

# Then



B.S. in Soil Resources and Communications

Worked on projects related to local natural resource planning. Co-authored 2 technical reports for the Center for Land Use Ed.



At the Marathon Co. Landfill I developed their first regional zero waste plan. At the NRCS where I was part of a team that analyzed soil profiles for carbon sequestration.

# For a while now



Provide regional pollution prevention technical assistance with a focus on waste management. Led projects that include creating Integrated Solid Waste Plans and Sustainability Plans.



Manage the University of Illinois waste management operation, which includes a recycling processing facility as well as six hauling truck fleet.

# Recently



Started PhD program in 2019.

Study the relationship of efficacy and equity in local climate change action.

# 2017-



Started PhD program in 2019.

Study the relationship of efficacy and equity in local climate change action.

# Climate Change Action

- Who is doing the work?
- How are they being developed?
- What do they contain?
- Are they working?
- What alternative models?

- How do you evaluate their effectiveness?
- How are we measuring impacts?
- What innovations and processes are being celebrated?
- How are these strategies affecting urban systems?
- Why are they not working?
- What are we not measuring?
- For whom are they working?
- Who is invited vs who is excluded

## Efficacy concerns

Ensuring we reach our targets

## Equity concerns

Across regions  
Across time

# Efficacy concerns

Juggling multiple  
priorities

# Equity concerns

Across regions  
Across time

# Efficacy concerns

Juggling multiple  
priorities

*Reimagining this  
relationship by  
incorporating  
justice*

# Equity concerns

Across regions  
Across time

# Why?

Climate change is more than just about emissions

Implementation of plans that incorporate social equity considerations is higher

Nationally social equity is missing from local sustainability agenda

Transitions + transformations

## More reading?

Cohen, S., Eimicke, W., & Miller, A. (2015). *Sustainability policy: hastening the transition to a cleaner economy*. John Wiley & Sons.

Feiock, R. C., Krause, R. M., Hawkins, C. V., & Curley, C. (2014). The integrated city sustainability database. *Urban Affairs Review, 50*(4), 577-589.

Knuth, S. (2020). All that is Solid.... *City*.

Liao, L., Warner, M. E., & Homsy, G. C. (2020). When Do Plans Matter? Tracking Changes in Local Government Sustainability Actions from 2010 to 2015. *Journal of the American Planning Association, 86*(1), 60-74.

Liao, L., Warner, M. E., & Homsy, G. C. (2019). Sustainability's forgotten third E: what influences local government actions on social equity? *Local Environment, 24*(12), 1197–1208.

Portney, K. E. (2013). *Taking sustainable cities seriously: Economic development, the environment, and quality of life in American cities*. Cambridge, MA: MIT Press

Saha, D., & Paterson, R. G. (2008). Local government efforts to promote the “Three Es” of sustainable development: Survey in medium to large cities in the United States. *Journal of Planning Education and Research, 28*(1), 21–37.

Svara, J. H., Watt, T. C., & Jang, H. S. (2013). How are US cities doing sustainability? Who is getting on the sustainability train and Why? *Cityscape, 15*, 9–44

Thanks!

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# **Greentown: Climate Crisis Just Transition: Movement to a New Economy**



**Nakhia C. Morrissette**  
**Central Region Director & Counsel**

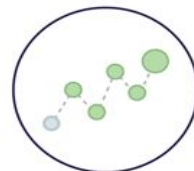


# Overview

- About SEIA
- U.S. Solar Diversity Statistics
- SEIA's Goals
- Illinois Legislative Efforts
- Q&A

September 28, 2020

[www.seia.org](http://www.seia.org)

