



STUDENT CLIMATE CHALLENGE

TEACHER GUIDE

Table of Contents

1. New Jersey Student Climate Challenge Overview	2
2. Tips for Getting Started	3
3. Climate Challenge Eligible Student Projects and Student Teams	3
4. Overview of the Teacher’s Role for the Climate Challenge	4
5. Resources to Supporting Integrating Climate Change Topics.....	5
6. Resources to Support Action Project Planning and Implementation	7
7. Resources to Support Digital Story Video Production	12
8. Submission Requirements and Form.....	15
9. Submission Review Process	16
10. Climate Challenge Awards	18
11. Questions?	18



1. New Jersey Student Climate Challenge Overview

The New Jersey Student Climate Challenge is an educational initiative administered by Sustainable Jersey and the Drumthwacket Foundation that encourages students to have an active role in addressing the climate change crisis. This challenge builds on New Jersey's initiative to incorporate climate change education across all K-12 classrooms. The Climate Challenge provides support and recognition to New Jersey public school students in grades 6 through 12 as they implement local projects to address the climate crisis.

The Challenge provides hands-on learning opportunities to build an understanding of climate change and encourage students to address their concerns through collaborative action. Students are encouraged to form teams and complete a school or community project to address a cause or impact of climate change. They will then create a 3-5-minute digital story documenting their accomplishments. By creating a digital story, students are empowered to share their experience with tackling climate change issues. Teams should organize their steps, starting with the planning stage, moving to implementation, and through the evaluation phases of the climate action project. All efforts should be documented to potentially be included in their digital story.

By the end of their project, students should be able to communicate to others *why* climate change is an important issue and, more critically, *what* they are doing to address it. Learning about locally relevant climate issues has been shown to have a long-lasting positive impact on students' hopefulness towards their future and the future of our planet.

While the Challenge is a student-led action project, the role of the teacher is crucial to the project's success. Teachers should facilitate students in their learning and provide lessons that help to scaffold the skills needed to accomplish the task. The challenge was created to be flexible in its climate change focus, allowing teachers to integrate it into the current curriculum and instruction or into afterschool programs. The Challenge provides students and teachers the opportunity to deepen their understanding of the climate crisis and use multidisciplinary skills as students engage, investigate, and enact their climate action projects. The project can also be used as an assessment for the new climate education learning standards. Teachers should provide time, space, and access to climate education resources to support student groups as they develop an action plan, implement their projects, and document the results. There are [webinar recordings](#) and a [list of actions](#) on the Sustainable Jersey for Schools website to support and inspire students in action. The [New Jersey Climate Change Education Hub](#) also provides New Jersey specific exemplar lesson plans and over 1400+ resources.

Suggestions for instructional integration and digital story-making tips are provided later in this guide. Other resources such as action project brainstorming, video techniques, and completing the Challenge application are also available in this document.



2. Tips for Getting Started

- [Register](#) for the Climate Challenge early to take full advantage of the support and guidance available to you and your students as they move through the project. Additional resources will be shared with registered teachers throughout the year to assist with project design, digital story video development, and facilitation. **The specific student teams, project topics, or digital story submissions are NOT due at registration.** Registration indicates your interest in the Challenge and will keep you connected with the latest information.
- Review the Climate Challenge scoring rubric found later in this guide. Through their participation in the Challenge, students will engage with their team in a project-based learning experience to brainstorm, research, design, and implement a climate action project of their choosing. Consider sharing the Climate Challenge Student Guide, which can be shared with your students to assist them through the action project and digital story processes. The Student Guide is available as a [PDF](#) or a [WORD](#) document.
- Read and become familiar with the different types of projects that qualify for the Challenge and the submission requirements. Teachers are encouraged to dedicate some class or club time to discussions around protecting the local environment and taking civic action on climate change. Consider the following: How do you plan to teach about or discuss climate change in the classroom? How do you intend to integrate climate connections into your instruction or club learning activities? How much class or afterschool time you dedicate to these tasks is up to you; however, ensure that you allow enough time for students to complete their action project and create the digital story by the **April 21, 2023**, entry due date.
- Climate Challenge entries must be submitted online via a [Google Submission Form](#). View a PDF copy of the form [here](#). The form requires students to summarize how their project links to climate change solutions. Digital stories should include video clips or pictures of team members participating in the action project. Please see the [Challenge Official Rules](#) for additional details on the Challenge.

