# Wisconsin's K-12 Energy Education Program (KEEP)

# 2023 Calendar Year: January-December Scope of Work and Accomplishments

Reporting period January 1 – December 31, 2023 Submitted in support of the KEEP contract to the 2023 funding agencies:













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# Vision, Mission and Goal

#### Wisconsin Center for Environmental Education

#### Vision

The Wisconsin Center for Environmental Education envisions an actively engaged, educated population who create and maintain sustainable human and natural communities.

#### Mission

The Wisconsin Center for Environmental Education provides leadership and resources to advance education for sustainable human and natural communities.

# Wisconsin K-12 Energy Education Program (KEEP)

The Wisconsin Center for Environmental Education supports energy education through the KEEP program. KEEP provides professional development and training, youth and community engagement, networking and communications, consultation and support, and curriculum and resources to Wisconsin's K-12 public and private districts, schools, educators, youth, and nonformal K-12 educators within six funded Utility service territories.

KEEP leverages teacher education to increase energy literacy of K-12 youth through energy education opportunities in Wisconsin's K-12 community. This approach aims to improve informed energy decision-making among Wisconsin citizens contributing to statewide energy savings and securing a healthy economic and environmental future for Wisconsin communities.

#### Vision

KEEP envisions communities making informed energy choices now and for a sustainable future.

#### Mission

KEEP initiates and facilitates the development, dissemination, implementation, and evaluation of energy education programs within Wisconsin schools.

#### Goal

KEEP leverages teacher education to improve and increase energy literacy in Wisconsin's K-12 schools as a means of contributing to statewide energy savings.

#### Website

http://www.KEEPprogram.org

## **Partnership Program**

The Wisconsin K-12 Energy Education Program (KEEP) is a partnership between Alliant Energy, Madison Gas and Electric, We Energies, Wisconsin Public Service, WPPI Energy and Xcel Energy and the Wisconsin Center for Environmental Education within the College of Natural Resources at the University of Wisconsin-Stevens Point.

# **Outreach Goal for Calendar Year 2023**

This goal was estimated based on the average of the previous three years of participation for educators and for youth.

ind for youth				
		Educators	Youth	
		388	2,494	
Funding Agency	% Budget			
We Energies	42%	163	1,047	
Alliant Energy	18%	70	449	
Wisconsin Public Service	17%	66	424	
Xcel Energy	10%	39	249	
WPPI Energy	7%	27	175	
Madison Gas and Electric	6%	23	150	

# **Scope of Work for Calendar Year 2023**

KEEP's work is structured within the following program areas by objectives and strategies.

# **Professional Development & Training**

# **Objectives:**

- 1. Provide educators energy-related knowledge, skills, and resources.
- 2. Increase educators' integration of acquired knowledge and resources into their curriculum.
- 3. Increase utilization of school buildings and grounds as teaching tools.
- 4. Inspire educators to teach about energy concepts including global climate change.
- 5. Provide educators with energy career pathways, connections, and resources.

# **Strategies:**

- Develop, deliver, and evaluate non-credit courses, workshops and in-services which support professional development priorities for educators, schools, and school districts in participating utility service territories.
  - Minimum of 4 offerings that encourage educators to use their school building, onsite renewable energy systems and/or real-world energy data to integrate energy concepts and activities.
  - Minimum of 4 offerings that provide educators basic energy concepts and teaching methods.
  - Minimum of 2 offerings that encourage educators to integrate exploration of energy concepts outdoors.
  - Minimum of 2 KEEP Kits train-the-trainer workshops to introduce the new Solar Tilt
     Kit and companion lessons and review legacy kits.
  - Support the facilitation of at least 2 Wisconsin KidWind workshops.
  - Support the facilitation of 1 Wisconsin Public Service SolarWise for Schools workshop.
  - Leverage energy educators for their classroom expertise in professional development and training.
  - Support DPI Energy Career Pathway by providing Career and Technical Education training to at least 3 CTE consortia.