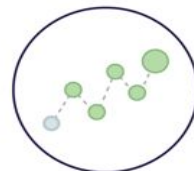


# About SEIA

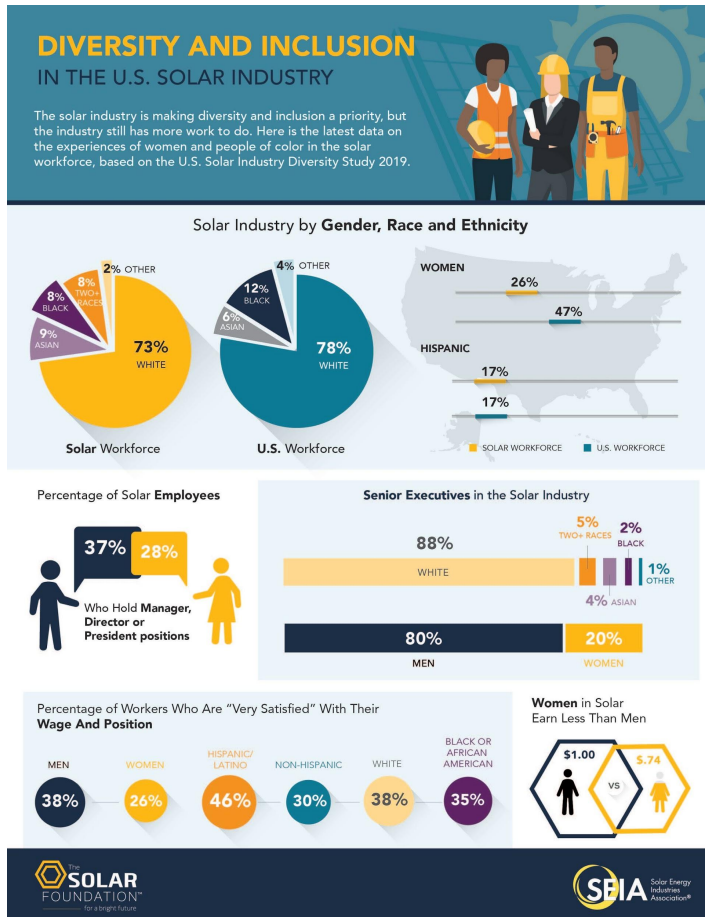
- The Solar Energy Industries Association (SEIA®) is the national trade association of the U.S. solar energy industry, which now employs more than 250,000 Americans.
- We represent all organizations that promote, manufacture, install and support the development of solar energy.
- SEIA works with its 1,000 member companies to build jobs and diversity, champion the use of cost-competitive solar in America, remove market barriers and educate the public on the benefits of solar energy.
- SEIA values diversity and a just transition to clean energy through the development of tangible, measurable goals to train, integrate and empower the workforce at all levels with a focus on minority and underrepresented communities.

September 28, 2020

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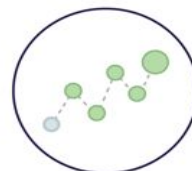
# 2019 U.S. Solar Diversity Study



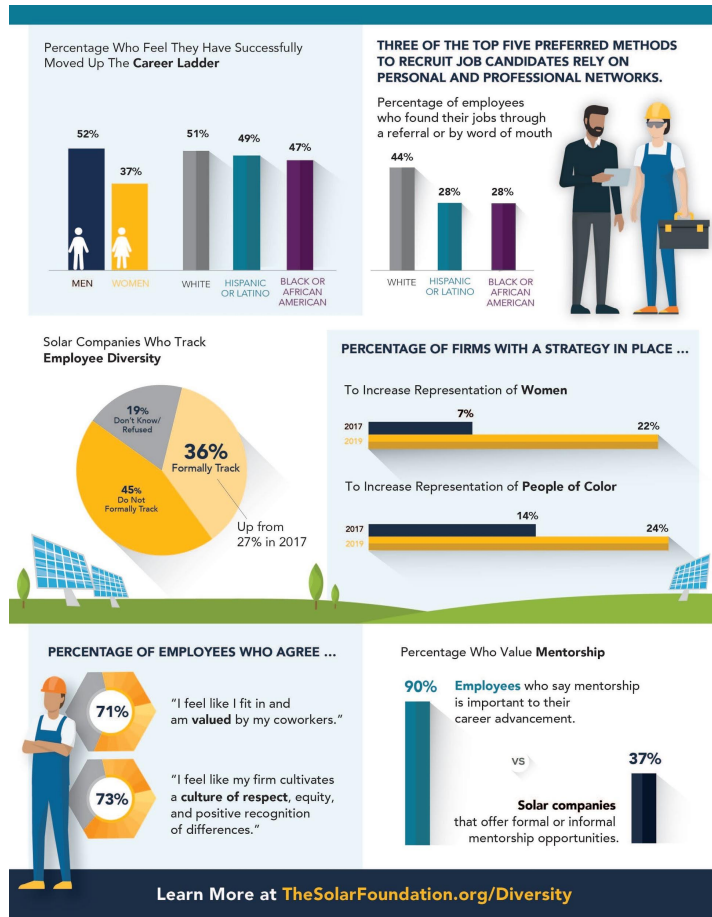
- The U.S. Solar workforce is 73% white; 26% women
  - Senior executives are 80% white; 20% women (4% Asian, 2% Black)
  - Women earn .74 cents for every dollar earned by men
- DEI must be integrated into industry corporate culture
  - Focus on top down inclusive hiring, paths to promotion and workforce retention, and pay equality