3. Climate Challenge Eligible Student Projects and Student Teams

Each student team should complete a school or community-based project addressing a cause or impact of climate change. As students select their projects, they should consider the time they have to complete the project and plan accordingly.

The selection committee will judge each submission on its own merits and will not be comparing project impacts. In other words, a smaller-scale project will be judged on its application quality and will not be compared to a larger-scale project.

All student projects must culminate in a tangible outcome. To help guide student brainstorming and decision-making, the list below outlines examples of topics or ideas for student projects.

- A physical change to the environment (e.g., tree planting project, rain garden, dune restoration)



- A reduction in a factor that contributes to climate change (e.g., any effort to reduce greenhouse gases such as anti-idling or to increase walking/biking instead of driving)
- Increased awareness of the climate crisis among a target audience (e.g., education campaign, green challenge)
- Civic engagement in local or state policymaking related to climate change (e.g., following current policy-making efforts and submitting comments at a public hearing, orchestrating a letter-writing campaign on an issue, or visiting an elected official to advocate for a policy or initiative that would help address the causes or impacts of climate change)
- Presentation of research findings on a local climate-related issue that informs decision-makers (e.g., identifying a step the school district, municipality, or county should take and presenting recommendations at a public meeting)
- Develop a proposal and apply for a grant to complete a community or school project (i.e., research grants available for electric vehicle (EV) charging infrastructure or to complete a Sustainable Jersey action, identify a project idea, promote the idea to the municipality or school, and spearhead the grant application)

Questions regarding eligible student projects are welcomed and can be emailed to:

njstudentclimatechallenge@sustainablejersey.com

Student Teams

Each student team must have a Climate Challenge registered school staff member from an eligible school. [Register](#) for the Climate Challenge as soon as possible to take full advantage of opportunities for coaching and guidance. **The specific student teams, project topics, or digital story submissions are NOT required at registration.**

Classroom teachers and club leaders can have more than one team per class section. The teacher should determine team size to allow for participation by all team members. The ideal number of students is around 5-6 per team. The minimum number of team members is 2 and the maximum number is 12. Teams from the same club or class section can work on similar projects, but each team must produce a unique outcome. For example, if two teams are interested in doing tree planting projects, the planting must take place at two separate locations. Or, if two teams want to do an education and outreach campaign, they should focus on two different target audiences.

The Challenge entries must be submitted online using the [Challenge Submission Form](#) by April 21, 2023. See the Submission Form section of this document for more information. To view a PDF version of the Challenge Submission Form, click [here](#).

4. Overview of the Teacher’s Role for the Climate Challenge

The Climate Challenge is intentionally flexible, allowing student teams to pursue their interests in



climate change solutions. Students can be creative problem solvers, express their voice as civic-minded members of the community, and develop agency to inform and seek solutions. While teachers have a template for planning climate action with this guide, they should avoid providing step by step directions to solve a climate problem and allow students to lead climate action projects. Teachers should facilitate the process by creating lessons and building on the skillset students will need to accomplish their project. Teacher can also support student teams by pointing them to resources or guidelines. Teachers are encouraged to step back and allow the students to take ownership of their own projects – be an ally for youth driven action projects.

5. Resources to Supporting Integrating Climate Change Topics

Teachers are encouraged to approach teaching climate change as an interdisciplinary topic – across science disciplines and other content areas. The updated [Student Learning Standards](#) support curricular connections to the types of climate action project your students select. Teachers should explore their curricula for potential links to climate change as a human-driven environmental issue for society to manage. A great set of resources to consider for review can be found on the [Climate Literacy and Energy Awareness](#) Network’s website (often called the CLEAN network) and the [New Jersey Climate Education Hub](#).

For example, a middle school interdisciplinary unit could focus on essential questions such as: *What natural resources do we use, and how does it impact our environment? And what can we do about the impacts?* As with many interdisciplinary units, the New Jersey Student Learning Standards should be bundled together instead of being addressed separately in different contexts. For the above middle school unit essential questions, the following interdisciplinary NJSLs could be addressed:

Life Science	<ul style="list-style-type: none"> MS-LS2-5: Evaluate competing design solutions for maintaining biodiversity and protecting ecosystem stability.
Earth & Space Science	<ul style="list-style-type: none"> MS-ESS3-3: Apply scientific principles to design a method for monitoring and minimizing a human impact on the environment MS-ESS3-5: Ask questions to clarify evidence of the factors that have caused the rise in global temperatures over the past century.
Engineering, Technology, and the Application of Science	<ul style="list-style-type: none"> MS-ETS1-1: Define the criteria and constraints of a design problem with sufficient precision to ensure a successful solution, taking into account relevant scientific principles and potential impacts on people and the natural environment that may limit possible solutions.
Social Studies	<ul style="list-style-type: none"> 6.2.8.GeoPP.3.b: Explain how geography and the availability of natural resources led to both the development of classical civilizations and to their decline. 6.3.8.CivicsPD.2: Propose and defend a position regarding a public policy issue at the appropriate local, state, or national level. 6.3.5.GeoGI.1: Use technology to collaborate with others who have different perspectives to examine global issues, including climate change, and propose possible solutions.