#### **Metrics of Success:**

- Number of educators trained
- List of participating schools/districts
- Number of courses, workshops and/or in-services conducted
- Number of students reached indirectly through classroom integration of curriculum and resources (estimated at 60 students per educator trained)

# **Evaluation:**

- Assess and implement changes based on results of program evaluation measures.
  - Administer an evaluation at the end of each professional development or training.

 Conduct a post-professional development annual survey of all participants and prepare summary report (available upon request).

# **Youth & Community Engagement**

# **Objectives:**

- 1. Inspire youth to learn about energy concepts.
- 2. Provide youth energy-related knowledge and life skills training.
- 3. Facilitate youth participation in energy, STEM, and career-based experiences.
- 4. Empower youths' application of acquired knowledge and skills into their school communities and at home.
- 5. Increase youth's awareness of energy career opportunities.
- 6. Increase youths' awareness of utility funding agencies' goals and initiatives.

## Strategies:

- Develop, deliver, and support direct youth engagement programs which enhance learning priorities for youth in participating utility service territories.
  - Minimum of 4 school and/or community events promoting energy education to youth and families.
    - Share pre- and post-activities with registered educators
  - Minimum of 12 schools participating in youth energy challenges, including, but not limited to, KidWind Challenge, Renew Our Schools energy competition, and SkillsUSA Facilithon competition.
  - o Co-facilitate the annual Wisconsin KidWind Challenge.
  - Co-facilitate the WPS Solar Olympics.
- Provide coaching, leadership development and funding opportunities for minimum of 4 student green teams advancing clean energy solutions in school buildings and districts.
- Provide at least 2 virtual energy career exploration opportunities for youth.

## **Metrics of Success:**

- Number of youth engaged
- Number of educators supported
- List of participating schools/districts
- Number of programs delivered
- Number of students reached indirectly through integration of curriculum and resources (estimated at 60 students per educator supported)

## **Evaluation:**

 Assess and implement changes based on feedback from participating educators and youth.

# **Lessons, Activities & Teaching Tools**

# **Objectives:**

- 1. Provide energy education lessons, activities, teaching tools for educators and youth.
- 2. Convey important Wisconsin energy concepts identified within conceptual frameworks, academic standards, and energy literacy principles.
- 3. Reflect current energy and utility industry and K-12 educational system trends.
- 4. Continue to improve accessibility of activities and lessons through digitization and integration of equity, climate change themes, and clean energy careers.

## **Strategies:**

- Develop, distribute, and evaluate lessons and activities and other teaching tools which support subject matter and teaching method priorities for educators, schools, and school districts in participating utility service territories.
  - Curate selected resources and standards-based activities or lessons to complement professional development offerings.
  - Evaluate need for new and/or revised activities or lesson materials.
  - Develop and integrate multi-media resources, including videos related to clean energy careers, teaching climate change, exploring energy outdoors, and solar dashboard technology.
  - o Enhance connections to equity, energy careers, and climate change.
  - Increase accessibility of and improve ability to track use of digital assets and resources.
- Support maintenance and distribution of energy-related kits as part of the Wisconsin Center for Environmental Education Resource Lending Library and host sites.
  - Offer minimum 8 different kits, including Energy Concepts Kit, Energy Audit Kit, Take-home Energy Audit Kit, Hand-crank Generator, Pedal Power Energy Bike, Sun Oven, Watts Up Meter Kit, Wind Kit, and Solar Tilt Kit.
- Support partner resource development and distribution efforts to increase energy career awareness and career-based learning experiences for K-12 youth and their educators.

