Wisconsin K-12 Energy Education Program (KEEP)

2021 Calendar Year
Scope of Work and Accomplishments

*Reporting period January 1 – December 31, 2021*

Submitted in support of the KEEP contract to the 2021 funding agencies:

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<td>Xcel Energy</td>
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**Vision, Mission and Goal**

**Wisconsin Center for Environmental Education (WCEE)**

**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 KEEP. KEEP provides professional development and training, hands-on resources, curricular support, youth engagement activities, and recognition opportunities to Wisconsin’s K-12 public and private districts, schools, educators, youth, and non-formal 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.
## Budget for Calendar Year 2021

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<td>Fringe on Academic Staff</td>
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<td>Professional Services</td>
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<td><strong>Grand Total</strong></td>
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### Outreach Goal for Calendar Year 2021

This goal was estimated based on the average of the previous three years of participation for educators (Scope: Professional Development & Training) and for students (Scope: Youth & Community Engagement).

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<tr>
<th>Funding Agency</th>
<th>Educators</th>
<th>Youth</th>
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<td>Wisconsin Public Service</td>
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<td>WPPI Energy</td>
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<td>165</td>
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<tr>
<td>Madison Gas and Electric</td>
<td>18</td>
<td>141</td>
</tr>
</tbody>
</table>
Scope of Work for Calendar Year 2021

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

Objective:
1. Enhance energy literacy through professional development activities delivered to pre-service, formal and non-formal educators.

Strategies:
• Offer KEEP professional development in participating utility service territories.
• Maintain data collection and evaluation of all KEEP professional development offerings.
• Support teacher and school staff attendance at energy-related industry and education events to build skills.
• Provide leadership and consulting services to school districts focused on integration of energy education across disciplines and grade levels.
• Provide energy efficiency education consulting services to schools and community organizations, supporting energy-saving educational campaigns guided by the sustainability goals of their school districts.
• Maintain and train a cohort of ad hoc instructors.

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.
  o Administer an evaluation at the end of each professional development offering.
Objective:
1. Empower students to be ambassadors for responsible energy behaviors, applying what they learn at school with their families at home and in their communities, thereby contributing to increased energy efficiency and savings.

Strategies:
• Provide classroom presentations and workshops, lesson plans, and hands-on experiences engaging students in PK-12 classrooms.
• Partner with program funders and stakeholders including utility representatives and sustainability partner programs to provide information and experiences to teachers and their students focused on energy efficiency and conservation, renewable energy, energy-saving behaviors and energy careers.
• Contribute energy education experiences at school/community events involving PK-12 students, schools, and their communities to advance education for sustainable human and natural communities.

Metrics of Success:
• Number of youths 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.
Objective:
1. Promote energy education and training through conferences and other professional events by staffing exhibits or providing presentations.
2. Provide updates, announce opportunities, and share resources regarding utility services and other resources relevant to the energy education network in Wisconsin.

Strategies:
- Partner with energy businesses, industry and organizations to provide information and experiences to teachers and their students.
- Partner with utilities, energy management providers, industry and organizations to provide information and access to school district administration and facilities personnel focused on energy management tools, services and technical assistance.
- Support schools in their utilization of renewable energy systems.
- Grow the renewable energy in schools’ network across Wisconsin.
- Provide leadership and administration for the Energy Educator of the Year Awards program.

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.
Objectives:
1. Build and maintain relationships with educators and administrators to support integration and implementation of energy education curriculum 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.
• Respond to requests for assistance from student green teams.
• Respond to requests from schools in the Wisconsin Green & Healthy Schools program.
• Respond to requests for support from utility companies and their key collaborators, including, but not limited to:
  o Alliant Energy
  o Madison Gas and Electric
  o We Energies
  o Wisconsin Public Service
  o WPPI Energy
  o Xcel Energy
  o Focus on Energy
  o Slipstream
  o Wisconsin Energy Workforce Consortium

Metrics of Success:
• Number of individuals at schools supported
• List of schools/districts supported
• List of partners engaged

Evaluation:
• Assess and implement changes based on results of program evaluation measures.
  o Conduct a post-professional development annual survey 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.
**Objective:**

1. Develop and disseminate high quality energy education resources including digital curriculum and activities, multimedia resources, and hands-on energy tools as part of the WCEE Trunks & Kits lending program.