English Language Arts	<ul style="list-style-type: none"> • RST.6-8.8: Distinguish among facts, reasoned judgment based on research findings, and speculation in a text • WHST.6-8.1: Write arguments focused on discipline-specific content • WHST.6-8.7: Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration. • SL.8.5: Integrate multimedia and visual displays into presentations to clarify information, strengthen claims and evidence, and add interest.
Mathematics	<ul style="list-style-type: none"> • MP.2: Reason abstractly and quantitatively • 7.EE.B.4: Use variables to represent quantities in a real-world or mathematical problem and construct simple equations and inequalities to solve problems by reasoning about the quantities.
Computer Science & Design Thinking	<ul style="list-style-type: none"> • 8.2.5ETW.5: Identify the impact of a specific technology on the environment and determine what can be done to increase positive effects and to reduce any negative effects, such as climate change
Career Readiness, Life Literacies, and Key Skills	<ul style="list-style-type: none"> • 9.4.8.DC.8: Explain how communities use data and technology to develop measures to respond to the effects of climate change (e.g., smart cities).

As shared above, similar essential questions could be posed in a high school setting. Additional essential questions could include: ***How will climate change affect my community and how much? What local action can be taken to mitigate and adapt to these impacts?***

Once again, bundling interdisciplinary standards to provide a rationale for including climate change topics in your curriculum is highly recommended. Consider how the various aspects of climate change as a socioscientific issue already connect to topics in your required curriculum. For these essential sample questions, the following interdisciplinary NJSLs could be addressed:

Life Science	<ul style="list-style-type: none"> • HS-LS2-7: Design, evaluate, and refine a solution for reducing the impacts of human activities on the environment and biodiversity.
Earth & Space Science	<ul style="list-style-type: none"> • HS-ESS3-1: Construct an explanation based on evidence for how the availability of natural resources, occurrence of natural hazards, and climate change have influenced human activity. • HS-ESS3-4: Evaluate or refine a technological solution that reduces impacts of human activities on climate change and other natural systems.
Engineering, Technology, and the Application of Science	<ul style="list-style-type: none"> • HS-ETS1-1: Analyze a major global challenge to specify qualitative and quantitative criteria and constraints for solutions that account for societal needs and wants. • HS-ETS1-3: Evaluate a solution to a complex real-world problem based on prioritized criteria and trade-offs that account for a range of constraints, including cost, safety, reliability, and aesthetics, as well as possible social, cultural, and environmental impacts.

Social Studies – Geography, Civics and Government, History	<ul style="list-style-type: none"> • 6.1.12.GeoHE.14.a: Evaluate the impact of individual, business, and government decisions and actions on the environment and climate change and assess the efficacy of government policies and agencies in New Jersey and the United States in addressing these decisions. • 6.1.12.GeoHE16.a: Explain why natural resources (i.e., fossil fuels, food, and water) continue to be a source of conflict and analyze how the United States and other nations have addressed issues concerning the distribution and sustainability of natural resources and climate change. • 6.2.12.CivicsPI.6.a: Use historic case studies or a current event to assess the effectiveness of multinational organizations in attempting to solve global issues.
English Language Arts	<ul style="list-style-type: none"> • RST.11-12.1: Accurately cite strong and thorough evidence from the text to support analysis of science and technical texts, attending to precise details for explanations or descriptions. • RST.11-12.9: Synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible • SL.11-12.5: Make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance understanding of findings, reasoning, and evidence and to add interest
Mathematics	<ul style="list-style-type: none"> • MP.2: Reason abstractly and quantitatively. • MP.4: Model with mathematics. • HSS-IC.B.6: Evaluate reports based on data
Computer Science & Design Thinking	<ul style="list-style-type: none"> • 8.2.12.ETW.3: Identify a complex global environmental or climate change issue, develop a systemic plan of investigation, and propose an innovative sustainable solution.
Career Readiness, Life Literacies, and Key Skills	<ul style="list-style-type: none"> • 9.4.12.IML.5: Evaluate, synthesize, and apply information on climate change from various sources appropriately.