#### **Metrics of Success:**

- Number of educators directly supported
- Number of times lessons accessed, as available
- List of schools/districts using KEEP kits
- Number of students reached through classroom integration of curriculum and resources (when unreported estimated at 60 students per educator supported)

#### **Evaluation:**

- Assess and implement changes based on results of program evaluation measures.
  - Administer feedback survey to borrowers of KEEP kits.
  - Administer feedback survey to educators and newsletters to subscribers for evaluation of key KEEP lessons.
  - Conduct a post-professional development annual survey of all participants and prepare summary report (available upon request)

# **Networking & Communications**

# **Objectives:**

- 1. Serve in a leadership role representing KEEP and funding agencies to increase capacity for energy education statewide.
- 2. Connect educators, energy professionals, and other partners, organizations, and agencies with one another and KEEP increasing effectiveness for energy education, workforce development, and clean energy solutions through expanded partnerships.
- 3. Leverage energy and educator professional networks to provide relevant resources and experiences for educators, youth, administrators, and facility personnel.
- Provide high quality communication and marketing efforts to attract and retain relationships with educators and stakeholders to increase program awareness and statewide outreach.

## **Strategies:**

- Facilitate minimum 3 networking opportunities, including at partner conferences and events.
- Offer minimum 4 presentations and/or exhibits at professional conferences, events, and meetings.
- Publish minimum 7 digital newsletters during academic year, as well as other relevant email marketing to subscriber list.
- Recognize and reward minimum 2 exemplary energy educators through coordination of the Energy Educator of the Year Award program.
- Stay connected with energy and education professionals and trends through participation and leadership roles in professional networks and associations.
- Maintain and train a cohort of ad hoc instructors.
- Maintain KEEP website and social media presence.
- Seek out and respond to requests for contribution to external publications reaching new and target audiences.

## **Metrics of Success:**

- Number of educators engaged
- Number of sessions delivered
- List of partners engaged
- Reach of digital newsletters (subscribers and open rate)
- List of published articles authored by KEEP

#### **Evaluation:**

 Assess and implement changes based on feedback from participating educators and partners.

# **Consultation & Support**

# **Objectives:**

- 1. Build and maintain relationships with educators and administrators to support integration and implementation of energy education across disciplines and grade levels.
- 2. Assist schools and districts to grow a culture of sustainability related to energy-savings practices, goals, policies, and facilities.
- 3. Assist utility funding agencies and partners to increase capacity for energy and STEM career-based learning experiences for youth.
- 4. Work with utility funding agencies to understand and broaden awareness of their goals and initiatives through K-12 education and engagement strategies.

# **Strategies:**

- Respond to requests for assistance in all program areas, including, but not limited to requests from:
  - o Educators, schools, and districts
  - Student green teams
  - Utility funding agencies and their key collaborators
  - Partners

#### **Metrics of Success:**

- Number of energy educators supported
- List of schools/districts supported
- List of partners engaged

#### **Evaluation:**

- Assess and implement changes based on results of program evaluation measures.
  - Administer feedback survey to key partners for evaluation of KEEP contributions towards partner energy education goals.
  - Conduct a post-professional development annual survey of all participants and prepare summary report (available upon request)
- Engage funding agencies in quarterly and annual meetings to assess program progress toward meeting program objectives.
- Provide half-year and annual reporting to funding agencies.

# **External Factors**

Notable external factors limiting the proposed deliverables:

- The ability to reliably trace the utility service territory for every participating educator and youth.
- The ability to quantify and gather identifying information from viewers accessing online curriculum and resources.
- Staffing challenges faced by school districts, which limit the ability of teachers to attend trainings because of the critical shortage of substitute teachers statewide.

# **KEEP Staff January - December 2023**

When fully staffed, KEEP is coordinated by three full-time staff and a part-time director with support from four part-time staff with split positions in the Wisconsin Center for Environmental Education (WCEE) at UW-Stevens Point.



Anna Haines WCEE Director



Samara Hamzé Program Manager, (Full-time KEEP)



Wendy Stelzer Energy Educator (Full-time KEEP)



Heather Phelps WCEE Resource Specialist (75% KEEP)



Laureanna Raymond-Duvernell Energy Educator (80% KEEP)



Jamie Mollica
WCEE Outreach Support
+ Administration
(40% KEEP)



Matthew Brown WCEE Communications (50% KEEP)



Gina Smith WCEE Curriculum Specialist (50% KEEP)

In 2023 KEEP had five UWSP students helping with a variety of projects:
Emma Chelberg: Website Development
Audrey Nagorsen: Graphic Design Internship
Jacob Tepsa, Logan Chelberg: Office Assistants

# **Accomplishments for Calendar Year 2023**

Reporting period January 1 – December 31, 2023

KEEP outreach and programs offered **220 programs**, directly engaging **1,873 educators** and **9,665 youth**.

