

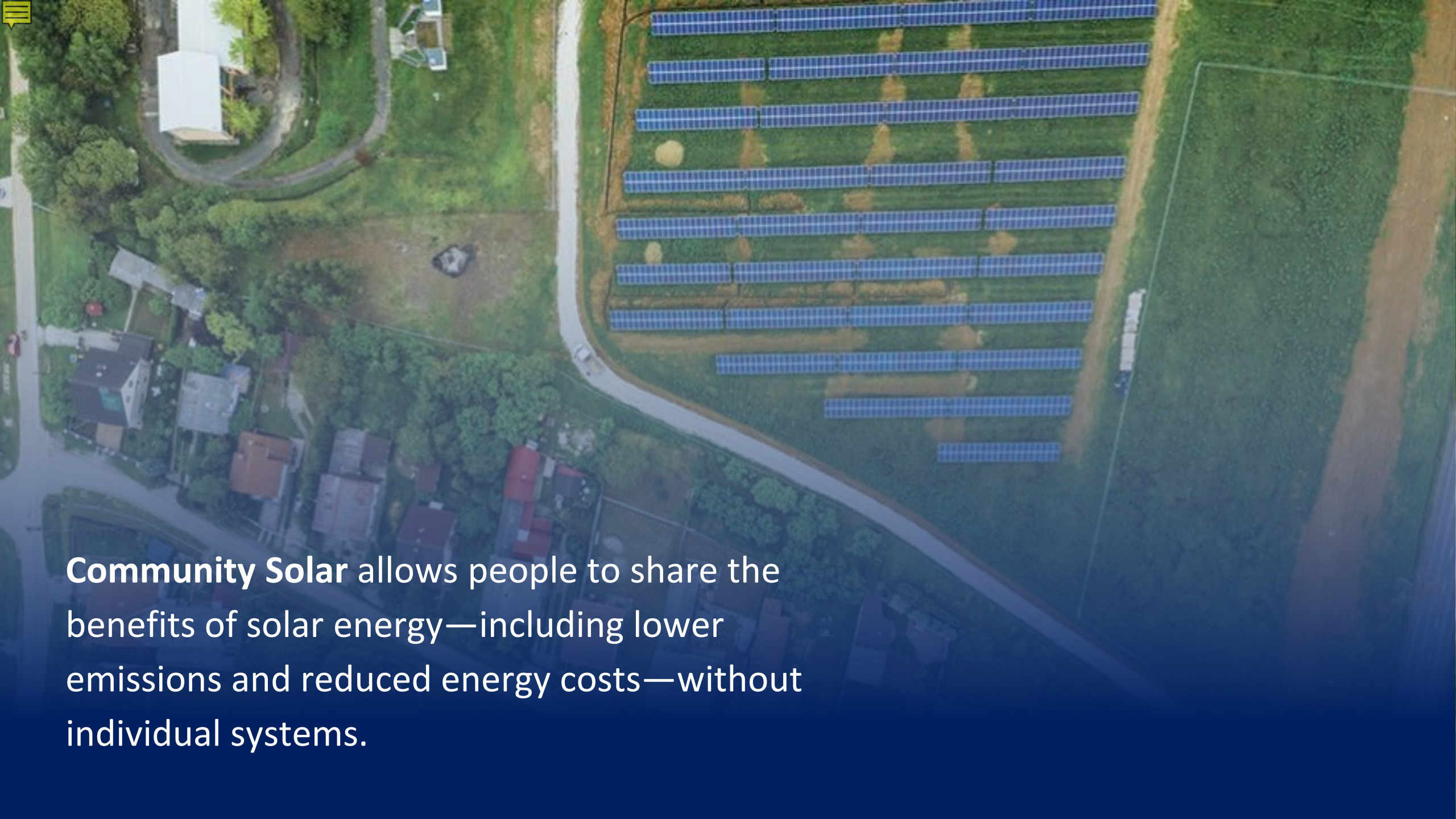


MASSACHUSETTS
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Massachusetts Climate Careers: Powering the Future

**Harnessing the Power of the Sun
for Our Communities**



Community Solar allows people to share the benefits of solar energy—including lower emissions and reduced energy costs—without individual systems.



Opening Activity





Today's Agenda

- **The Big Question and My Climate Goals**
- **Climate Watch and Discussion**
- **The Power of Community Solar**
- **Pitching Community Solar**
- **Takeaways and Closing**



The Big Question

What is community solar, and what are its benefits?