6. Resources to Support Action Project Planning and Implementation

A wide range of resources are available to help students decide on a project. A simple google search on a topic will return a wealth of resources. Part of the fun is researching and discovering team members’ interests.

Once the group has settled on a dimension of climate change it wants to address, it might be helpful for students to reach out to local organizations for project ideas. This includes their municipal Environmental Commission, Green Team or Shade Tree Commission, a local [Watershed Association](#), [Pinelands Preservation Alliance](#), [Rutgers Cooperative Extension](#), etc. for ideas. Various nonprofits, including Rutgers University Extension Services, often publish how-to guides or may have outreach coordinators willing to coach students through their projects.

Your school **does not** have to be participating in the Sustainable Jersey for Schools program to participate in the Challenge or access the resources. However, if your school or the municipality is participating, the student project could help earn them points in the program. Students should reach out to the school or municipal Green Team if they would like to select a project related to a



Sustainable Jersey action. To learn how to find out if your school or municipality is certified or participating in Sustainable Jersey and obtain contact information, click on the links below to a short instructional video:

[Sustainable Jersey for Schools](#)

[Sustainable Jersey Municipal Program](#)

Climate-Related Sustainable Jersey for Schools Actions

The following table is a collection of Sustainable Jersey for Schools actions that link to climate change. These actions could serve as inspiration for student team projects. More information about each action can be found at the links provided.

Action	Description and/or Goal of Action
<i>Climate Mitigation & Renewable Energy</i>	
School Carbon Footprint	A School Carbon Footprint measures the amount of greenhouse gas (GHG) emissions produced by a school in a given year. Completing a School Carbon Footprint requires an accounting-like inventory of all the sources of GHG in your school buildings, fleet, and operations.
<i>Energy Efficiency</i>	
Behavior-Based Energy Conservation Programs	The goal of this action is to spur activity among students – and the wider school community – that promotes energy savings. Behavior-based conservation programs have been shown to impact school culture through an increased awareness of energy use, and to provide significant and long-term energy savings.
<i>Food & Nutrition</i>	
Promote Locally Grown Foods	The goal of this action is to support the farm to school movement by encouraging schools to source more foods locally and provide complementary educational activities to students that emphasize food, farming, and nutrition.
School Gardens	School gardens serve as living classrooms that teach lessons as simple as "where our food comes from" to complex lessons on ecology, resource management, nutrition, and healthy lifestyles. The goal of this action is to encourage and support the creation and maintenance of sustainable food-producing school gardens.
<i>Healthy School Environments</i>	
Anti-Idling Education & Enforcement	A motor vehicle is idling when the engine is turned on, but the vehicle is not in motion. A great deal of idling occurs at schools, where buses and cars line up to drop off and pick up children. Stopping unnecessary vehicle idling is a simple way to contribute to improved air quality around schools.
<i>School Grounds</i>	



<u>Green Infrastructure Assessment & Plan</u>	Stormwater runoff, if not controlled properly, has a major negative impact on water quality in local waterways and can contribute to flooding. There are often opportunities to reduce these impacts on-site by retrofitting school facilities with green infrastructure (such as rain gardens, bioswales and rain barrels) to capture and treat stormwater runoff.
<u>Green Infrastructure Installation</u>	School campuses contain many impervious surfaces, including buildings, parking, access roads, and paved playgrounds which can lead to flooding from stormwater runoff. With this action, schools can install green infrastructure on their grounds to capture and treat stormwater.
<i>Student & Community Outreach</i>	
<u>Community Education & Outreach</u>	Schools take action to educate the community about sustainability issues and about specific programs that encourage sustainable practices.
<u>Civic & Stewardship Volunteer Initiatives</u>	Civic and Stewardship Initiatives directly connect the school with its surrounding environment by providing opportunities for students to participate in projects with community-based organizations, thereby gaining real-world learning experience with a broad realm of sustainability issues, from land and water stewardship to socio-economic stewardship.
<u>Green Challenges</u>	The green challenge action involves asking people to pledge to make a specific change in their lives or in their behavior towards greater sustainability. The program educates participants on the sustainability issues addressed by the challenge and instructs them on how to participate; it documents participation and offers resources for success.
<u>Green Fair</u>	A green fair is a community-wide event that educates and encourages people of all ages to adopt a more sustainable lifestyle. Green fairs allow participants to visualize how their small individual efforts can make a difference in their community.
<u>'Green' Your Green Fair or School Event</u>	Schools incorporate sustainable or "green" features to the running of their Green Fairs or other larger school events such as athletic events, dances, multiple classroom parties, or commencement.
<i>Student Safety</i>	
<u>School Travel Plan for Walking and Biking</u>	A Safe Routes to School Travel Plan maps out how to improve pedestrian and bicycle travel to and from school to increase the number of students who walk and bike to school and to improve safety. It identifies: (1) where students currently walk and bike; (2) where students would walk and bike if they could; and (3) what changes need to be made so that students can and will walk and bike to school.

