

13 CLIMATE ACTION



# GOAL 13

## CLIMATE CHANGE



CONNECTING STUDENTS TO THE  
SUSTAINABLE DEVELOPMENT GOALS



**National  
Wildlife  
Federation**



**Alcoa  
Foundation**



## Subject

Climate Action

## Focus

Goal 13: Climate Change

## Unit Duration

10 days + implementation of climate action plan

## Materials

computer, internet connectivity, notebook, pen/pencil, chart/butcher paper, markers

## Time Recommendation

- Using 50 minutes as a class period see the lesson summaries for time recommendations.
- (+) Some activities require research and actions to be taken outside of the school day

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## Summary

This guide is designed to broadly bridge local climate understanding to that of a more global mindset. Students will unpack Sustainable Development *Goal 13, Climate Change*, and reflect more deeply on their own contributions to the climate system, research climate-positive design, and dive into climate justice, activism, and advocacy resulting in the development of a climate action plan.

## Big Ideas

- The environment today is not the planet our families one and two generations ago grew up in.
- The current infrastructure was built for a climate that no longer exists
- View, analyze, and interpret media and data
- Explore how youth climate activists are engaging and meaningfully connecting to young people
- Develop and carry out a climate action plan using the *Jemez Principles for Democratic Organizing*.

## Academic Vocabulary

climate change, resilience, green and gray infrastructure, activist, advocate, climate justice, climate equity, reciprocity

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### Activity 1: Urgent Solutions for Urgent Times 1 period

Student will view and respond to a climate video from the United Nations. Small groups will focus on 5 different sections and analyze the speaker's purpose, tone, develop a summary and present questions for class discussion.

### Activity 2: Unpacking Goal 13 - 1 period

In small groups students will read, then dissect and discuss the UN's Sustainable Development Goal 13 by responding to guiding questions.

### Activity 3: Climate Implications of What I Love 2 periods

Students will work individually to identify something in their life they love or are passionate about and dig in to uncover its climate impacts. How can their choices become better for the planet?

### Activity 4: Green Infrastructure on the School Grounds 2-3 periods

Students will distinguish between green and gray infrastructure and work in small groups to become experts on one green infrastructure strategy. They will explore and explain the benefits and limitations of their chosen green infrastructure practices and discuss how green infrastructure can make a space more resilient to climate change impacts.

### Activity 5: Generation Now: The Fight For Climate Justice - 2 periods

Students will define climate justice and activist. They will respond to a video highlighting youth climate action and activists. Either exploring their own social network of youth climate leaders or the ones provided students will identify the characteristics that are engaging and help them connect with young people globally.

### Activity 6: Developing a Climate Action Plan 3+ periods

Building on lesson 5, students will read and discuss the *Jemez Principles for Democratic Organizing*. They will work in small groups to identify a community climate concern and develop and implement a climate action plan

GOAL 13 GUIDE

# OVERVIEW



**ACCELERATE  
CLIMATE  
ACTION**  
FOR ALL SDGs



What are the Sustainable Development Goals and Why I Should Teach Them

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**ACCELERATE  
CLIMATE  
ACTION**  
FOR ALL SDGs

# The Sustainable Development GOALS



**LEAVE  
NO ONE  
BEHIND**

## What are the Sustainable Development Goals (SDGs)?

The Global Goals are the blueprint to achieve a better and more sustainable future for all. They address the global challenges we face, including poverty, inequality, climate change, environmental degradation, and peace and justice.<sup>1</sup>

## Why Teach the SDGs?

Teaching the goals will support the knowledge, skills, attitudes and values necessary to address sustainable development challenges. And educating for sustainable development empowers everyone to make informed decisions in favor of environmental integrity, economic viability and a just society for present and future generations.<sup>2</sup>



### 'We The People' for the Global Goals

<sup>1</sup> | <https://www.un.org/sustainabledevelopment/sustainable-development-goals/>

<sup>2</sup> | <https://en.unesco.org/themes/education/sdgs/material>

# URGENT SOLUTIONS FOR URGENT TIMES

## WHAT TO DO

Watch the video in full. Then go back and rewatch chapter by chapter. After each chapter, respond to prompts digitally or in your notebook using the guidance below.

Nations United | <https://youtu.be/xVWHuJ0maEk>

- 0:00 | Introduction
- 5:09 | Chapter 1. Climate Change and the Planet
- 11:15 | Chapter 2. Poverty and Inequality
- 19:25 | Chapter 3. Justice and Human Rights
- 23:30 | Chapter 4 Gender Equality



Nations United:  
Urgent Solutions for Urgent Times  
Presented by Thandie Newton

### 1. Chapter Speakers

Identify the main chapter speakers and their titles (usually between 2 and 3 people).