Brewster Community Solar Garden

Serves over 200 households and has generated over 3 million kWh of clean energy since 2016.



Harvard Community Solar Garden

Powers municipal buildings and residences, reducing local greenhouse gas emissions by 1,500 tons annually.

Courtesy XXXXXX





My Climate Goals

When you complete this lesson, you'll be able to

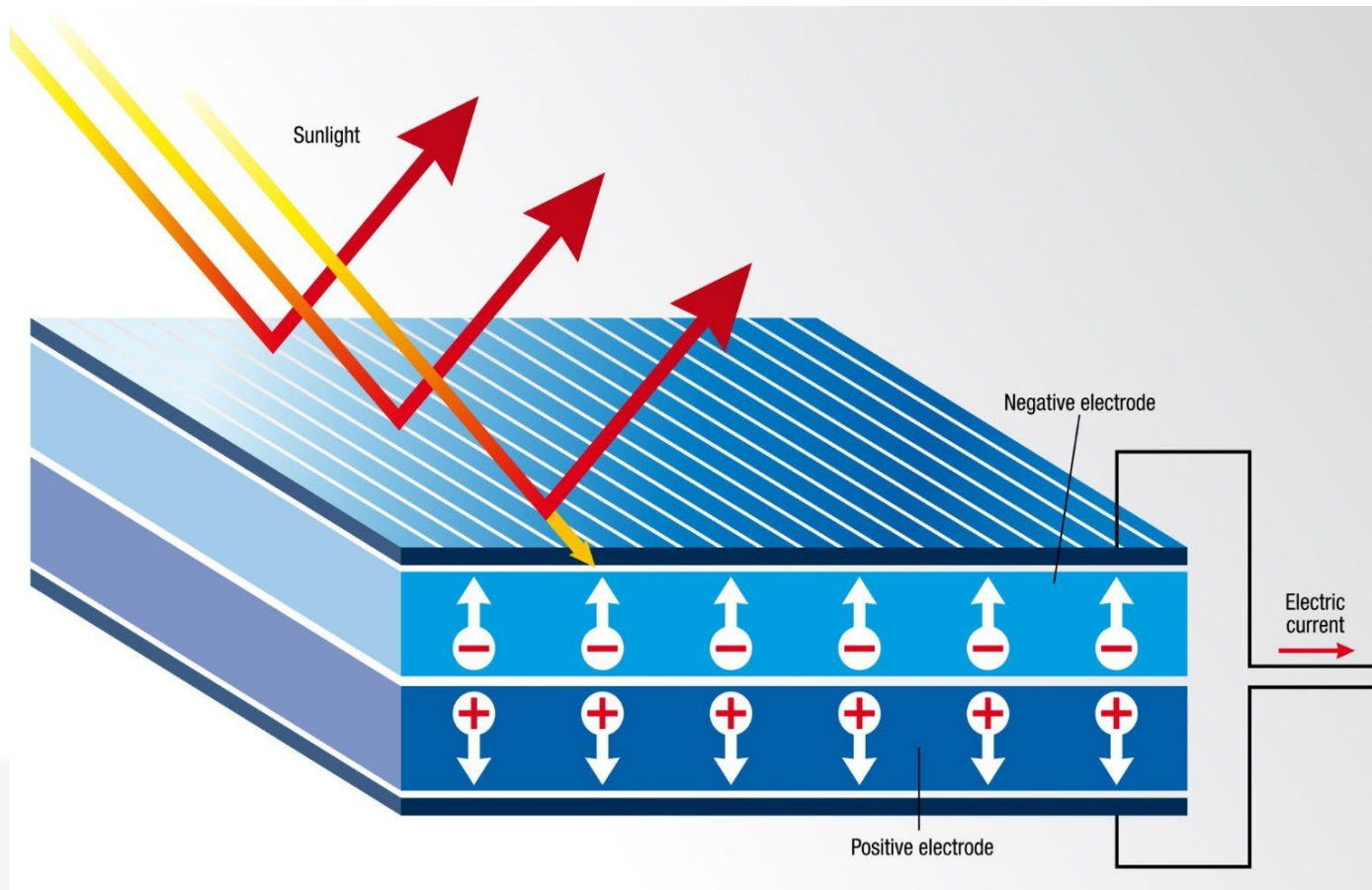
1. Explore examples of community solar projects in Massachusetts
2. Identify some examples of climate-critical professionals who work together to make community solar projects succeed, from the design to the outreach to the installation and maintenance phases
3. Discuss how individual solar and community solar projects can support various individual and community needs.