**Strategies:**

- Provide energy-related teaching resources for educators; track usage and evaluate effectiveness.
- Continue to maintain, revise, and update educational materials and curriculum resources to remain relevant through educational system changes and shifts in energy trends.

**Metrics of Success:**

- Number of educators supported
- List of schools/districts supported
- 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 trunks and kits.
KEEP Staff for Calendar Year 2021

The KEEP program is coordinated by three full-time staff and a part-time director and four part-time staff with split positions inside the Wisconsin Center for Environmental Education (WCEE) or Center for Land Use Education (CLUE) at UW-Stevens Point.

Anna Haines
WCEE Director

Annie Baker
Program Coordinator

Karen Blaha
WCEE Administrator

Jenny Christopher
WCEE Communications

Samara Hamzé
Energy Educator

Jamie Mollica
WCEE Outreach Support

Melissa Ruether
Energy Educator

Gina Smith
WCEE Resources
Accomplishments for Calendar Year 2021

Reporting period January 1 – December 31, 2021

KEEP outreach and programs engaged 1,712 educators and 3,600 youth.

An additional 65,160 students are estimated to have been supported indirectly through utilization of KEEP curriculum and resources.

Professional Development & Training

• 398 educators participated in 23 professional development workshops made possible by KEEP potentially impacting 23,880 students.

Highlights:

• KEEP offered 2 online courses, 4 virtual workshops, and 3 in-person workshops for educators to choose from in 2021, totaling 23 individual trainings.
  - Virtual workshops included: Pre-service Teacher Education, MeterHero, Exploring Solar Dashboards, and Exploring Energy Outdoors.

• Fall 2021 welcomed the return of in-person workshops. KEEP safely facilitated 5 in-person workshops for 40 educators.

• Exploring Solar Dashboards (Lower Elementary). Part 1 of an upcoming five-part virtual workshop series exploring solar generation data and dashboards in the classroom, each featuring a Wisconsin classroom teacher as co-presenter.

• Evaluation:
  - 97% would recommend KEEP professional development to a colleague
  - 83% plan to use KEEP resources
  - 38% self-reported increase in interest in teaching about energy
  - Note: Evaluation data is collected on an academic year basis. These results are based on a 57% survey response rate during the 2020-2021 academic year.

• Testimonials:
  - “I found the lessons and activities to be very useful. I really like being able to teach concepts and skills that are applicable to every student. It is exciting for the students to apply what they learn in their daily lives.”
  - “Working hands on was very beneficial as it's important to include mendable scaffolds for students to learn hands-on.”
  - “I think the visual representation about energy topics is very effective with kids, because it takes complex issues and makes them accessible. I think it relates well with their personal lives as well.”
  - “I really enjoyed looking at the watts for an item in my house because it really put into perspective how much I spend on energy.”
  - “…the information and the stories that the facilitator brought to the meeting is what really brought it to life and made it special.”
“After this workshop, I feel much more confident in teaching future students about energy use and the effects of energy use in the environment!”

Youth & Community Engagement

- 1,435 students and 386 educators from 47 schools participated in 19 direct student engagement programs.

**Highlights:**

- **Nakuru Day School Biogas Project Virtual Field Trip.** KEEP hosted a virtual international field trip attended live by 56 educators and students who interacted directly with student leaders from Nakuru Day Secondary School in Kenya sharing the success of a student-led biogas project. 43 educators (representing schools in all six utility service territories) registered to receive the event recording.

- **Exploring a Climate Change Solution Virtual Field Trip.** KEEP facilitated a virtual statewide field trip as part of the Wisconsin Science Festival attended live by 95 students and their educators.

Networking & Communications

- 645 educators attended 21 sessions presented by KEEP staff at conferences, events, or other trainings potentially impacting 38,700 students.

**Highlights:**

- KEEP published 10 newsletters, subscribed to by approximately 5,500 educators and averages a 26% open rate, sharing stories of schools and teachers leading energy efficiency and education efforts, as well as promoting KEEP offerings.