### 2. Chapter Summary

Using your own words and remaining objective, provide an overview of the chapter, including any arguments and their key points. Stick to the main idea(s) and don't get bogged down in a lot of details.

### 3. Chapter Purpose

Identify the purpose.

- *Persuade*-to convince a viewer to believe an idea or take a course of action
- *Inform*-to teach a viewer about a topic
- *Explain or Entertain*-to recount events or share a story
- *Describe*-to tell the viewer what something looks, sounds, or feels like

### 4. Chapter Tone

Tone is related to the speakers' attitude toward a subject. Tone is described with adjectives and it is detected through the speakers' word choice and style. Tone must match purpose in order for an argument to be successful. For example, is the piece joyful, sad, threatening, etc.

### 5. Chapter Questions

What questions do you have? What is one thing new you learned? What is something presented you already knew? How can you ensure the source(s) are credible and based on fact?

# Activity 2 | Unpacking Goal 13

# CLIMATE CHANGE

## WHAT TO DO

Read the Sustainable Development Goal 13 fact sheets. Work with your group to first discuss and then respond, thoughtfully and completely. Responses will be inclusive of the entire group's ideas.

Digital access:

<https://www.un.org/sustainabledevelopment/climate-change/>



- Generally, how are people being affected by climate? Who is most affected by a changing climate? What are some examples of how you/your family have been impacted by climate change?

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- Under What Happens If We Don't Take Action, the document states, "We have an opportunity to take actions that will lead to more jobs, greater prosperity, and better lives for all by reducing greenhouse gas emissions and building climate resilience." Provide examples of how there will be more jobs, greater prosperity, and better livelihoods. Who is most likely to benefit last or see change last in this scenario? Why?

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# CLIMATE CHANGE

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- Review the infographic, looking specifically at the reduction in greenhouse gas emissions during the pandemic's lockdown. The results seen in 2020 were not sustainable and still shy of the necessary 7.5-degree drop. Create an infographic that demonstrates how your group would design solutions to significantly reduce greenhouse gas emissions in a way that is long-lasting and centers the needs of people, especially those with marginalized identities?

Use this space to brainstorm your ideas and use an infographic platform, such as Piktochart to create an infographic.



# 13 CLIMATE ACTION



## CLIMATE ACTION: WHY IT MATTERS

### What's the goal here?

Taking urgent action to tackle climate change and its impacts.

### Why?

The climate crisis continues unabated as the global community shies away from the full commitment required for its reversal. 2010-2019 was warmest decade ever recorded, bringing with it massive wildfires, hurricanes, droughts, floods

and other climate disasters across continents.

### How are people being affected by climate change?

Climate change is affecting every country in the world. It is disrupting national economies and affecting lives and livelihoods, especially for the most vulnerable.

Weather patterns are changing, sea levels are rising, and weather events are becoming more extreme,

To limit global warming to 1.5C, as called for in the Paris Agreement, greenhouse gas emissions must begin falling by **7.6 %** each year starting in 2020



affecting more than 39 million people in 2018.

## What happens if we don't take action?

If left unchecked, climate change will cause average global temperatures to increase beyond 3°C, and will adversely affect every ecosystem. Already, we are seeing how climate change can exacerbate storms and disasters, and threats such as food and water scarcity, which can lead to conflict. Doing nothing will end up costing us a lot more than if we take action now. We have an opportunity to take actions that will lead to more jobs, great prosperity, and better lives for all while reducing greenhouse gas emissions and building climate resilience.

## Can we solve this problem or is it too late to act?

To address climate change, we have to vastly increase our efforts. Much is happening around the world – investments in renewable energy have soared. But so much more needs to be done. The world must transform its energy, industry, transport, food, agriculture and forestry systems to ensure

that we can limit global temperature rise to well below 2°C, maybe even 1.5°C. In December 2015, the world took a significant first step by adopting the Paris Agreement, in which all countries committed to take action to address climate change. Many businesses and investors are also committing themselves to lower their emissions, not just because it is the right thing to do, but because it makes economic and business sense as well.

## Are we investing enough to tackle climate change?

Global climate-related financial flows saw a 17 per cent rise from 2013 to 2016, largely due to private investment in renewable energy, which represents the largest segment in total climate-related flows, to the amount of \$681 billion. However, investment in fossil fuels continues to be higher than in climate activities to the amount of \$781 billion in 2016. To achieve a low-carbon, climate-resilient transition, a much

greater scale of annual investment is required.

In 2019, at least 120 of the 153 developing countries had undertaken activities to formulate and implement National Adaptation Plans to enhance climate adaptation and resilience, an increase of 29 countries over the previous year. Furthermore, progress in meeting the 2020 disaster risk reduction target has been slow.