An additional **5,580 students** are estimated to have been supported indirectly through utilization of KEEP curriculum and resources.

## Overview:

The 2023 calendar year brought several positive changes to KEEP. During this time KEEP hired the first Program Manager who has direct oversight of the KEEP budget and supervises the KEEP staff. After much staff turnover during the pandemic, KEEP returned to having a full staff. In January the Wisconsin Center for Environmental Education hired a Communications Coordinator whose position is shared between KEEP and LEAF (forestry education). Additionally, we hired an outreach specialist who had previously provided ad hoc professional development services for the program. Both positions have added to KEEP's capacity to reach a wider audience. The communications coordinator led the transition to KEEP's new website (KEEPprogram.org) which allows for more than an updated look: navigation is smoother, archival documents have been removed from the website, and KEEP's energy education lessons are searchable. The new outreach specialist is focused on providing professional development and maintaining a full calendar between PD events and fostering relationships for future workshops.

With a complete staff, KEEP can confidently plan as we continue to leverage multiple partnerships which enrich the energy education experience of both teachers and students who participate in our programming. These partnerships include statewide partners like DPI, multiple CESA's, Wisconsin Energy Workforce Consortium, Focus on Energy, the Technical Colleges, and Slipstream. Partnerships beyond Wisconsin include Climate Generation, Renew Our Schools, KidWind, and MeterHero. In a time of an unprecedented energy transition, these partnerships allow KEEP to remain relevant to Wisconsin educators, ensuring that KEEP is a one-stop shop for their energy education needs. All KEEP staff are familiar with our partnerships and can connect educator inquiries to appropriate resources to support their pedagogical needs. While Wisconsin was one of the first states to have implemented energy education at the statewide level, we are now a leader for other states, demonstrating an effective statewide framework for energy education.

KEEP's vision remains communities making informed energy choices now for a sustainable future. KEEP staff strive to infuse all of our work with lenses that highlight Energy Careers, Diversity Equity and Inclusion, and Climate Change in all areas of our energy education work. With continued support from the Utility funders, KEEP staff are proud to share accomplishments and highlights of our work completed in 2023.

# Highlights:

## **Professional Development & Training**

- Interest for energy education workshops remains steady from faculty of teacher preparation
  programs across Wisconsin. KEEP provided Energy Education for Pre-Service Educator trainings for
  314 pre-service teachers (undergraduates pursuing teaching licenses) from 6 technical colleges and
  universities.
- Offered 11 sessions at teacher conferences with 137 participants.
- Provided one-on-one on-site training to **27 teachers** through Renew Our Schools and **15 teachers** through MeterHero virtual training.
- Continued to offer 2 on-demand energy focused professional development courses that meet DPI Environmental Education stipulation.
- KEEP professional development workshops included participants from **30 organizations or centers** which provide non-formal education for K-12 students.
- During Fiscal Year 2023 (July 1, 2022 June 30, 2023) KEEP received a 78.6% response rate on 254 evaluations of 8 PD opportunities:
  - o 99% of evaluations would grade the PD as excellent (87%) or good (12%)
  - 94% of respondents strongly agree or agree that their personal knowledge about the training topic increased
  - 94% of respondents strongly agree or agree that their knowledge about how to teach the topic increased.