The Power of Community Solar



Introduction to Solar

- ☀️ Solar energy is power generated from the sun.
- ☀️ Solar panels capture sunlight and turn it into electricity.
- ☀️ This electricity is used to power homes, schools, and more.



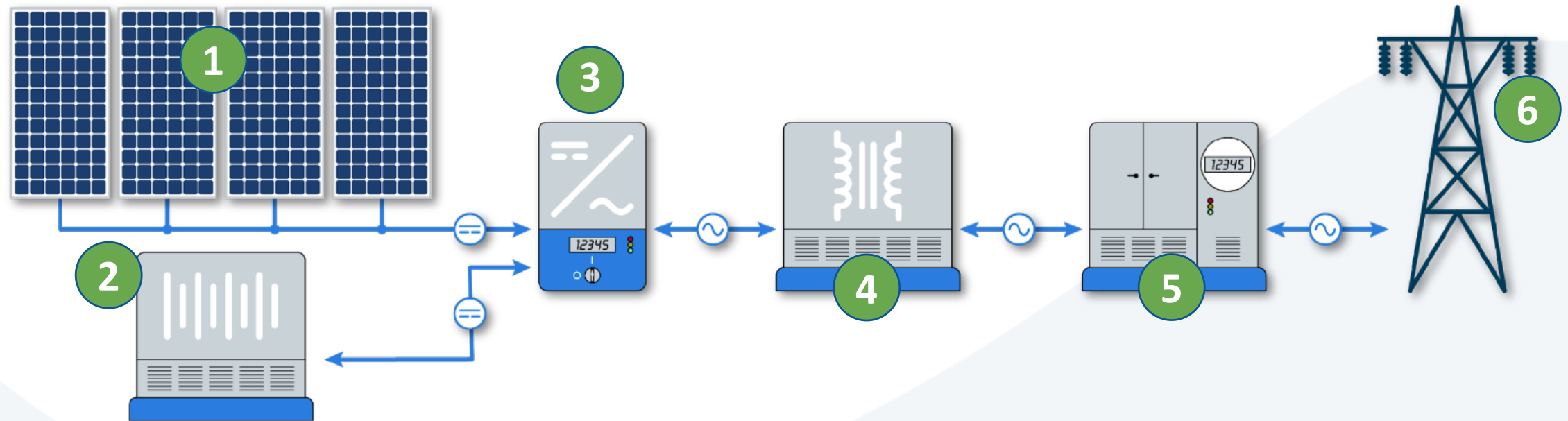


How Solar Panels Work

1. Solar panels are made of solar cells.
2. When sunlight hits the cells, photons knock electrons loose.
3. Free electrons flow through the cells, creating an electric current.
4. The current is collected by wires and used as electricity.



Community Solar Technology



Community solar projects rely on large-scale solar-electric systems that can power dozens or even hundreds of homes and businesses. Look at the illustration of the main components of these systems.



The Benefits of Solar

- Clean and renewable energy
- Reduction of pollution and carbon emissions
- Potential savings over time
- Ability to store power in a battery for later use
- Flexible arrangements and designs

