communication, Teamwork, Critical Thinking
Flexibility, Creativity, Respectful Listening
Time Management

Capacity building programs need to value, develop and review interpersonal skills.
CAPACITY BUILDING for Tomorrow’s Solar Jobs

K-12 Education
Technician Training
College and Post-Graduate Education
Professional Development
Public Education

Here are some program EXAMPLES and ACTIONS for each category
K-12 Education
Introduce children to solar and future jobs, and encourage them to be “influencers”

Million Solar Stars involves students worldwide in the process of deploying solar power
https://www.millionsolarstars.org/about

SolarSchoolhouse uses hands-on teaching tools
https://solarschoolhouse.org

ACTION: Develop networks for sharing K-12 resources and funding opportunities globally.
Technician Training
Enable people to get trained and re-trained for solar jobs.

GLOBAL SOLAR CONNECTION INITIATIVE
Online training to combat sense of isolation due to COVID-19

Bright Solar Futures - workforce training program for high school and underemployed youth


ACTION: Develop global program for solar installer training and certification

Guidelines
College and Post-Graduate Education

Develop and expand skills for solar jobs requiring higher education credentials

Solar Academy combines practice and theory in the areas of solar and building physics, scientific computing, material science, business, law, sociology, architecture and urban planning.  [https://www.univ-smb.fr/solaracademy/](https://www.univ-smb.fr/solaracademy/)

International Symposium on Renewable Energy Education (ISREE)

- Explores the latest developments and new initiatives in renewable energy education worldwide;
- Identifies the best ways to train future leaders in renewable energy;
- Highlights how best to prepare citizens to work toward a healthy environment and better future;
- Encourages research centres to collaborate in educating and training highly-skilled professionals in renewable energy.

ACTION: Develop platforms and other mechanisms for sharing information and expertise on all program areas across countries.
Professional Development

Provides solar basics to help solar enabling professionals better incorporate solar into their work.

Solar Enabling Industries: Real estate professionals, lawyers, emergency responders, city and regional planners, financial advisors, policy makers …..

ACTION: Develop and/or expand programs for specific industries -Webinars, Workshops, Forums, Publications, Networking-
Public Education
Increases solar adoption and support

ACTION: Expand innovative, engaging programs like tours and infographics to communities worldwide.
THANK YOU

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