- Digital newsletters and published articles authored by KEEP
  - KEEP Newsletter Archive
  - Coming Clean: Six Steps to Your District’s Clean Energy Transition
  - Energy Action Month with Green & Healthy Schools

- Wisconsin’s statewide education associations created abundant opportunities to engage virtually with formal educators. KEEP provided sessions reaching 153 formal K-12 teachers during the following annual conferences:
  - Innovative Schools Network (ISN)
  - Teacher Educators Network for Environmental Education (TENFEE)
  - Wisconsin Agricultural Educators Association (WAAE)
  - Wisconsin Association for Environmental Education (WAEE)
  - Wisconsin Council for Social Studies (WCSS)
  - Wisconsin Society for Science Teachers (WSST)
  - Wisconsin Technological Education Association (WTEA)

- Recognition: Annual Energy Educator of the Year award serves to recognize and support exemplary energy educators, highlighting the strong statewide network. 2021 recipients include:
  - Nathan Mahr and Chris Mitchell, Oregon High School
  - Michael Moore, WPS SolarWise for Schools
  - Debra Weitzel, City of Middleton Sustainability Committee and Middleton High School (retired)
Consultation & Support
- 31 educators and/or administrators and 36 students from 17 schools/districts received direct mentoring support and resources for student-led energy-savings projects at their school.
  - By engaging with administrators, directors of curriculum and facilities, school boards, and student green teams, KEEP renewed efforts to assist schools and districts to grow a culture of sustainability and energy-savings integrated throughout curriculum, practices, goals, policies, and facilities. Critical to this effort, KEEP helped to identify and establish monthly meetings with a network of statewide partners, contractors, and advocates responsible for advancing clean energy in Wisconsin’s K-12 schools. KEEP aims to be considered a trusted, central hub for information for both schools and partners.

Curriculum & Resources
- 252 educators from 39 schools accessed hands-on or digital curriculum and resources from KEEP potentially impacting 2,580 students.

Highlights:
- KEEP is excited to share the development of three educational video and lesson series, including:
  - Clean Energy Careers video resource. Slipstream partnered with KEEP, WPPI Energy, and Xcel Energy to create a video and lesson series for high schools students highlighting careers opportunities to consider within the energy sector.
  - Solar Dashboard lesson series. Features four lessons for lower elementary through high school educators to learn how to access, navigate, and interpret data and information found in solar PV generation dashboards; includes introduction to ArcGIS Online maps.
- Focus on Energy blog series. In partnership with Focus on Energy, KEEP was invited to author blog posts for educators and families, including:
  - Earth Month – Exploring Energy Outdoors. Over 169 unique page views were tracked by Focus on Energy during the release of four posts throughout April.
  - Energy Awareness Month – Clean Energy Careers. Over 130 unique page views were tracked by Focus on Energy during the release of four posts through October.
- The WCEE Trunks & Kits lending program was managed in a limited capacity (based upon the severity of the pandemic) from January – June, and then expanded to regular operation from July – December.

COVID-19 Impact
- Working within fluctuating State and University guidelines based upon the severity of the pandemic (including working remotely and not permitted to travel), KEEP staff continue to meet program goals by providing high quality energy education for schools, educators, and youth through adaptation of outreach methods and curriculum resources; supporting requests for modified in-person, physically-distanced, and virtual learning experiences.
# Outreach Impact for Calendar Year 2021

Reporting period January 1 – December 31, 2021

## By Program Area

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<tr>
<th>Program Area</th>
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<td>398</td>
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<tr>
<td>Youth &amp; Community Engagement</td>
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<td>386</td>
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<td>47</td>
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<td>5</td>
<td>252</td>
<td>2,129</td>
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*For trackable curriculum resource projects only. An additional 65,160 students are estimated to have been supported indirectly through utilization of KEEP curriculum and resources.

## By Funding Agency

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<td>TOTAL</td>
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<tr>
<td>Unspecified**</td>
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**The ability to reliably trace the utility service territory for every participating educator and youth is periodically outside of KEEP’s control.
Alliant Energy

Reporting period January 1 – December 31, 2021

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<tr>
<th></th>
<th>Educators</th>
<th>Youth</th>
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*An additional 2,400 students are estimated to have been supported indirectly through utilization of KEEP curriculum and resources.

