For immediate release

TC² and ELSE Create K-12 Teaching Resources for Developing Energy and Climate Literacy



Shining a Light on Solar Energy: Teaching and learning about sustainable energy

VANCOUVER, October, 2019 – Funded by a grant from the Community Environment Action Grant Program, an initiative of the Alberta provincial government (2017), <u>The Critical Thinking Consortium</u> (TC²) and <u>Emerging Leaders for Solar Energy</u> (ELSE) collaborated to create "Shining a Light on Solar Energy", a teaching resource to support educators and learners in developing energy and climate literacy. With twenty-four lessons for kindergarten to grade 12, this resource explores the roles that solar power might play in providing sustainable energy for vehicles, homes, schools, and communities. This resource nurtures the competencies required for scientific thinking and critical inquiry, with a focus on using critical thinking to deepen conceptual understanding.

Developed to be used individually or as a set, each fully-developed lesson includes teaching notes, briefing sheets, image sets, activity sheets, and assessment materials to support student thinking and learning about solar energy. These resources can be downloaded for **FREE** from the TC^2 website: https://tc2.ca/en/solar/.

Samples of lesson summaries

Where does energy come from? (K-3) Students use observations of images depicting the resources used to generate electricity in Alberta to develop questions about resource use. Students then create the three most important questions to ask about the resources used to generate electricity in Alberta.

What's the truth about solar energy? (Gr.4-6) Students evaluate the accuracy of common statements made about solar energy.

Whose voice needs to be heard? (Gr.4-6) Students create an informative news article to describe the interests of key stakeholders in a school solar energy project. What important advice about energy efficiency might our homes give? (Gr.7-9)

Students create an interview with a home to describe actions and behaviours that can improve household energy efficiency.

Which vehicle is better for the environment: electric or gasoline-powered? (Gr. 10-12)

Students develop the criteria to determine which type of vehicle is better for the environment and identify evidence that could be used to support or refute conclusions about the environmental impacts of electric and internal combustion-powered vehicles. Using calculations, students decide which type of vehicle is better for the environment.

What others are saying about this resource

"After attending a workshop on the new Shining a Light on Solar Energy program, I was thoroughly impressed on at least three fronts. First, I love the way the program is scaled to a range of student audiences from Division I to IV, recognizing that it is never too early or too late to be learning about solar energy and its role in helping us create a more sustainable future. Second, the program is masterfully designed to enhance critical thinking skills throughout. Third, the program uses real-time data from existing school solar arrays, providing an authentic and engaging context for student learning. As a leader in environmental education, I wholeheartedly recommend this excellent resource to all teachers interested in introducing their students to the fascinating world of solar energy and the excellent career options it offers as we transition toward a low-carbon economy." - Marie Tremblay, Phd. PhD Senior Education Advisor Alberta Council for Environmental Education (ACEE)

About TC²

 TC^2 is a Canadian not-for-profit organization that partners with education leaders to advance critical, creative, and collaborative thinking. It provides resources and professional development opportunities that inspire and support educators, parents, and students. Based in Vancouver, BC, and with consultants and facilitators across the country, TC^2 works with more than 70 partners in Canada, the United States, and beyond. Since its inception, TC^2 has hosted more than 5 000 professional learning events, serving more than 180 000 educators and advancing critical, creative, and collaborative thinking for hundreds of thousands of students.

About ELSE

ELSE is a growing network of young professionals, students, and solar advocates who are working with the Canadian Solar Industries Association and industry stakeholders to build a strong solar energy future across Canada.

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