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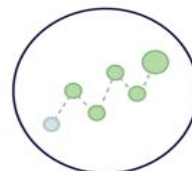
# 2019 U.S. Solar Diversity Study



- 36% formally track workforce diversity; up from 2017
- >20% companies have formal strategy to increase representation for women and people of color; up from 2017
- >70% of employees feel valued/the cultivation of respect, equity and positive recognition of differences

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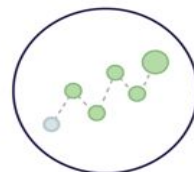
# SEIA's Goals

Ideally, our work will lead to:

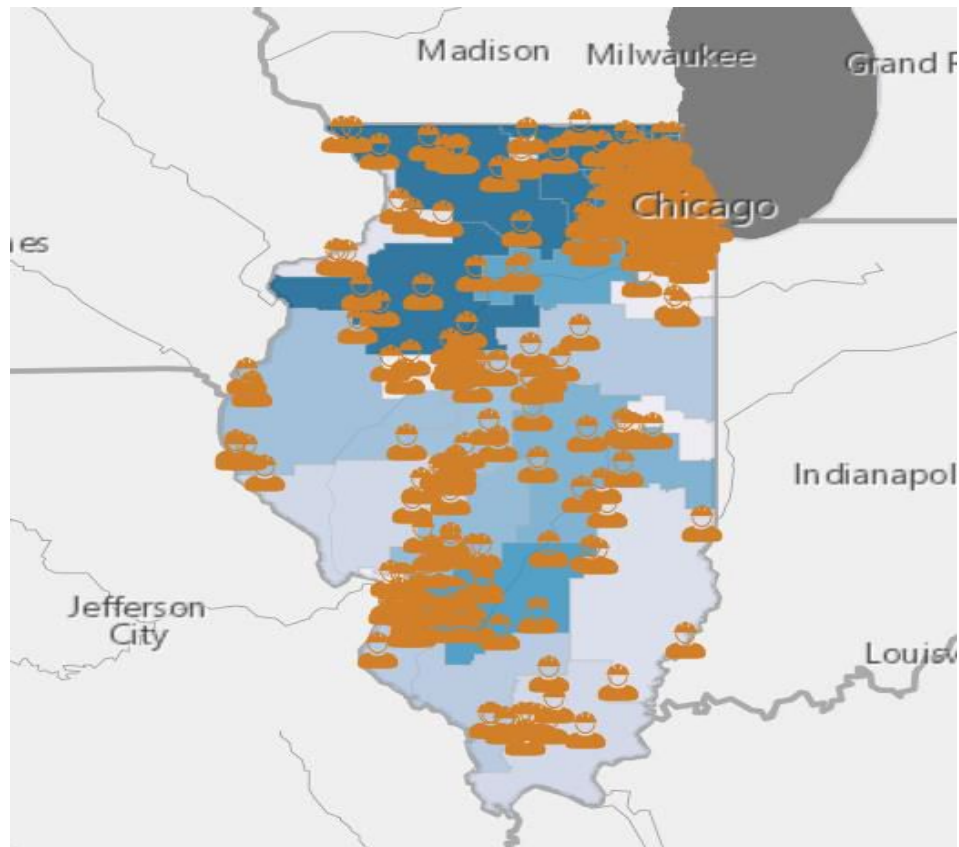
- A more diverse and inclusive solar industry
- Internal changes to SEIA operations
- Increased SEIA Board diversity
- Increased support for students, businesses and transitioning workforce, with focus on minority and underrepresented communities
- A new slate of equity and justice focused policy priorities for the solar industry that increases access to opportunities we create and solar energy itself for communities left behind