Professional Development & Training
- 18 educators from 10 schools participated in 10 professional development workshops potentially impacting 1,080 students.
  - Communities impacted: Beaver Dam, Beloit, DeForest, Mauston, Oakfield, Oregon, Rosholt, Verona, Waupun

Highlight:
- Educator teams of 3 from SAGES School for Agricultural and Environmental Studies (Waupun) and Oregon School District (Forest Edge Elementary and Rome Corners Intermediate) attended Exploring Solar Dashboards (Lower Elementary) virtual workshop.

Youth & Community Engagement
- 224 students and 83 educators from 9 schools participated in 6 youth or community events offered by KEEP.
  - Communities impacted: Cambridge, Darlington, Delevan, Endeavor, Mauston, Nekoosa, Oxford, Prairie du Chien
  - Events participated: KidWind Challenge, MeterHero, UWSP College Days for Kids, Wisconsin Science Festival

Highlight:
- 80 students from Gordon Olson Middle School (Mauston) participated in MeterHero’s project-based explorations investigating residential energy usage through electricity, gas and water meters at home.
- 3 students from Alexander Middle School (Nekoosa) participated virtually in UW-Stevens Point College Days for Kids programming with KEEP and UWSP GIS Center.
- Supported student teams from Darlington High School and Mauston High School as part of the 2021 Wisconsin KidWind Challenge.
- Alliant Energy Foundation and KEEP teamed up for the Wisconsin Science Festival to provide an energy-themed storytime book (Running on Sunshine: How Does Solar Energy Work) and KEEP lessons to libraries statewide. 12 libraries received resources and presented community programs during Energy Awareness Month in October to an estimated 216 adults and 383 youth.
Communities impacted (statewide): Antigo, Augusta, Chippewa Falls, Delavan, Endeavor, North Lake, Oxford, Prairie du Chien, Stratford, Westboro, Westby, Winchester

Networking
- Recognition: Energy Educator of the Year 2021 recipients include Nathan Mahr and Chris Mitchell, science teachers at Oregon Middle School
  - Celebrated at: Wisconsin Association for Environmental Education (WAEE) statewide Awards Ceremony, and locally 15 attendees at Oregon School District Board Meeting

Consultation & Support
- 19 students and 7 educators from 5 schools/districts received direct mentoring support and resources for student-led energy-savings projects at their school.
  - Communities impacted: Baraboo, Cambridge, Mauston, Parkville, Pittsville

  Highlight:
  - Ongoing collaboration with community organization Powered Up Baraboo to support energy efficiency efforts at Jack Young Middle School and Baraboo High School.
  - Ongoing support for Mauston High School student-led green team to plan school building energy audits to be conducted before and after referendum-funded energy efficient building improvements take place.

Curriculum & Resources
- 7 educators from 4 schools accessed hands-on or digital curriculum and resources from KEEP potentially impacting 300 students.
  - Communities impacted: Baraboo, Milton, Orfordville, Ripon
  - Resources accessed: Nakuru Day School Biogas Project Virtual Field Trip

  Highlight:
  - 5 educators registered to receive the Nakuru Day School Biogas Project international field trip recording, including Milton Middle School, Parkview Jr/Sr High School (Orfordville), Ripon High School, and Baraboo High School.
## Madison Gas and Electric

Reporting period January 1 – December 31, 2021

<table>
<thead>
<tr>
<th></th>
<th>Educators</th>
<th>Youth</th>
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<tr>
<td><strong>TOTAL</strong></td>
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<tr>
<td>Professional Development &amp; Training</td>
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<tr>
<td>Curriculum &amp; Resources</td>
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*An additional $6,7800 students* are estimated to have been supported indirectly through utilization of KEEP curriculum and resources.

### Professional Development & Training
- 20 educators from 8 schools participated in 8 professional development workshops potentially impacting 1,200 students.
  - Communities impacted: Madison, Middleton, Monona Grove

**Highlight:**
- 12 troop leaders from the Badgerland Girl Scout Council received STEM-energy training tailored to the *Think Like an Engineer* journey.
- KEEP, in partnership with the Wisconsin Energy Institute, hosted a KidWind Educator Workshop at UW-Arboretum (Madison) for 6 educators.