Anonymous comments from participants include the following:

- "I like how interactive the GeoInquiries are. I already implemented the "Scramble for Africa" one into my World History and plan to add the Solar Energy one (modified in my final project) to my Sociology class"
- "I didn't know there were so many ways to teach this concept and I liked the different and fun variety of activities."
- "I think that it is extremely important that students know where their energy comes from. I definitely plan on using some of these activities in the future"
- "This was a wonderful and fun hands-on training. I thoroughly enjoyed the activities and felt comfortable sharing my personal thoughts in a safe space for learning."
- "I found I enjoyed that it was self-paced and easily accessible. I very much enjoyed how data was already collected so that I didn't have to spend a lot of time doing the sourcing myself."
- "This was awesome, highly recommend"

#### Youth & Community Engagement

- Renew Our Schools 19 Wisconsin schools competed in the Renew our Schools Energy
  Conservation Competition. KEEP staff, in partnership with Focus on Energy ® advisors, visited each
  school. 353 students directly engaged in school-wide energy conservation and learned about
  careers in clean energy through the participation in this competition. During the six-week
  competition schools reduced their electricity consumption by an average of 3.4%.
- Green Team Mini-Grants Students across Wisconsin shared their ideas and received consultation and mentoring for strategies to reduce schools' carbon footprints during **29 consultations**. Ultimately, **13 student green teams** received mini-grants to implement their projects. In fall 2023, **5 green teams** submitted mini-grant proposals.

- Chippewa Falls High School Green Team, the first recipient of a KEEP mini-grant, received national recognition from NEED and traveled to Washington DC to receive "School of the Year" and "National Rookie of the Year" awards.
- KEEP staff collaborated with the Wisconsin Energy Workforce Consortium for two career fairs: High School Energy Career Fair which reached students 21 educators and 259 students from 22 high schools in western Wisconsin and Oshkosh 8<sup>th</sup> Grade Career Fair where KEEP staff engaged with 350 students who attended that event.
- KEEP partnered with CESA 12 to provide a virtual energy career exploration event that was attended by **63 classrooms**, reaching **1260 elementary students**.
- Shawano and Waupaca County Youth Conservation Field Days: KEEP provided a solar career exploration for **264 students** who participated in these day-long outdoor conservation events.
- KEEP provided logistical support and judging for two energy competitions, KidWind Challenge and WPS Solar Olympics. These events reached **177 students** who were mentored by **37 educators.**
- KEEP staff were invited to give the keynote address at UWSP STEAM Days. During those events, staff interacted with **642 students** through hands-on energy education activities.
- **10 students** at Menominee Indian High School received in-class energy education instruction from KEEP staff.

## Curriculum & Resources

- In tandem with the development and publication of the new KEEP website, KEEP lessons were migrated into a searchable platform. Teachers can now find and filter lessons by an array of fields including: grade level, title, energy focus area, and lesson format.
- As technology has shifted, KEEP staff decided to use Google as the platform for sharing new
  lessons and revising current lessons. This format is the one most widely used by K-12 teachers
  and allows KEEP to seamlessly share ready-to-use slide decks with educators, rather than having
  them download static PDF's of lessons. In tandem with this decision, all KEEP google lessons
  have been curated and migrated into an Enterprise Google shared drive, providing a greater
  level of security for KEEP's digital assets.
- KEEP staff have leveraged external partnerships to disseminate KEEP lessons across multiple
  platforms. Several KEEP lessons are now featured on the website TeachWisconsinClimate.org; a
  hub coordinated by DPI and used statewide for sharing lessons and other teaching resources
  with Wisconsin K-12 educators.
- KEEP partnered with Slipstream to offer a full day webinar on Sketchbox, a free building energy
  modeling tool available to educators. Educators attending the training submitted ready-to-use
  lessons that have been shared statewide via DPI's WiseLearn portal.
- KEEP continues to promote the <u>Clean Energy Careers Slipstream-KEEP video series</u> comprised of 9 videos. These have had a total of 5,496 views, with Solar Energy Careers and Electric Vehicles videos receiving 45% of total views.
- KEEP kits continue to have strong demand. 52 KEEP energy education kits were requested from KEEP and used by 270 educators, reaching 5,206 students; this reflects a 40% increase for number of students reached over this time last year. To increase access to educators, 8 KEEP Energy Kits are located at host sites around Wisconsin. These kits were checked out by 31 educators and reached an additional 1,371 students. Host sites include: Reflo, Keep Greater Milwaukee Beautiful, Brown County STEM Center, Forest County Potawatomi, CESA 3, and CESA 10.