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# Illinois



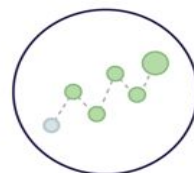
7,000 newly approved wind/solar projects in every legislative district



Photos of Illinois Solar Employees Hired in 2019 – more info at [www.pathto100.net/people](http://www.pathto100.net/people)

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[www.seia.org](http://www.seia.org)

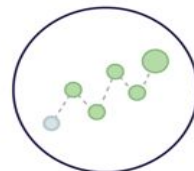


# Path to 100 Act – DEI Transitioning

- Expand existing structures
- Produce tangible inclusion in and access to the renewable energy market for:
  - Individual workforce training to support new and transitioning workers
  - Increased diversification of workforces, suppliers and contractors
  - Increased entrance of diverse firms from other industries
  - Establishing new businesses and entrepreneurs
  - Developing location appropriate renewable resources in all IL communities

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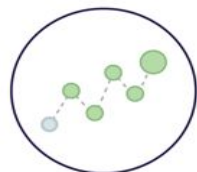


# Path to 100 Act – Workforce Development and Entrepreneurship

- Supplier Diversity. Establish searchable database of diverse suppliers, vendors and subcontractors for the renewable energy industry
- Worker Pipeline. Establish state agency hub for tracking all renewable workforce training efforts and act as contact for both job seekers and employers
- Entrepreneurship. Small Business Development Centers to incorporate renewable sector

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# Path to 100 Act – D&I for IL Renewable Energy Industry

Diversity Mandate. Required pre-certification to participate in state renewable incentive programs:

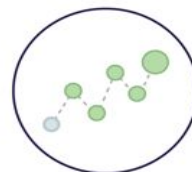
- Supplier Diversity Goal: % of construction and vendor contracts/jobs created
- Hiring Diversity Goal: % of company direct hires

Compliance can be met through:

- **Diversity.** % workforce that are diverse
- **MWBE.** % of work attributed to contractors/subcontractors with diversity certifications
- **Training Programs.** % workforce graduates from training programs
- **Just Transition.** % workforce that are displaced fossil fuel workers
- **Returning citizens.** % workforce that are returning citizens

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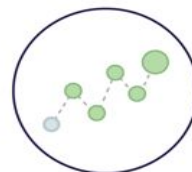
# Path to 100 Act – Access for Underserved Families

Solar is a powerful tool to help consumers save money. Low income consumers should benefit from solar participation.

- Community Solar Access. Utilities can provide low-income subscriber to enroll in projects
- Solar for All. Ensure funds will be available for increased access to Solar for All families

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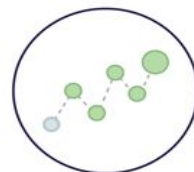
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**Thank you!**  
**Contact:**  
**[nmorrissette@seia.org](mailto:nmorrissette@seia.org)**

**September 28, 2020**

**[www.seia.org](http://www.seia.org)**



# Lyte Solar Training Program

## Lessons Learned



GreenTown Conference - September 30, 2020





Chicago-based **OAI** is a nationally recognized pioneer in workforce development. Our work opens career pathways; fuels business success; promotes health, safety, and the environment; and supports community development. For more than 40 years, we've been delivering real economic benefit to individuals, employers, and communities across the country.

[www.oaiinc.org](http://www.oaiinc.org)



# Future Energy Jobs Act (FEJA)

Senate Bill 2814 is one of the most significant pieces of energy legislation ever to pass the Illinois General Assembly. It was passed during the December 2016 Session.

