Lesson 2

CEGC Case Study - Instructor Guide

Overview

Lesson 2 is a city or community case study. Lesson 2 is intended to follow Lesson 1 and provides an opportunity for students to examine one of the six CEGC and to develop an appreciation for the complexities of addressing the challenge in the context of a City/Community Case study.

The CEGC and city or community can be selected by the instructor to align with the topic of the course. For example, an instructor interested in Water Resources might select CEGC 3 – Access to Safe Water in All Communities.

Learning Objectives

1. Identify major elements and competing priorities within one CEGC.
2. Examine complexities involved in a CEGC by reviewing a city or community case study.

Timing

Expected lesson duration: 15 minutes

Approach

* Lesson 2 is intended to follow Lesson 1 – Introduction to the CEGC
* This lesson is intended to be delivered in class (either online or in person)

Resources

* Module 1 – Canadian Engineering Grand Challenges (CEGC)
* Module 2 – Cities and Communities
* Lesson 2 – CEGC Case Study - Presentation.pptx (PowerPoint)
* Lesson 2 – CECG Case Study - Activity Sheet (Word)

Deliverables

The lesson can be run as an in-class discussion as an orientation to the CEGC and can be approached as a think-pair-share reflection exercise, or the instructor facilitate the depth of the discussion by asking individuals or groups to complete the Lesson 2 – CEGC Case Study Activity Sheet.

Lesson Structure

The Lesson is structured to be run using the CEGC Case Study Presentation.pptx and consists of the following steps. Total Duration (15 minutes)

1. Introductory Slides – Select and review a CEGC (3 min)
2. CEGC Activity – Discussion (3 min)
3. Additional Slides – Select/review CEGC Case Study (4 min)
4. Case Study Activity – Discussion (5 min)