• To meet demand, KEEP staff assembled a second Solar Tilt Kit and developed a Solar Load kit educators can request to augment the Solar or Wind kits. The file for printing 3D solar tilt stands will be available on the KEEP website in January 2024, providing access to this teaching resource.

## **Networking & Communications**

- KEEP published 11 newsletters that were sent to approximately 5700 subscribers. On average 39.2% of recipients opened the newsletters, with 0.9% click rate.
- KEEP has a new website that went live in September 2023. The website was developed in WordPress. The majority of the website architecture was completed by a UWSP student employee!
   The new website streamlines navigation and places KEEP's resources: professional development, lessons, and activities, and KEEP Energy Kits front and center.
- KEEP's social media totaled nearly 12,000 impressions across three platforms Facebook, Instagram and LinkedIn yielding more than 1,350 engagements likes, shares, comments, clicks, and reposts in 2023. KEEP's YouTube video library had 1,186 views in 2023. KEEP also continues to promote the 9 videos in the Clean Energy Careers series it developed with Slipstream, which have 5,606 total views since they were first posted in 2021.
- KEEP staff continue to be actively engaged in the Wisconsin Energy Workforce Consortium, providing consultation and support for Mobile Learning Lab at K-12 energy career events.
- Wisconsin's statewide education associations created abundant opportunities to engage with formal educators. KEEP interacted with 538 educators at 30 events, including energy education resources table or presented at the following conferences:
  - Wisconsin Association of Schools Boards (WASB)
  - Wisconsin Technical Education Association (WTEA)
  - Wisconsin Society of Science Teachers (WSST)
  - Wisconsin Association of Agricultural Educators (WAAE)
  - Wisconsin Rural Schools Alliant (WiRSA)
  - Midwest Environmental Education Association (hosted by WAEE)
  - CTE Summit (hosted by CESA 5, co-presented with Alliant Energy)
- KEEP staff directly reached educators and students through resources tables and student events at the following events:
  - o Renewable Energy Summit
  - WPS Solar Olympics
  - KidWind Challenge
  - Madison Green and Healthy Schools Conference
  - o MREA Energy Fair
  - Milwaukee Green and Healthy Schools Conference
  - Dane County High School Climate Conference

#### **Consultation & Support**

- KEEP and WCEE staff concluded equity coaching with CORE, a service of CESA 10. This year-long
  coaching has helped staff gather baseline data related to KEEP's demographic reach throughout
  Wisconsin and helped us set stepwise goals for increasing equity in access to all KEEP resources
  throughout Wisconsin.
- With the DPI Energy Career Pathway completed, KEEP has maintained the partnership created during the pathway's development to facilitate adoption and implementation of the pathway in all 7 career regions of the state. Partners include Department of Public Instruction, CESAs, Wisconsin

- Technical College System, Wisconsin Energy Workforce Consortium. Regions that will be customizing the pathway during 2024 are Milwaukee 7, NEW North, and North Central.
- KEEP continues as a statewide consultant regarding K-12 energy education for partners including summer school programs, Wisconsin Academy, and schools that have recently installed solar PV. In this capacity, KEEP staff have provided consultation to **47 educators** in **61 consultation events**, a 4-fold increase over the number of consultations provided during this reporting period in 2022.

# **Outreach Impact for Calendar Year 2023**

Reporting period January 1 – December 31, 2023

By Program Area	Programs/Events	Educators	Youth	Total Reach	Schools/ Colleges
TOTAL	220	1,873	9,665	11,538	261^^^
Professional Development & Training	39	613	-	613	
Youth & Community Engagement^	76	268	4,459	4,772	
Networking & Communications	31	538	-	538^^	
Consultation & Support	64	91	-	91	
Curriculum & Resources*	10	93	-	93	
KEEP Kits Checked out by Educators & other Orgs**	52	270	5206	5,476	

<sup>\*</sup>For trackable curriculum resource projects only. An additional **2,220 students** are estimated to have been supported indirectly through utilization of KEEP curriculum and resources.