<i>Waste Management & Recycling</i>	
Waste Audit	This action requires that the school or district complete a waste audit: an assessment of the school's waste in terms of quantity and origin.
Document Recycling Rates	The recycling rate is a measure of how much of the school's waste is being recycled and will require at least one year of waste disposal and recycling data.
Food Waste Management	A school may choose to add the recycling of cafeteria and lunchroom food waste to its recycling program. Recycling of food waste in a school can serve as a valuable lesson for students on making compost, improving soil nutrients for plant growth, and diverting food waste from landfills.
Materials Reuse	A Materials Reuse Program connects those wishing to discard unnecessary or unwanted items within their school with others who are looking for used items in good condition. Materials Reuse Programs are valuable to the environment as they keep many materials from being disposed of in landfills and incinerators.
Recycling Non-Mandated Materials	This action implements recycling initiatives that target materials that are not designated as mandatory recyclable items. School initiatives to collect non-mandated materials can include but are not limited to: Recycling milk cartons; Recycling/reusing old toys; Recycling crayons/markers; Plastic bag/film collection; Battery/ink toner recycling.

Climate-Related Sustainable Jersey Municipal Actions

Much like the climate-related Sustainable Jersey for Schools actions listed above, many municipal or community-based actions could be great climate action projects for student teams. Investigate the links in the table below for more information.

The student team may not need to complete all the action requirements but select a component of the action to achieve.

Action Category	Links to Sustainable Jersey Actions	
Animals in the Community	Wildlife Interaction Plan	
Community Partnership & Outreach	Community Education & Outreach	Green Challenges
Emergency Management & Resiliency	Community Wildfire Protection Plans	Heat Island Assessment
	Vulnerable Populations Identification for Emergencies	
Energy	Commercial Energy Efficiency Outreach	Residential Energy Efficiency Outreach
	Make Your Town Solar Friendly	Make Your Town EV Friendly



	Municipally Supported Community Solar	Purchase Alternative Fuel Vehicles
	Transportation Fleet Inventory	Public EV Charging Station
	Wind Ordinance	
Food	Community Gardens	Buy Fresh, Buy Local Programs
Green Design	Green Building Education	
Health & Wellness	Anti-Idling Education & Enforcement Program	Safe Routes to School
Land Use & Transportation	Bicycle and Pedestrian Audits	Bicycle and/or Pedestrian Plan
	Bicycle and/or Pedestrian Improvement Projects	Green Infrastructure Planning
	Green Infrastructure Implementation	Sustainable Land Use Pledge
Local Economies	Green Business Recognition Program	Buy Local Campaign
Natural Resources	Tree Hazard Inventory	Tree Protection Ordinance
	Tree Planting Programs	Water Conservation Education Program
	Water Conservation Ordinance	
Operations & Maintenance	Adopt a Green Purchasing Policy	Efficient Landscape Design
	Minimize Water Consumption	
Sustainability and Climate Planning	Community Asset Mapping	
	Recycling and Waste Reduction Education and Compliance	Recycling Food Waste
Waste Management	Recycling Household Hazardous Waste	Non-Mandated Materials Recycling
	Backyard Composting Program	Grass - Cut It and Leave It Program
	Materials Reuse Program	Waste Audit of Municipal Buildings and Schools

Additional Project Resources

Here is an example of a possible Action Plan template. The A.C.T.I.O.N plan from Young Voices for the Planet provides a framework for students to design and implement their projects.