## What can I do to help achieve this goal?

There are many things that each of us can do as individuals. To find out what you can do, go to: <https://www.un.org/en/actnow>

To read more about the UN's efforts on climate change: <https://www.un.org/en/climatechange>

To find out more about Goal #13 and other Sustainable Development Goals, visit: <http://www.un.org/sustainabledevelopment>

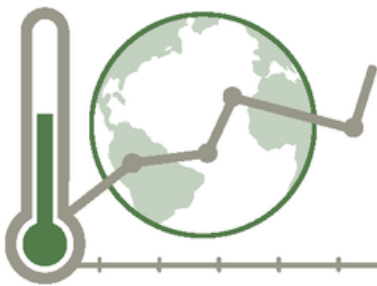




# TAKE URGENT ACTION TO COMBAT CLIMATE CHANGE AND ITS IMPACTS

## BEFORE COVID-19

GLOBAL COMMUNITY SHIES AWAY FROM COMMITMENTS REQUIRED TO REVERSE **THE CLIMATE CRISIS**



2019 WAS THE SECOND WARMEST YEAR ON RECORD

GLOBAL TEMPERATURES ARE PROJECTED TO RISE BY UP TO 3.2°C BY 2100



**ONLY 85 COUNTRIES HAVE NATIONAL DISASTER RISK REDUCTION STRATEGIES**

ALIGNED TO **THE SENDAI FRAMEWORK**

## COVID-19 IMPLICATIONS



COVID-19 MAY RESULT IN A **6% DROP IN GREENHOUSE GAS EMISSIONS FOR 2020**

STILL SHORT OF **7.6% ANNUAL REDUCTION REQUIRED TO LIMIT GLOBAL WARMING TO 1.5°C**

**CLIMATE FINANCE: INVESTMENT IN FOSSIL FUELS CONTINUES TO BE HIGHER THAN INVESTMENT IN CLIMATE ACTIVITIES**



CLIMATE CHANGE CONTINUES TO EXACERBATE THE FREQUENCY AND SEVERITY OF **NATURAL DISASTERS**



MASSIVE WILDFIRES



DROUGHTS



HURRICANES



FLOODS

AFFECTING **MORE THAN 39 MILLION PEOPLE** IN 2018



ACCESS MORE DATA AND INFORMATION ON THE INDICATORS AT [HTTPS://UNSTATS.UN.ORG/SDGS/REPORT/2020/](https://unstats.un.org/sdgs/report/2020/)

# Activity 3 | Climate Implications of **WHAT I LOVE**

There are climate implications associated with everything on the planet, some implications are positive and some negative. Use the prompts below to develop a presentation using one of the following strategies writing, social media engagement, speech, art, or music.

- Dig deep and write 10 things that enrich your life. CANNOT BE PETS OR PEOPLE

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

- Choose one of the 10 that speaks to your heart, mind, or soul.

\_\_\_\_\_

- Identify its economic sector, i.e. food, tech, agriculture, business, fashion, etc. sector (it may be intersectional).

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- Through research uncover "your thing's" climate impacts. Bullet or summarize at least five impacts.

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- Research businesses that are associated with what you love and are leaders or are making actionable strides toward a better climate future--not just words on the screen, but real, tangible actions. Share their why and summarize how the business is making improvements or how they have successfully implemented a circular economy.

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# Activity 4 | Green Infrastructure on the **SCHOOL GROUNDS**

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## WHAT TO DO

Your group will become an expert on two green infrastructure practices and teach the rest of the class about them using an engaging presentation strategy. Completing the tasks below will provide the information needed to develop the presentation. A few resources are found at the bottom of the page and are not exhaustive. You will want to research local infrastructure issues and green infrastructure use.

Use chart or butcher paper and a marker to organize your responses to the following prompts.

- Define and find examples of green and gray infrastructure.
- As a team, choose 2 green infrastructure practices to learn more about.
  - stormwater wetlands
  - green and blue roofs
  - tree plantings and conservation
  - enhanced tree pits
  - bioswales
  - rain gardens
  - permeable pavement
  - rain barrels/rainwater harvesting
  - raised planters
- Answer the following questions for each green infrastructure practice chosen above.
  - What are the benefits of your green infrastructure practice?
  - What are the limitations of your green infrastructure practice?
  - How does this practice make a space more resilient to climate change impacts?
  - What would this look like at school or in the community?
- Your team should be prepared to ask one question of each presenting group. If needed take notes during presentations.

