# **Assignment 3: Case Study LEED Platinum Certified National Renewable Energy Laboratory (NREL) Research Support Facility (RFL)**

# Objectives

Identify the characteristics of the LEED Platinum Certified National Renewable Energy Laboratory (NREL) Research Support Facility (RFL) using the [Video Summary](https://www.youtube.com/watch?v=43dT66mhh0c) and the Design-Build Process for the Research Support Facility PDF.

Navigate LEED [resources online](https://www.usgbc.org/resources?Format=%5B%22Excel+doc%22%5D&SearchResultsortOption=%22Recently+added%22) and use the [LEED Credit Library](https://www.usgbc.org/credits) for points tabulation that could have been used in the project.

Answer the following questions:

1. Identify the certification category and points achieved for the LEED Platinum Certification.
2. Where is the building located? Identify Climate Zone and screenshot the Google Maps location.
3. How does a Net Zero Energy (NZE) building design incorporate Advanced Energy System Design to reach Net Zero (NZ)?
4. Can you identify any design concepts that could be adopted in the campus building that you have chosen for your group project?
5. What design concepts do you think should be included in building codes that are being developed in Belize?
6. What do you think could be added to the RSF building to make it more sustainable?
7. Which design feature do you think was the most important factor in reducing the environmental footprint of the building? Why did you select this feature?
8. Based on your Group Project, select three Advanced Energy System Design features that you would recommend for your Group Project building.

# Deliverables

A technical report or slide presentation that includes the following:

* Table of Contents
* Summary of the RFL Advanced Energy System Design concepts
* Answers to questions 1-8
* Appendix items where appropriate