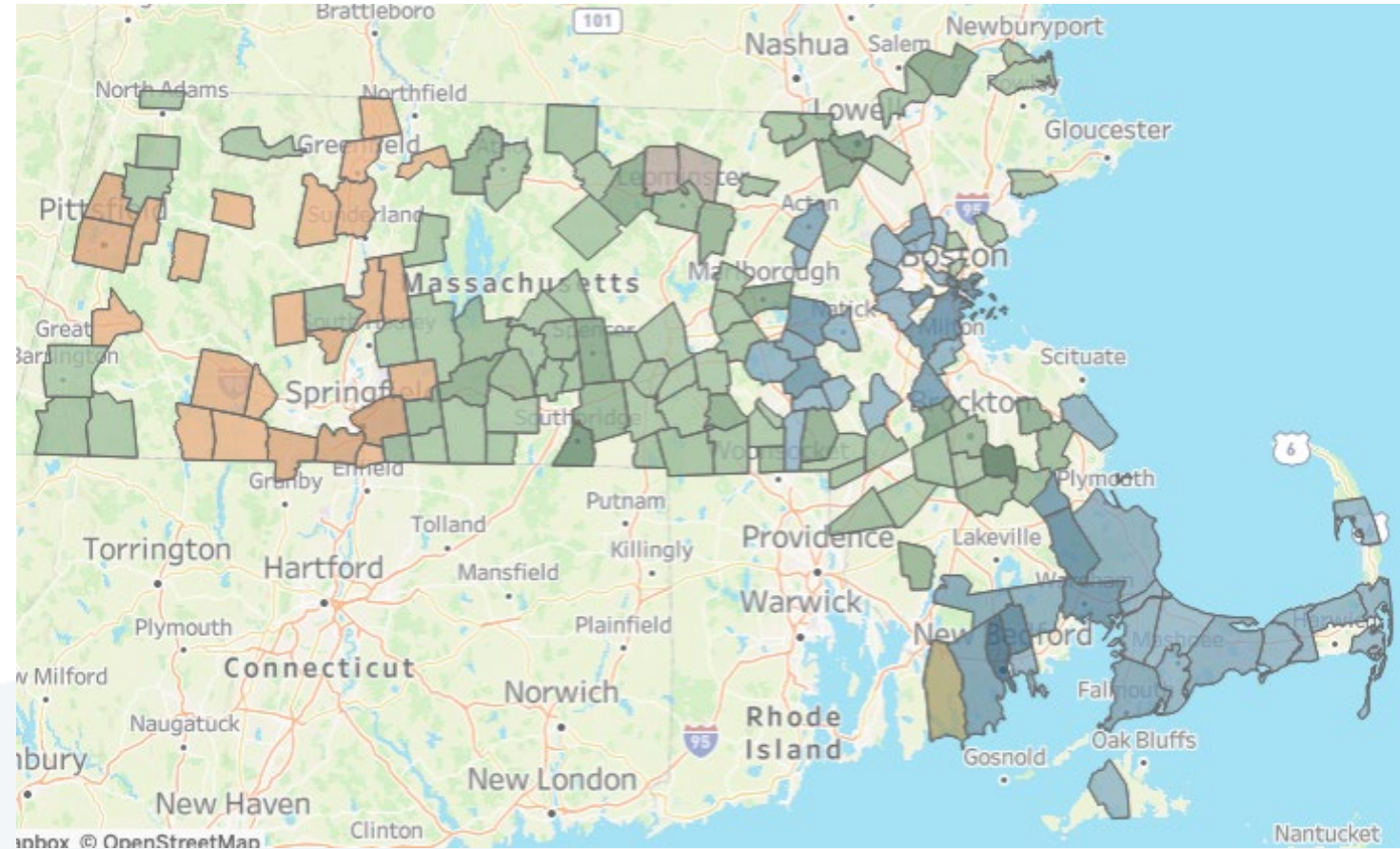
Energy Equity

Why might some communities have more access to solar energy than others?

All planned and operational community solar projects in Massachusetts as of July 15, 2022

Utilities:

- Eversource MA East
- Eversource MA West
- Mixed Utility
- National Grid (MA Electric)
- Unitil



Map and data provided by Massachusetts Clean Energy Center.



Climate Watch: Video





Climate Watch Discussion

Share what you learned from the video and listen to your classmates' perspectives. Here are a few thoughts to get you rolling:

1. What does Evaleah like about her career?
2. How would you describe what “community solar” is?





Solar Site Surveys

Professionals will survey a property to evaluate if it's a good candidate for on-site solar power.

- Is there enough unobstructed solar access?
- What is the condition of the location's roof and electrical system?
- Will the **array** require a ground mount?



Courtesy XXXXXX





Today's Group Activity

Create a persuasive pitch for a community solar project in your assigned town!



City Center



Historic District



Suburban Town



Rural Community

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Today's Group Activity

Your pitch should include:

- 1. Introduction:** Introduce your town and explain why solar energy is vital.
- 2. Benefits:** Explain the benefits of community solar for your town.
- 3. Challenges:** Identify two or three key challenges and how to overcome them.
- 4. Call to action:** Make a persuasive case for why this project should happen now!





Group Debrief

1. Which pitch did you find most compelling? Why?
2. What challenges do you think are most common with community solar projects?
3. How could projects like these help address issues of energy equity?





Key Points

- Community solar projects allow multiple participants to share the benefits of a single solar installation, increasing access to renewable energy.
- Successful community solar programs prioritize collaboration, location suitability, and community involvement.
- Environmental justice ensures that disadvantaged communities gain access to clean energy and its benefits.



Closing Activity

Answer one of these questions:

- How can community solar projects positively impact Massachusetts's climate goals?
- How can community solar address energy equity in your community?





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*Community solar creates greater access to
the benefits of clean, renewable solar energy.*