### Youth & Community Engagement
- 18 students and 13 educators from 1 school participated in 2 youth or community events offered by KEEP.
  - Communities impacted: Unable to pinpoint
  - Events participated: Badgerland Girl Scout Council, KidWind Challenge

**Highlight:**
- 7 girl scout troops from the Badgerland Council built solar cookers and received renewable energy and climate change education with KEEP and MGE educator Jim Jenson.
- Supported student teams and volunteered as judge and panel moderator as part of the 2021 Wisconsin KidWind Challenge.

### Networking
- **Recognition:** *Energy Educator of the Year* 2021 recipient: Debra Weitzel, City of Middleton Sustainability Committee
  - Celebrated at: Wisconsin Association for Environmental Education (WAEE) statewide Awards Ceremony and locally 86 attendees at meetings of: City of Middleton Common Council, City of Middleton Staff Meeting, and Sustainability U library program
- KEEP newsletter dedicated *October issue* to exclusively MGE content. The newsletter was sent to approximately 5,500 educators and had an open rate of 20.9%
Consultation & Support

- 6 educators from 2 schools/districts received direct mentoring support and resources for student-led energy-savings projects at their school.
  - Communities impacted: Middleton Cross Plains Area School District, Dane County Clean Energy Group
  - Highlight:
    - Supported student green teams during development of a Sustainability Resolution for the Middleton Cross Plains Area School District (which was adopted by the Board of Education in March 2021).

Curriculum & Resources

- 9 educators from 4 schools accessed hands-on or digital curriculum and resources from KEEP potentially impacting 360 students.
  - Communities impacted: Madison, Seneca
  - Resources accessed: Nakuru Day School Biogas Project Virtual Field Trip, Sun Oven
  - Highlight:
    - 6 educators registered to receive the Nakuru Day School Biogas Project international field trip recording, including The Country School (Madison) and Seneca High School.
Reporting period January 1 – December 31, 2021

<table>
<thead>
<tr>
<th></th>
<th>Educators</th>
<th>Youth</th>
<th>Schools</th>
</tr>
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<tbody>
<tr>
<td>TOTAL</td>
<td>188</td>
<td>622</td>
<td>43</td>
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<tr>
<td>Professional Development &amp; Training</td>
<td>102</td>
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*An additional 7,560 students are estimated to have been supported indirectly through utilization of KEEP curriculum and resources.

**Professional Development & Training**
- 102 educators from 23 schools participated in 12 professional development workshops potentially impacting 6,120 students.
  - Communities impacted: Appleton, Brookfield, Fredonia, Kenosha, Marshall, Marshfield, Milwaukee, Saukville, Sussex, Waukesha, West Allis, Whitefish Bay

**Highlight:**
- 78 pre-service teachers from Carroll University (Waukesha), Waukesha County Technical College, and Fox Valley Technical College (Appleton) participated in KEEP energy education trainings.
- KEEP, in partnership with the Wisconsin Energy Institute, hosted a KidWind Educator Workshop at Vincent High School (Milwaukee) for 12 educators.

**Youth & Community Engagement**
- 202 students and 47 educators from 8 schools participated in 5 youth or community events offered by KEEP.
  - Communities impacted: Elkhorn, Fremont, Glendale, Greenville, North Lake, Stratford, Waupaca, Weyauwega
  - Events participated: MeterHero, KidWind Challenge, UWSP College Days for Kids, Weyauwega-Fremont Field Day, Wisconsin Science Festival

**Highlight:**
- 52 students from Glen Hills Middle School (Glendale) participated in MeterHero’s project-based explorations investigating residential energy usage through electricity, gas and water meters at home.
- Supported student team from Elkhorn High School as part of the 2021 Wisconsin KidWind Challenge.
- North Lake and Stratford libraries received an energy-themed storyline book and KEEP lessons and presented community programs during Energy Awareness Month in October to an estimated 36 adults and 64 youth (sponsored by Alliant Energy Foundation as part of the Wisconsin Science Festival).
• 79 students learned about the drinking water cycle from KEEP staff during the on-site Weyauwega-Fremont Water Studies Field Day.