## RESOURCES

- [Stormwater Management: Overview](https://vimeo.com/67238468) (GrowNYC video) - <https://vimeo.com/67238468>
- [NOAA Green Infrastructure Options to Reduce Flooding-definitions, tips, and considerations](https://coast.noaa.gov/data/docs/digitalcoast/gi-econ.pdf) - <https://coast.noaa.gov/data/docs/digitalcoast/gi-econ.pdf>
- [GrowNYC Green Infrastructure Toolkit](https://www.grownyc.org/gardens/green-infrastructure-toolkit) - <https://www.grownyc.org/gardens/green-infrastructure-toolkit>
- [NOAA Green Infrastructure Protective Services Animation](https://coast.noaa.gov/greeninfrastructurevis/) - <https://coast.noaa.gov/greeninfrastructurevis/>

# Activity 5 | Generation Now: the Fight for CLIMATE JUSTICE

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## WHAT TO DO

How are your peers engaging and activating communities of young people around the country and across the world? In this activity, you will look closely at climate justice and activism. Identify who's who in this space and what engagement tools and strategies they use to activate youth-led climate action. This work will inform the development of your climate action plan in the next activity. Use your own paper or respond in your notebook.

- Define climate justice, climate equity, advocacy, and activism.
- Watch Time's [Generation Now: The Fight for Climate Justice](https://time.com/6114499/generation-now-climate-activists-video/?jwsourc=cl) and respond to five of the ten questions below. The gather with another student and share and discuss your responses.  
<https://time.com/6114499/generation-now-climate-activists-video/?jwsourc=cl>
  - Have your opinions or ideas ever been dismissed because of your age? Briefly explain.
  - Do you think your countries leaders are listening to young people? Are they taking real actions? Briefly explain.
  - How is the climate you are growing up in different from the one your family grew up in? Briefly explain.
  - When do and how do young voters form their political attitudes?
  - What does it mean to you to collaborate intergenerationally?
  - What's an example of climate injustice?
  - How are young adults in Germany driving more immediate change?
  - Where do political parties disagree on climate change today?
  - What needs to be at the center of climate action?
  - Why is hope important to the climate movement?
- Come together with 2-3 other classmates. Discuss the following questions.
  - Do you follow any climate influencers, if yes who and why do you follow them?
  - If no one follows or knows of any climate activists, look at the social networks, websites, articles, and or blogs by
    - Vic Barrett @vict\_barret on Twitter and @vicbarrett\_ on Instagram
    - Haven Coleman @havenruthie and @climateactivist
    - Leah Namugerwa @namugerwaLeah
    - Saio O'Connor @saio4climate
    - Xiuhtezcatl Martinez @xiuhtezcatl and @ziuhtezcatl
    - Vanessa Nakate @vanessa\_vash and @vanessanakate1
  - What tools, strategies, and characteristics do these youth activists use/have that move young people to take action for the climate? Are there similarities or all they all unique?

# Activity 6 | Develop and Implement a CLIMATE ACTION PLAN

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## WHAT TO DO

1. Reflect on your discussion with your group in the previous activity, Generation Now, your climate concerns, and the changes you and your family have observed locally.
2. Come together as a group of 3-5. How does each team member identify, as an activist or as an advocate? Use this to inform the development of your climate action plan.
3. Next, read and discuss the [Jemez Principles for Democratic Organizing](https://www.ejnet.org/ej/jemez.pdf) - <https://www.ejnet.org/ej/jemez.pdf>. Use these principles to support the development of your climate action plan.
4. Use the discussions, resources, and reflections to craft a climate action plan.
5. Implement the climate action plan and report back to the class lessons learned, outcomes, and what the team will do next.

**Use this space for notes.**

# Activity 6 | Develop and Implement a CLIMATE ACTION PLAN

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What is the climate problem, concern, or needed improvement, and why is it needed? Consider how the problem you identified is affecting you, your family, and or the community. When centering the community be thoughtful and intentional about who is invited to inform the action plan. Expand your perspective of community to include Black, Brown, Indigenous, Pacific Islander, and Asian members. As you set the table to develop a plan is it inclusive of the numerous other identities represented in your community?

Your response.

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What three actions will be taken? Make sure these actions were developed centering the lived experiences of those most impacted by climate change. Consider how to persuade students, staff, families, and friends. If there is complete disagreement. Look for where there is agreement and modify the actions to focus on where you have common ground.

Your response.

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# Activity 6 | Develop and Implement a **CLIMATE ACTION PLAN**

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How will we monitor our progress on our climate actions? If not progressing, at what point do we need to convene the team to make modifications to the climate action plan?

Your response.

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What will success look like? How will we use the outcomes and lessons learned to make continued progress for the planet?

Your response.

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What materials are needed? Writing letters, calling businesses, and putting out calls for support, advice, or volunteers is a great way to find what's needed free of charge. Be thoughtful and thankful in your outreach. You want to build a relationship, not just receive and move on. Reciprocity is key to building relationships.

Your response.

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# National Wildlife Federation

Uniting all Americans to ensure wildlife thrive in a rapidly changing world.

[contact: eco-schoolsusa@nwf.org](mailto:eco-schoolsusa@nwf.org)



**National  
Wildlife  
Federation**



**Alcoa  
Foundation**