<u>A</u>	ASSESS and ANALYZE what local issues most concern them (Find your passion)
<u>C</u>	COLLABORATE with fellow students, friends, families, teachers, school administrators, and community members to brainstorm with them about how to address the issue (Find your team)
<u>T</u>	Create a TIMETABLE to plan out steps towards their goal
<u>I</u>	IDENTIFY who they can talk to for assistance and enlist as mentors
<u>O</u>	ORGANIZE their thoughts. Organize meetings. Make a list of goals and action steps necessary to achieve their vision (Find your power)
<u>N</u>	Share the NEWS with school media, social media, and local and national news outlets. Celebrate success by sharing and engaging others in their project

Additional instructional resources and Young Voices for the Planet films series can be found at the following links:

<https://www.youngvoicesfortheplanet.com>

7. Resources to Support Digital Story Video Production

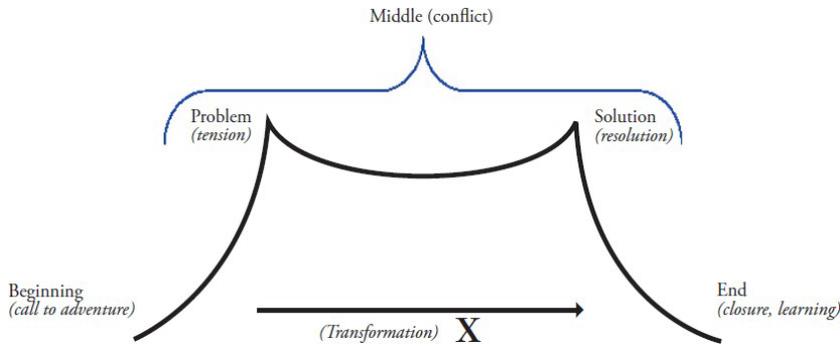
Teachers and students alike are familiar with creating and viewing videos in our technology-dependent world of education. What sets a digital story apart from other videos is the personal storytelling aspect that shares the narrative behind the video topic with the viewer. Understanding these differences is essential, and additional guidance can be found in the [Digital Storytelling Guide](#). The guide lays out the three C's of digital storytelling:

*"New technology tools allow us to **connect, communicate, and collaborate** easily with others worldwide. Stories are all about these three C's and lend themselves naturally to create a bridge between teaching and integrating technology. Digital Storytelling is a tool that can support education and learning in any subject area.*

1. We **connect** emotionally with people and events in stories and **connect** them to experiences in our own lives.
2. Stories let us **communicate** our perspectives and perception.
3. Stories are usually a **collaborative** effort of the characters, their actions, and points of view."

The [University of Houston website](#) on the educational uses of digital storytelling, including example stories, educational materials, and more is great resource. Key components of any digital story are the storytelling elements and the plot consisting of a beginning, a problem, a conflict, a solution/resolution, and an ending. It is often helpful to think about a digital story visually:





This graphic is online at:
<http://www.jasonohler.com/pdfs/VPS.pdf>

By thinking about digital stories in this way, students can relate it to their climate action project. The “call to adventure” can be presented when students share information about climate change, its impacts, and why it is problematic for their community. Then students may want to show the project design and implementation, which can be seen as the “tension, conflict” portion of the digital story arc. Lastly, the completion of the project would demonstrate the “resolution” and the reflection as a “closure” and “learning” process. Thinking about digital stories in this way allows students to visualize better and plan what they want to create.

In [8 Steps to Great Digital Storytelling](#), Samantha Morra provides a great overview of the digital storytelling process, as shown in the graphic below. Each of the steps is described in more detail in the article, which should be helpful to those just starting to explore digital storytelling and those teaching the process to others.



For the Climate Challenge, the digital story video should approximately 3 minutes. Keep in mind that longer is not necessarily better. The video should highlight the action project **clearly communicating how it addresses a cause or impact of climate change**. Students are encouraged to “show” rather than “tell” as much as possible—it is more exciting to see visual representations of the work rather than someone just talking into the camera.

VIDEO REQUIREMENTS:

- Save as .mp4, .mov, or .avi file
- Do not include copyrighted music. Free music at is available <https://www.bensound.com/>.

Each student member is required to sign the [Climate Challenge Digital Story Video Student Consent Form and Release](#). The completed forms from each student team member should be combined into a single file and uploaded into the [Challenge Submission Form](#).

EASY WAYS TO MAKE A VIDEO:

- Use your cellphone and keep it casual (please use landscape/horizontal recording format)
- Create an online meeting and record the “meeting”
- Create a PowerPoint presentation with narration and export it as a video

FREE VIDEO EDITING SOFTWARE:

- Lightworks (more advanced), VideoPad (great for beginners) and Movie Maker Online (use in browser)
- Cap cut pro
- [Tiktok](#)
- iMovie (Video: [iMovie Tutorial for Beginners](#) 11 minutes)
- [Animoto](#) is a way to create videos without the use of editing software
- [WeVideo](#)

Edutopia has put together a [curated list](#) of video tutorials to help teachers and students get started with filmmaking. There are tons of helpful tips on everything from no-budget filmmaking gear to editing video, from storyboarding to planning camera angles.