Networking
• 15 educators attended 2 sessions presented by KEEP staff at conferences, events or other trainings potentially impacting 900 students.
  Highlight:
  • 9 guidance counselors attended a Professional Learning Day hosted by Northeast Wisconsin Technical College (NWTC) about energy careers. NWTC faculty represented KEEP programs and shared resources.
    ▪ Communities impacted: Bonduel, Gillett, Kaukauna, Pulaski

Consultation & Support
• 10 students and 1 educator from 2 schools/districts received direct mentoring support and resources for student-led energy-savings projects at their school.
  • Communities impacted: Milwaukee, Waukesha, Wauwatosa
  Highlight:
  • Mentored the Waukesha South High School green team during a brainstorming session to identify and plan a sustainability action project for the club.
  • Clement Avenue School (Milwaukee), Starms Early Childhood (Milwaukee) were honored with 2021 U.S. Department of Education Green Ribbon School Award.

Curriculum & Resources
• 23 educators and 410 students from 10 schools accessed hands-on or digital curriculum and resources from KEEP potentially impacting an additional 540 students.
  • Communities impacted: Germantown, Mequon, Milwaukee, Niagara, Princeton, Union Grove, Wauwatosa Wind Point, Wisconsin Rapids
  • Resources accessed: Nakuru Day School Biogas Project Virtual Field Trip, Pedal Power, Energy Audit Kit
  Highlight:
  • 9 educators registered to receive the Nakuru Day School Biogas Project international field trip recording, including Union Grove High School, The Prairie School (Wind Point), Wauwatosa Montessori School, St Joseph Academy (Milwaukee), Princeton Middle School, Steffen Middle School (Mequon), and Lincoln High School (Wisconsin Rapids).
  • 400 students and 10 educators in the Milwaukee area utilized the Pedal Power bicycle hosted by Keep Greater Milwaukee Beautiful.
Wisconsin Public Service

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*An additional **22,800 students** are estimated to have been supported indirectly through utilization of KEEP curriculum and resources.

**Professional Development & Training**

- 239 educators from 15 schools participated in 9 professional development workshops potentially impacting 14,340 students.
  - Communities impacted: Chetek-Weyerhaeuser, Custer, Green Bay, Oshkosh, Plover, Sheboygan Falls, Stevens Point, Wausau

**Highlight:**

- 217 pre-service teachers from UW-Stevens Point and UW-Oshkosh participated in KEEP energy education trainings.
- 7 science teachers from 5 elementary schools in the Stevens Point Area School District participated in solar dashboard training at Boston School Forest.

**Youth & Community Engagement**

- 761 students and 129 educators from 16 schools participated in 9 youth or community events offered by KEEP.
  - Communities impacted: Antigo, Cleveland, Plover, Stevens Point, Waupaca, Wausau, Winchester
  - Events participated: Boston School Forest Field Day, KidWind Challenge, UWSP College Days for Kids, UWSP Earth Week, UWSP Museum of Natural History Storytime, Waupaca County Conservation Field Day, Wisconsin Science Festival

**Highlight:**

- 517 students from 9 Stevens Point area elementary schools received solar energy education programming during annual field trip to Boston School Forest (Stevens Point).
- 106 students and 34 educators from Waupaca Middle School participated in outdoor-based energy education with KEEP staff at the Waupaca County Conservation Field Day hosted by Golden Sands RC & D.
- 30 students from Waupaca Learning Center attended live virtual field trip as part of the Wisconsin Science Festival, Exploring a Climate Change Solution.
Antigo and Winchester libraries received an energy-themed storytime book and KEEP lessons and presented community programs during Energy Awareness Month in October to an estimated 59 adults and 95 youth (sponsored by Alliant Energy Foundation as part of the Wisconsin Science Festival).

Networking

- 133 educators attended 6 sessions presented by KEEP staff at conferences, events or other trainings potentially impacting 7,980 students.

  Highlight:
  - 35 guidance counselors attended a Professional Learning Day hosted by Northeast Wisconsin Technical College (NWTC) about energy careers. NWTC faculty represented KEEP programs and shared resources.
    - Communities impacted: Brillion, Brussels, Coleman, Denmark, De Pere, Green Bay, Lena, Kewaunee, Reedsville
  - Recognition: Energy Educator of the Year 2021 recipient: Michael Moore, WPS SolarWise for Schools Coordinator
    - Celebrated at: Wisconsin Association for Environmental Education (WAEE) statewide Awards Ceremony

Consultation & Support

- 3 educator from Davis Childcare Center (Oshkosh) received direct mentoring support toward their Green & Healthy Schools recognition application.
- Helen R. Godfrey University Child Learning and Care Center (Stevens Point) was honored with 2021 U.S. Department of Education Green Ribbon School Award.