**Stimulate** job creation with new investments in energy efficiency, renewables, and energy innovation

**Enhance** Illinois' position as a leader in the clean energy economy, attracting investment and new companies to Illinois

**Preserve** Illinois' low energy rates for residents and businesses

# Overview

OAI aims to train 160 low-income students including returning citizens, minorities, current and former foster children, women and veterans living in and around environmental justice communities in solar photovoltaic (PV) systems for solar employment generated by the Future Energy Jobs Act (FEJA) over the 4-year period (2018 – 2021).



# ComEd Solar Consortium





# Goals (2018 – 2021)

OAI will offer a total of 8 cycles of training to cohorts of 20 students each to reach the goal of training 160 students over a four-year period.

Outreach and Recruitment #	# Selected to participate in Tryouts	Participants Enrolled in the Program	Graduates Completing Program	Graduates Placed in Employment
1300	780	160	136 (85%)	116 (85%)

# Accomplishments

(as of 9/22/20)

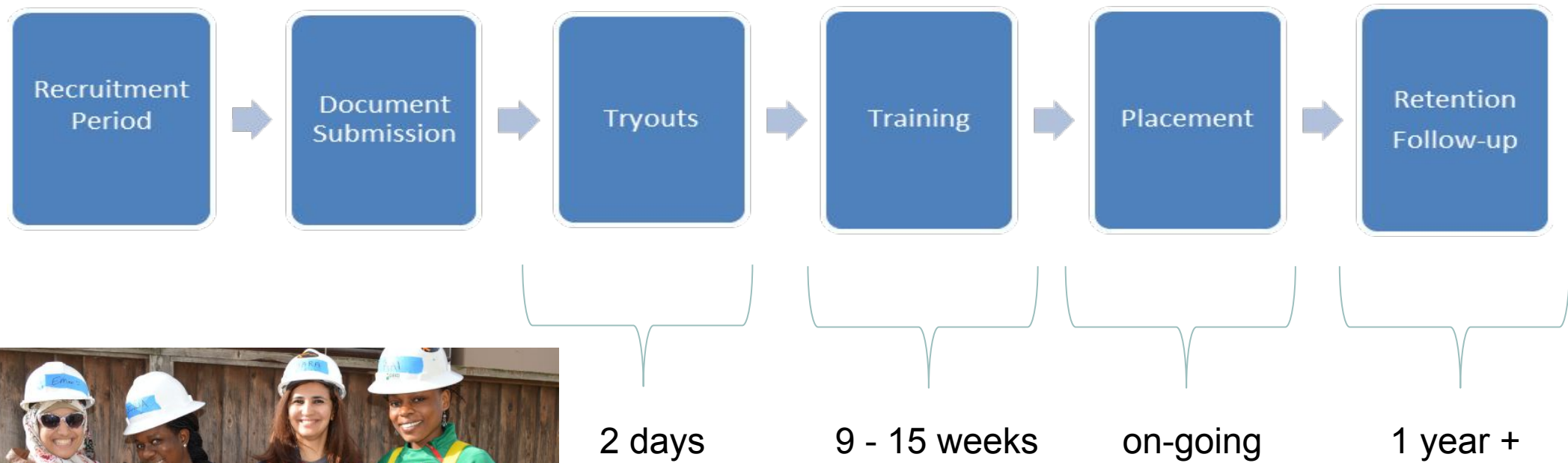
OAI has offered 7 cycles of training to a total of 136 students over the past three years.

Outreach and Recruitment #	# Selected to participate in Tryouts	Participants Enrolled in the Program	Graduates Completing Program	Graduates Placed in Employment
705	275	154	136 (88%)	117 (86%)

## Goals (2018-2021):

Outreach and Recruitment #	# Selected to participate in Tryouts	Participants Enrolled in the Program	Graduates Completing Program	Graduates Placed in Solar-related Positions
1300	780	160	136 (85%)	116 (85%)

# Implementation Flow



# Career Guidance and Power Skills Training

- Non-technical courses include: financial empowerment, cultural diversity, conflict resolution, critical thinking, fitness and nutrition, time and stress management, goal setting, and self-esteem.
- Career Guidance includes: resume building, interviewing, building relationships, individual employment plan development, and overcoming ex-offender employment barriers.
- Power Skills courses also include: Environmental Literacy, Computer Literacy, Industry Math, and Industry Spanish.
- A minimum of **88 hours** of training is offered to each trainee.