Additionally, while many students can record on their phones, not all students have the necessary technology to accomplish this for several reasons. Capturing live-action videos on phones or tablets is encouraged, but students can also draw pictures or diagrams or use animation tools to share their stories. Online tools for video creation abound, with new platforms being introduced frequently. Here is an [annotated list](#) describing (mostly all free) resources to help create and use video. Some examples of student-created digital stories using these alternative online tools include:

- Speed drawings - <https://youtu.be/U01jDsg2mLY>
- Drawings - <https://youtu.be/70u1w5kGbYg>
- Animation using an online tool - <https://youtu.be/5e4uKbXUGkM>
- Stop motion with Legos - <https://youtu.be/K0RvbAWU8PM>

The Green Ninja Film Festival project offers a collection of lesson plans around scientific storytelling. Teachers can access the lesson plans and resources needed to get started with story development and filmmaking [here](#). Green Ninja project hosts an annual student film festival around



student-made videos about their environmental action projects. Teachers can find additional sample student-created videos on this [YouTube playlist](#).

Young Voices for the Planet and Lens on Climate Change are two more organizations that offer educational resources for teachers and students around climate and environmental filmmaking. The Young Voices for the Planet [films](#) show how youth voices can use their influence to spearhead meaningful actions. Young Voices for the Planet also offers a civic engagement curriculum to assist students in designing, planning, and implementing a climate action project ([free download with signup](#)). The Lens on Climate Change program guides students through creating documentary films to assist with understanding the science behind climate change. Teachers can find sample student videos and curricular resources on their [website](#). They also offer a [free e-book](#) for teachers entitled *Sharing Science with Film: A Guide to Student Productions*, which includes tips for video production and a [collection](#) of video tutorials on technical aspects of filmmaking.

8. Submission Requirements and Form

To enter the Climate Challenge, each student team must complete a [Submission Form](#) by 11:59 pm on **Friday, April 21, 2023**. Please see the [Official Challenge Rules](#) document for additional details on the Challenge. To view a PDF copy of the Submission Form, [click here](#). **The student completing the submission form must sign into a Google account to complete the required file uploads. Google accounts are free, so one can quickly be created to complete the form.**

The form requests the following information:

Section 1 – Contact Information

- Teacher or Club Advisor First Name
- Teacher or Club Advisor Last Name
- Teacher or Club Advisor Email
- School District Name
- School Name
- School Social Media (Facebook Account, Twitter Handle, Instagram Account Name, Tiktok Name)
- Local News Outlets (TapInto, etc.)
- Student Team Name
- Number of Team Members
- Grade Level of Student Team Members (Middle or High School)
- Student Team Members' Name, Grade, and Student and Parent Email Addresses. Please provide this information using the [Team Roster template](#).

Section 2 – Project Information

- Project Summary – Briefly describe the focus of your project and what inspired your team to take that approach.
- Science Explanation – Explain how your project directly connects to and addresses a cause or impact of climate change. Teams are encouraged to do background research to make sure the science is clear and correct.



- Project Highlights – Share three major highlights or takeaways from completing the project.
For example:
 - The challenges your team encountered and how you addressed them
 - The lessons your team learned
 - The relationships your team developed with experts and outside organizations

Section 3 – Video Details and File Upload

- Digital Story Title (**10-word limit**)
- Running time (min, sec)
- Signed [Climate Challenge Digital Story Video Student Consent Form and Release](#) forms (one form per student combined into a single file).
- Video File Upload – The video file can be uploaded into the submission form or a link to the video can be provided. **THE LINK MUST ALLOW THE FILE TO BE DOWNLOADED BY ANYONE.**

Note: The student completing the submission form will need to sign into a Google account to upload the video. Google accounts are free, so one can be easily made for the purposes of completing the video upload.

9. Submission Review Process

Each entry will be reviewed and evaluated by a panel of judges, including educators and representatives from non-profits, state agencies, and partner organizations. Entries will be categorized as either Middle School or High School. Please see the [Official Challenge Rules](#) for additional Challenge details. The judges will independently score all entries using the following scoring rubric.