<sup>\*\*</sup>These numbers are self-reported to KEEP by the educators requesting the kits. Number of kits are not included in the Total number of KEEP Programs & Events

<sup>^</sup> One virtual career event was attended by 63 classrooms. Utility data collected only for Youth.

<sup>^^</sup> An additional 312 interactions with non-educators at events are not included in this total

<sup>^^^</sup> An additional 29 non-school educational organizations (CESA's, nature centers, etc.) interacted with KEEP in 2023

By Funding Agency	CY2023 GOAL			CY2023		
	Educators	Youth	Total	Educators	Youth	Total
TOTAL	388	2,494	2,882	1,873	9,665	11,538
Alliant Energy	70	449	519	135	1,353	1,488
Madison Gas and Electric	23	150	173	95	238	333
We Energies	163	1,047	1,210	339	2,624	2,963
WPPI Energy	27	175	202	71	1,402	1,473
Wisconsin Public Service	66	424	490	646	2,483	3,129
Xcel Energy	39	249	288	131	1,168	1,299
Unspecified**	-	-	-	456	397	853

<sup>\*\*</sup> The ability to reliably trace the utility service territory of all educators and youth participating in events is outside of KEEP's control. This number includes 268 educators who participated in Youth-focused events.

# **Upcoming for Calendar Year 2024**

# For Educators

- NEW Energy Concepts Kit. This kit will provide the hands-on energy education tools to support the 4<sup>th</sup> Grade NGSS-aligned Energy Education Lessons that are in development
- NEW Inquiry-based lesson for KEEP's Solar Load Kit
- Two online asynchronous courses:
  - Energy Education: Concepts & Practices. This course will be revised and updated during 2024.
  - Solar Energy Potential: Dashboard Technology as a Teaching Tool for Inquiry
- Energy Education for Pre-service Educators trainings
- Renewable Energy Education workshops for both wind energy engineering and solar energy lessons using KEEP Energy Kits: Wind, Solar Tilt, and Solar Loads Kits.
- Energy Efficiency Education delivered at schools participating in Renew Our Schools competition, and at partner organizations hosting KEEP Energy Audit Kits.
- Energy Educator of the Year recognition ceremony at WAEE.
- Collaboration with educators to present KEEP lessons and resources at professional conferences.
- Building off the success of assisting Bubolz Nature Preserve to develop energy education lessons and activities for school groups who visit their location, KEEP will support other non-formal education centers to develop and disseminate energy education resources that will reach local K-12 communities.
- Continued revision of key KEEP lessons and improved tracking of KEEP lessons that are shared on partner websites

#### For Youth

- Renew Our Schools energy competition, in partnership with Focus on Energy.
- Refinement of Green Teams Mini-Grants process, recruitment of new teams to participate, and continued mentorship of prior awardees.
- Exhibiting and presenting at regional or local school and community events.
- Wisconsin KidWind Challenge, in partnership with Wisconsin Energy Institute and Solar Olympics, in partnership with WPS.
- MeterHero residential energy-savings curriculum, in partnership with STEMhero.

# **Energy Careers Programming**

- Continued collaboration with DPI, WEWC, and CESAs to promote STEM-Energy Career Pathway
- Quarterly networking meeting for energy careers advocates.
- Continued promotion and education in support of DPI Energy Career Pathway through integration into all KEEP professional development and presentations at conferences.

- Support for the DPI Career Regions that are customizing the Energy Career Pathway in 2024.
- Planning consultation, promotion, and presentation at proposed Annual Energy Career Fairs that will be hosted at high schools in WPS and Xcel Energy service areas.
- Continued financial and logistical support for Cool Careers Day, elementary energy career exploration.