# Career-Specific Technical Training

- Solar Installer: Electricity Basics, Solar Energy Fundamentals, PV Module Fundamentals, System Components, Site Assessment & Evaluation, PV System Sizing Principles, PV System Electrical Design, PV System Mechanical Design, Performance Analysis, Maintenance and Troubleshooting
- MREA Site PV Solar Site Assessor,
- Basic Carpentry, First Aid/CPR, OSHA 10-hour, OSHA Fall Protection, HAZWOPER 40-hour, and Forklift Operations.
- This component includes classroom and hands-on lab training totaling approximately **232 hours**.




# Outputs

- Provide career guidance and placement of all graduates into an initial job.
- Track and conduct follow-up of all participants for one year beyond the end of each training cohort.
- Conduct training that applies current thinking in adult education principles and methods—blended student-centered learning, participatory and cooperative learning, hands-on exercises and experiential learning.
- Provide curricula that includes two components: Career Guidance/ Power Skills Training and Career-Specific Technical Training.
- Prepare students for entry-level employment as a designer, installer, troubleshooter, and maintenance technician for solar-photovoltaic power systems.
- Prepare students to perform successfully on the NABCEP PV Associate Exam.



Photovoltaic Site  
Assessment Certificate

A program of the  mrea

# Lessons Learned

- Community Engagement: marketing/education, combating miseducation and distrust
- The jobs **MUST** be there: establish projects, bidding processes in a timely fashion





**Thank you!**

**OAI, Inc.**  
Kentina Kellum  
Program Manager  
[kkellum@oaiinc.org](mailto:kkellum@oaiinc.org)

[www.oaiinc.org](http://www.oaiinc.org)





# Cynthia Myers, Solar Installer, WeThink Electric



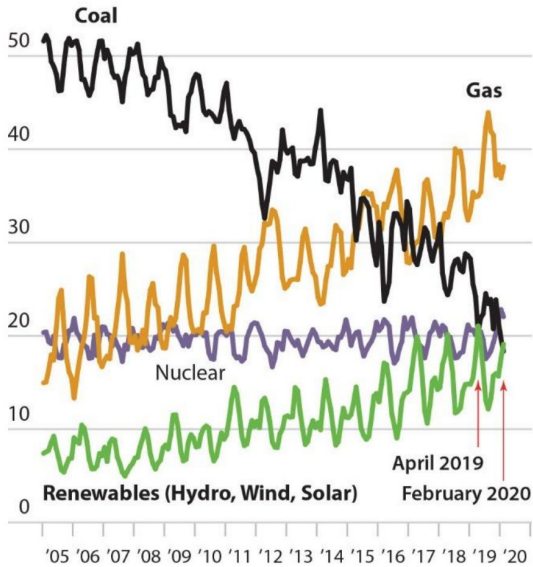


# The Changing Coal Economy

## Fuels Used for Electricity Generation

Share of net generation, monthly. Renewable generation includes utility-scale solar, wind and hydropower. In April 2019, for the first time, renewable generation surpassed coal—and it happened again in February.