Climate Challenge Scoring Rubric

Points	4	3	2	1	Total
Video Content					/12
Storytelling: Creative Elements	The video communicates to the audience in a creative way. It is interesting and engaging, and its purpose is clear. The digital narrative is clear and insightful and connects with the overall purpose of the project.	The story is creative and has several interesting and engaging elements with a set purpose. The digital narrative connects with the overall purpose of the project.	The story is generic and has few interesting or engaging elements related to the purpose of the video. The digital narrative loosely connects with the overall purpose of the project.	The story is difficult to follow or uninteresting. The project lacks a narrative and or overall connection to purpose.	/4
Core Science Ideas and Crosscutting Concept	The project clearly addresses a human impact on the environment; the cause-and-effect relationship (CCC-2) between human activity and climate change (ESS3.C) is accurately described and supported by evidence.	The project clearly addresses a human impact on the environment (ESS3.C); the cause-and-effect relationship (CCC-2) between human activity and climate change is described but not fully supported by evidence.	The project addresses a human impact on the environment but fails to describe the cause-and-effect relationship between human activity and climate change.	The tie to human impact is inadequate or missing entirely from the project.	/4
Solutions	The action project focuses on solutions that are innovative, practical, and may be implemented easily.	The action project includes solutions that are mostly practical and may be innovative.	The solutions suggested by the action project are impractical or difficult to implement.	There are no solutions given in the video, nor through the action project.	/4
Application					/8
Written Science Explanation	Climate science written descriptions—the cause-and-effect relationship between human activity and climate change—are accurate, well described, and clearly communicated. The science is closely related to the video.	Most climate science descriptions are accurate, well described, and clearly communicated. The science is related to the video.	Most climate science descriptions are vague or contain inaccuracies and explanations are confusing. The science may be only tangentially related to the video.	Climate science descriptions are missing or inaccurate. The science may be unrelated to the video.	/4
Written Project Components	The written project components section is descriptive and includes insightful, well described, and thoroughly detailed information about the design and completion of the action project.	The project components section is well described and has detailed information about the action project.	The project components section is included, but minimally addressed and/or without sufficient detail to fully describe the action project.	The project components section is incomplete or missing. Limited, or no additional information about the action project was provided.	/4
Total					/20



10. Climate Challenge Awards

Finalist will be notified in May 2023. The student teams and their teachers will be recognized at an awards ceremony hosted by the Drumthwacket Foundation with New Jersey Governor and First Lady in June 2023.

Schools with winning submissions will receive a grant to support their climate education initiatives. 1st Place: \$2,500 school grant 2nd Place: \$1,000 school grant 3rd Place: \$500 school grant

Students will receive an award certificate and a commemorative gift.

11. Questions?

Email questions related to the Climate Challenge including the Challenge rules, submission requirements, deadlines, project eligibility requirements, local organizations that could be a resource for a specific student project, or teacher resources addressing a specific topic to:

njstudentclimatechallenge@sustainablejersey.com.

If you would like to speak to someone about the Climate Challenge call Rosalie Morillo at 609-771-2802.



New Jersey Student Climate Challenge Program Partners

About Drumthwacket Foundation

The Drumthwacket Foundation is a 501c3 non-profit, non-partisan organization. Its mission is to inspire pride and enhance civic awareness for all New Jerseyans by restoring Drumthwacket, a nationally landmarked historic site and the official residence of NJ Governors, and by educational and cultural activities that recognize the rich diversity and ongoing contributions of New Jersey's communities and its residents.

About Sustainable Jersey for Schools

[Sustainable Jersey for Schools](#) is a certification program for public schools in New Jersey. It provides tools, training, and financial incentives to support and reward schools as they pursue sustainability programs. To date, 388 district schools and 1,058 schools are participating in the program. Sustainable Jersey for Schools has awarded over \$2.8 million in grants to schools and school districts. [Follow Sustainable Jersey for Schools on Twitter @SJ_schools](#).

About Atlantic City Electric

Atlantic City Electric is a unit of Exelon Corporation (Nasdaq: EXC), the nation's leading energy provider, with approximately 10 million customers. Atlantic City Electric provides safe and reliable energy service to approximately 560,000 customers in southern New Jersey.

About the Exelon Foundation

The Exelon Foundation is an independent, nonprofit organization funded solely by Exelon Corporation through shareholder dollars. The mission of the Foundation is to encourage respect for the environment, support innovative STEM education programs and strengthen the social and economic fabric of the community by providing a match to Exelon employee contributions.