Curriculum & Resources

- 153 educators and 695 students from 14 schools accessed hands-on or digital curriculum and resources from KEEP potentially impacting an additional 480 students.
  - Communities impacted: Cleveland, Green Bay, Oshkosh, Peshtigo, Plover, Stevens Point, Wausau
  - Resources accessed: Nakuru Day School Biogas Project Virtual Field Trip, Sun Oven, Hand-crank Generator, Energy Audit Kit, Energy Education Trunk, Pedal Power

  Highlight:
  - 97 adults and 96 youth utilized hands-on energy education resources through the WCEE Trunks & Kits lending program, including Boston School Forest (Stevens Point), DC Everest Middle School (Wausau), McKinley Elementary (Stevens Point), Peshtigo Middle School, Stevens Point Boys & Girls Club, and Stevens Point Area High School.
  - 8 educators registered to receive the Nakuru Day School Biogas Project international field trip recording, including Oshkosh Area School District, Northcentral Technical College Alternative High School (Wausau), and Green Bay Southwest High School.
**WPPI Energy**

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*An additional **1,740 students** are estimated to have been supported indirectly through utilization of KEEP curriculum and resources.

**Professional Development & Training**
- 10 educators from 9 schools participated in 7 professional development workshops potentially impacting 600 students.
  - Communities impacted: Cedarburg, Eagle River, Glendale, Kaukauna, Oconomowoc, Sun Prairie, Waunakee

  **Highlight:**
  - 3 educators from Webster Middle School (Cedarburg), Patrick Marsh Middle School (Sun Prairie) and Madison Country Day School (Waunakee) participated in KidWind Educator Workshops hosted in partnership with the Wisconsin Energy Institute.
  - 2nd grade teacher Patrick Bencher of Royal Oaks Elementary (Sun Prairie) was the featured co-presenter for KEEP’s [Exploring Solar Dashboards (Lower Elementary)] virtual workshop, which reached 13 educators statewide.

**Youth & Community Engagement**
- 57 students and 21 educators from 5 schools participated in 5 youth or community events offered by KEEP.
  - Communities impacted: Baraboo, Eagle River, New London, Sun Prairie, Westby
  - Events participated: UWSP College Days for Kids, UWSP Earth Week, Waupaca County Conservation Field Day, Wisconsin Science Festival

  **Highlight:**
  - 2 students from Northland Pines Middle School (Eagle River) participated virtually in UW-Stevens Point College Days for Kids programming with KEEP and UWSP GIS Center.
  - 22 students and 2 educators from New London Middle School participated in outdoor-based energy education with KEEP staff at the Waupaca County Conservation Field Day hosted by Golden Sands RC & D.
  - Bekkum Memorial Library (Westby) received an energy-themed storytime book and KEEP lessons and presented community programs during Energy Awareness Month in October to an estimated 18 adults and 32 youth (sponsored by Alliant Energy Foundation as part of the Wisconsin Science Festival).
Networking
- 6 guidance counselors attended a Professional Learning Day hosted by Northeast Wisconsin Technical College (NWTC) about energy careers. NWTC faculty represented KEEP programs and shared resources.
  - Communities impacted: Algoma, Oconto Falls, Two Rivers, Sturgeon Bay

Consultation & Support
- 9 educators from 2 schools/districts received direct mentoring support and resources for student-led energy-savings projects at their school.
  - Communities impacted: Jefferson
  
  **Highlight:**
  - On-going meetings with the School District of Jefferson leadership team to unify, expand, and achieve recognition for the energy and sustainability practices within the six school buildings.