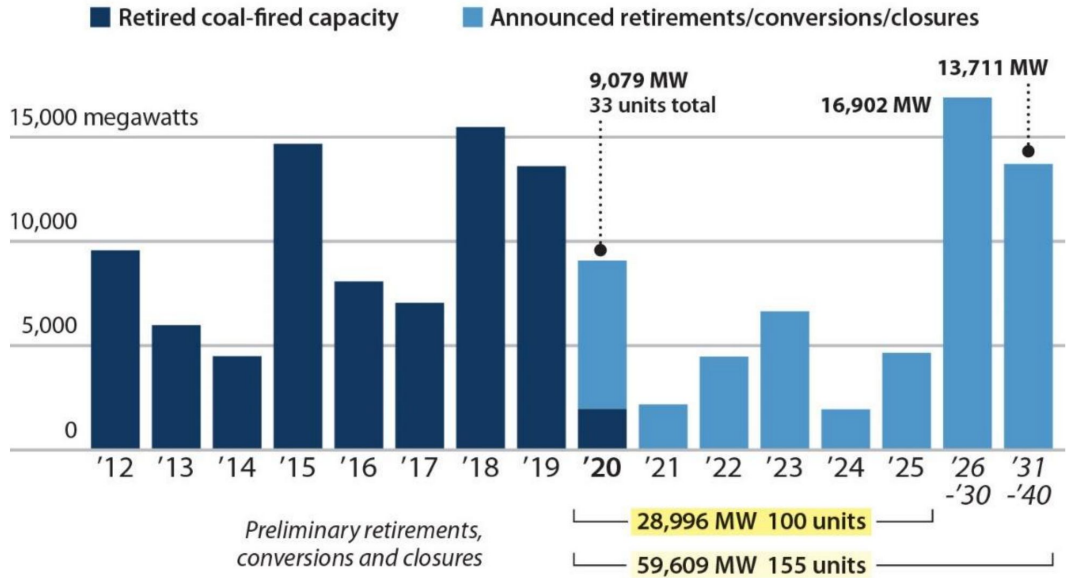
60% share of net generation (utility-scale)



Source: Energy Information Administration

## Coal-Fired Electric Generation Retirements and Conversions

One hundred coal-fired units are set to be retired between 2020 and the end of 2025, with a total capacity of 29 gigawatts, according to utility announcements, with another 31 GW scheduled to close between 2026–2040.



Sources: EIA; PJM; S&P Global; IEEFA research (2017-2040)

As of March 18, 2020

Source: U.S. Coal Outlook 2020, Institute for Energy Economics and Financial Analysis (IEEFA)

# What this can mean for communities

## Layers of Distress

- Loss of jobs
  - Direct job loss (and resulting income loss)
  - Indirect job loss
- Erosion of the tax base
- Long or complex remediation process necessary for future development
- Loss of identity
- Community trauma

# About the JTF



The Just Transition Fund works to build resilient communities by advancing economic solutions that are equitable, inclusive, and sustainable.

JTF approaches the problem as a **hybrid -**

## Part Grantmaker

We target our investments on communities **economically hardest hit** with the most vulnerable populations

*Our TECHNICAL ASSISTANCE complements and enhances our DIRECT INVESTMENTS, continually responding to the needs of the field*

## Part Technical Assistance

We engage as a neutral partner, **working with a range of stakeholders**



# What we mean by Just Transition

- Strengthen and diversify economies
- Promote inclusive and equitable economic growth
- Build resilience of workers
- Accelerate the development of low-carbon solutions
- Promote systems change and scale



*Context matters.  
Solutions vary.  
Think holistically.*

# Example: Tonawanda, New York

- **Background:** History of legacy environmental issues, coal plant closing impacting numerous stakeholders
- **Needs:** Planning, collaboration among groups with disparate views
- **Outcomes:** Drew national attention and funding and created successful economic development plan in politically charged setting. First in the country tax -base replacement legislations
- **Next Steps:** Implement the plan and maintain momentum to sustained outcomes



# Resources for the field

While each community context is unique, there are shared characteristics that most transitions follow. The JTF has create a series of resources for community-based organizations and local governments that can be used to guide your transition planning processes.

## Blueprint for Transition

[www.justtransitionfund.org/resources/getting-started](http://www.justtransitionfund.org/resources/getting-started)



### Finding Federal Funding

There are many resources that can support your transition efforts. This document outlines some common sources of funding that communities have used to plan, implement and sustain their transitions.

### Understanding Trauma and Adversity

Planning for a just transition can include helping communities manage the psychosocial aspect of economic change so that the community can thrive over time. This document includes an overview of trauma and adversity in some coal communities.