



Mining & Climate Justice Case Studies Module

Instructor Guide

Learning Objectives:

- Recognize how current mining practices affects climate justice issues
- Understand the role and impacts of mining in different capacities
- Examine community roles and energy demands
- Discover solutions to current mining issues

The module is divided into 5 sections following the introductory material: Mining & Economy (slide 10-12)/Mining & Community (slide 13-15)/Mining & Sustainability (slide 16-18)/Mining & Renewable Energy (slide 19-21)/Beyond the Module (slide 22-24)

Key Resources: [Scott Odell Publications/The True Cost of The Lithium Mining Boom Powering Electric Cars](#)

Activities Included:

- 1) [Slide 8: Watch & Discuss – “The True Cost of The Lithium Mining Boom Powering Electric Cars” \(Insider News\)](#)
 - a) Prior to the video ask students: Where is the photo from? What are these pools? Where is lithium mined?
 - b) Students watch the 15 minute video in-class which outlines lithium mining specifically in Latin America, focused on Chile & Bolivia

i) recommended to adjust playback speed to at least 1.5x and enable subtitles

 - c) After watching, students can answer the questions in small groups and share answers with the class

i) Recommend displaying questions prior to playing the video
- 2) [Slide 11: Read & Discuss – “How Can U.S. Safely Mine Minerals Critical to a Carbon-Free Economy?”](#)
 - a) Prior to reading, ask students to *answer the title question* to measure knowledge before and after the activity.
 - b) Read the introduction as a group then divide the class into 6 groups in correspondence /w each article
 - c) After reading, students can discuss their group’s questions and share with the class

i) Recommend displaying questions as students read
- 3) [Slide 14: Read & Discuss – Hydrosocial Displacements \(MIT\)](#)
 - a) Prior to reading, ask students to *define hydrosocial conflict and identify examples*



- b) Students read the brief which functions as a country-specific case study
- c) After reading, students answer discussion questions as a class
- i) Recommend displaying questions as students read
 - 4) Slide 17: Read & Discuss – [“Mining our green future” \(Nature\)](#), [MIT Engineers: “Energy-storing concrete...” \(NewScientist\)](#), & [MIT Mission 2016: Green Mining](#)
 - a) Students read the three articles and discuss the prompts on the slide and connect the articles using the prompt on slide 18
 - 5) Slide 20: Read & Propose – [“How does the environmental impact of mining for clean energy metals compare to mining for coal, oil, and gas?” \(MIT Climate Portal\)](#)
 - a) Student read the brief article
 - b) After reading, students split up students to propose solutions to the three suggestion on the following slide
 - 6) Slide 21: Beyond the Module
 - a) Students can create a project!

Suggestions for Future Learning:

After completing the module, ask students to reflect on the different aspects of the content and why the framework is applicable in their own field

- Utilize local and global case studies, especially from local news sources to address topics that may not be addressed in the mainstream and allows students to point out similar occurrences in different areas
- Provide the opportunity for students to share climate justice issues in their own hometown, as they can always be relevant to class topics

Additional Resources:

- Listed on slide 23

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