Curriculum & Resources
- 14 educators from 5 schools accessed hands-on or digital curriculum and resources from KEEP potentially impacting 780 students.
  - Communities impacted: Cedarburg, Columbus, Lodi, Oconomowoc, Sun Prairie
  - Resources accessed: Nakuru Day School Biogas Project Virtual Field Trip
  
  **Highlight:**
  - 13 educators registered to receive the Nakuru Day School Biogas Project international field trip recording, including Columbus Middle High School, Prairie Phoenix Academy (Sun Prairie), Oconomowoc High School, Lodi Middle School, and Webster Middle School (Cedarburg).
**Xcel Energy**

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*An additional 960 students are estimated to have been supported indirectly through utilization of KEEP curriculum and resources.*

**Professional Development & Training**

- 9 educators from 9 schools participated in 4 professional development workshops potentially impacting 540 students.
  
  - Communities impacted: Chippewa Falls, Eau Claire, Eleva-Strum, Hudson, LaCrosse, Mondovi, New Auburn, Owen-Withee, Washburn
  

**Highlight:**

- 1 educator from Hudson Senior High School participated in virtual professional development session through the Wisconsin Society for Science Teachers (WSST).
- 6 educators from Owen-Withee Middle/High School, Eleva-Strum Central High School, Anthony Acres School (Mondovi), and New Auburn High School participated in KidWind Educator Workshops hosted in partnership with the Wisconsin Energy Institute.

**Youth & Community Engagement**

- 98 students and 38 educators from 6 schools participated in 4 youth or community events offered by KEEP.
  
  - Communities impacted: Augusta, Chippewa Falls, Menomonie, Sparta, Westboro,
  
  - Events participated: Green Team investigations, Wisconsin Science Festival

**Highlight:**

- KEEP staff visited Menomonie High School and assisted 3 students and 3 educators with an on-site waste audit and connected students and educators to the City of Menomonie’s Environmental Specialist who facilitated career explorations.
- KEEP staff visited Chippewa Falls High School and assisted 1 student and 4 educators with planning for utilizing drones and licensed student pilots to conduct remote thermal sensing of the schools buildings to detect heat loss.
- 30 students from Innovations STEM Academy (Sparta) attended live virtual field trip as part of the Wisconsin Science Festival, Exploring a Climate Change Solution.
- Westboro, Augusta, and Chippewa Falls libraries received an energy-themed storytime book and KEEP lessons and presented community programs during Energy Awareness Month in October to an estimated 31 adults and 64 youth (sponsored by Alliant Energy Foundation as part of the Wisconsin Science Festival).
Networking
• 1 educator from Birchwood Blue Hills Charter School attended the Innovative Schools Network virtual conference session from KEEP exploring solar dashboards.
• 4 higher education faculty attended the Best Practices Summit for Educator Preparation for Environmental Education where KEEP staff provided guidance on planning energy education experiences for pre-service teachers (undergraduate students enrolled in education).
  ▪ Institutions impacted: UW-Eau Claire, UW-LaCrosse, Northland College (Ashland)
• KEEP newsletter dedicated September issue to exclusively Xcel Energy content. The newsletter was sent to approximately 5,500 educators and had an open rate of 25%.

Consultation & Support
• 5 educators and 7 students from 5 schools/districts received direct mentoring support and resources for student-led energy-savings projects at their school.
  o Communities impacted: Chippewa Falls, Eau Claire, Menomonie, Medford, Mondovi
  Highlight:
  o Ongoing collaboration with educators, students, and City officials to support energy and waste efficiency efforts at Menomonie High School.
  o Stetsonville Elementary (Medford) educator received direct mentoring support toward their Green & Healthy Schools recognition application.
  o Ongoing support for science and technical education teachers and their student-led green team at project-based learning school Anthony Acres Charter (Mondovi) to build a wind tunnel and participate in the KidWind Challenge.
  o Ongoing collaboration with educators and students to support monitoring of heat loss by drone at Chippewa Falls High School.

Curriculum & Resources
• 2 educators from 2 schools accessed hands-on or digital curriculum and resources from KEEP potentially impacting 120 students.
  o Communities impacted: Eau Claire, Cochrane-Fountain City
  o Resources accessed: Nakuru Day School Biogas Project Virtual Field Trip
  Highlight:
  o 2 educators registered to receive the Nakuru Day School Biogas Project international field trip recording, including Regis High School (Eau Claire) and Cochrane-Fountain City High School.