



TRIPLE energy
environment
economic\$



Thursday, November 17th

8:00 am Registration and Continental Breakfast

8:30 am Welcoming Remarks, *Lilas M. Soukup*

8:45 am **The Energy Race**

NETL Education Outreach Team

Through a board game, tips about energy will be unveiled. The player who completes the race first will be the winner. Participants will be provided a take-away game from this activity for their classroom.

10:00 am *Break*

10:15 am **ASSET Pittsburgh**

Deborah Spencer, ASSET STEM Education

ASE will provide an activity around designing hand pollinators.

11:30 am *Buffet Lunch Provided*

12:30 pm **Land Art Generator Initiative**

Elizabeth Monoian and *Robert Ferry*, Founding Directors, LAGI

LAGI presentation on strategies for STEAM programming for renewable energy education. Engaging students with creativity and art to arrive at their own innovative solutions that convert natural energy into useful energy. Participants will review the STEAM Toolkit, use LAGI Art + Energy Flash Cards to solve challenges and play the LAGI Idea Generator Game.

2:30 pm *Break*

2:45 pm **Environmental Impact of Human Activity**
Genoa Warner, Carnegie Mellon University

4:00 pm *Adjourn*

Friday, November 18th

8:00 am Registration and Continental Breakfast

8:30 am **Light, Color and Spectroscopy for Kids**

John Varine & Hub MacDonald, Spectroscopy Society of Pittsburgh (SSP)

With materials provided by the SSP, participants will learn to project a large and very bright rainbow in their classroom and learn why the colors appear the way that they do. Materials will be provided to the participants to take back to their classrooms.

10:00 am *Break*

10:15 am *Continue with “Light, Color and Spectroscopy for Kids”*

11:30 am *Buffet Lunch Provided*

12:30 pm **A Planetarium Experience with SSP**

Nick Barsic, Jonell Kerkhoff, & Neal Dando, Spectroscopy Society of Pittsburgh

The participants will have the opportunity to experience a true planetarium. The night sky will be demonstrated from within a 20’ planetarium where you will learn about constellations, etc. Information on how to have the planetarium visit your school will also be provided.



OR

12:30 pm **Electronics and Economics: The Hidden World of Cost**

NETL Education Outreach Team

Observe the amount of electricity used by everyday items and the amount of CO2 emitted by CFL vs. incandescent light bulbs. This activity on the consumption of electricity is truly illuminating.

Participants will receive an energy monitor for use in their classroom.

2:30 pm *Break*

2:45 pm **LEGO Robotics**

NETL Education Outreach Team

This workshop will have the participants in pairs build and demonstrate LEGO robots.

3:45 pm *Adjourn*

