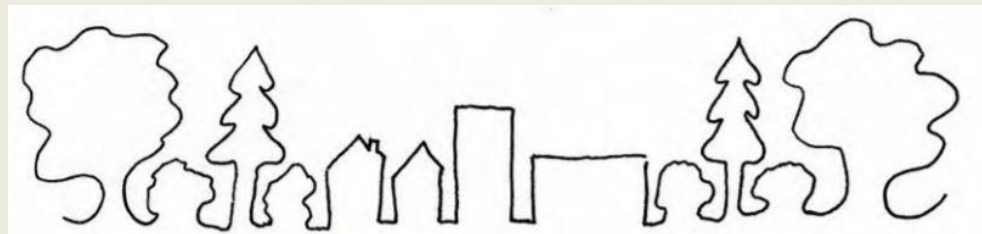


# ROCKLAND P.L.U.S PLANNING LAND USE WITH STUDENTS



## Visit #2

### Considering Your Community & Important Planning Elements



# Assess Both Your Local Community & The County

Score of 5 is highest



Score of 1 is lowest

Community Feature – How does your community rank in these categories?	Community Strengths Rank: From 1 - 5	Comments & Examples of Strengths & Challenges In Local Community	Application to <u>S.E.E.E.</u> Sustainability Spheres: Social, Environmental, Equitable, Economic
<b>Community Character:</b> <i>Places of Historical Significance/ Arts/ Theatres</i>			
<b>Demographic Diversity, Equity, &amp; Inclusion:</b> <i>diversity of people &amp; cultures included in all aspects of living and working in the community. Equitable access to community resources.</i>			
<b>Housing/Affordability/Mix of Housing:</b> <i>Condos/ Apartments/ Single Family Homes/ Options for all stages - Singles/ Families/ Retired</i>			
<b>Transportation/Accessibility/Walkability:</b> <i>Trains &amp; Buses/ Complete Streets/ Sidewalks/ Safe Roads/ Bike Trails/ Safe Crosswalks/ Walking Paths connect to stores &amp; services</i>			
<b>Health &amp; Wellness:</b> <i>Healthy Food Choices/ Farmers Markets/ Exercise opportunities/ Preventive treatment/ Accessible Clinics &amp; Hospitals / Health Education available</i>			
<b>Social/Recreation:</b> <i>Opportunities across ages &amp; prices: children/teens/adults/seniors</i>			
<b>Wilderness:</b> <i>Undeveloped Areas/Open Space to parkland</i>			
<b>Environmental Awareness, Water &amp; Energy Conscious</b> <i>Community Awareness of Stream Protection/ Water Conservation &amp; Management/ Recycling/ Energy Conscious &amp; Energy Savings (i.e. solar; automatic light switch off)/ Green Building requirements</i>			
<b>Education &amp; Employment</b> <i>Schools available for all stages (pre-schools through college level; internships) and a range of opportunities from entry level to professional jobs.</i>			
<b>Safety:</b> <i>Street Lighting/ Fire and Police departments/ Residents Feel Safe in their community</i>			



# One way is through actively being a **‘Climate Smart Community’**

Climate Smart  
Communities

**How has your community changed or become more climate smart in recent years?**

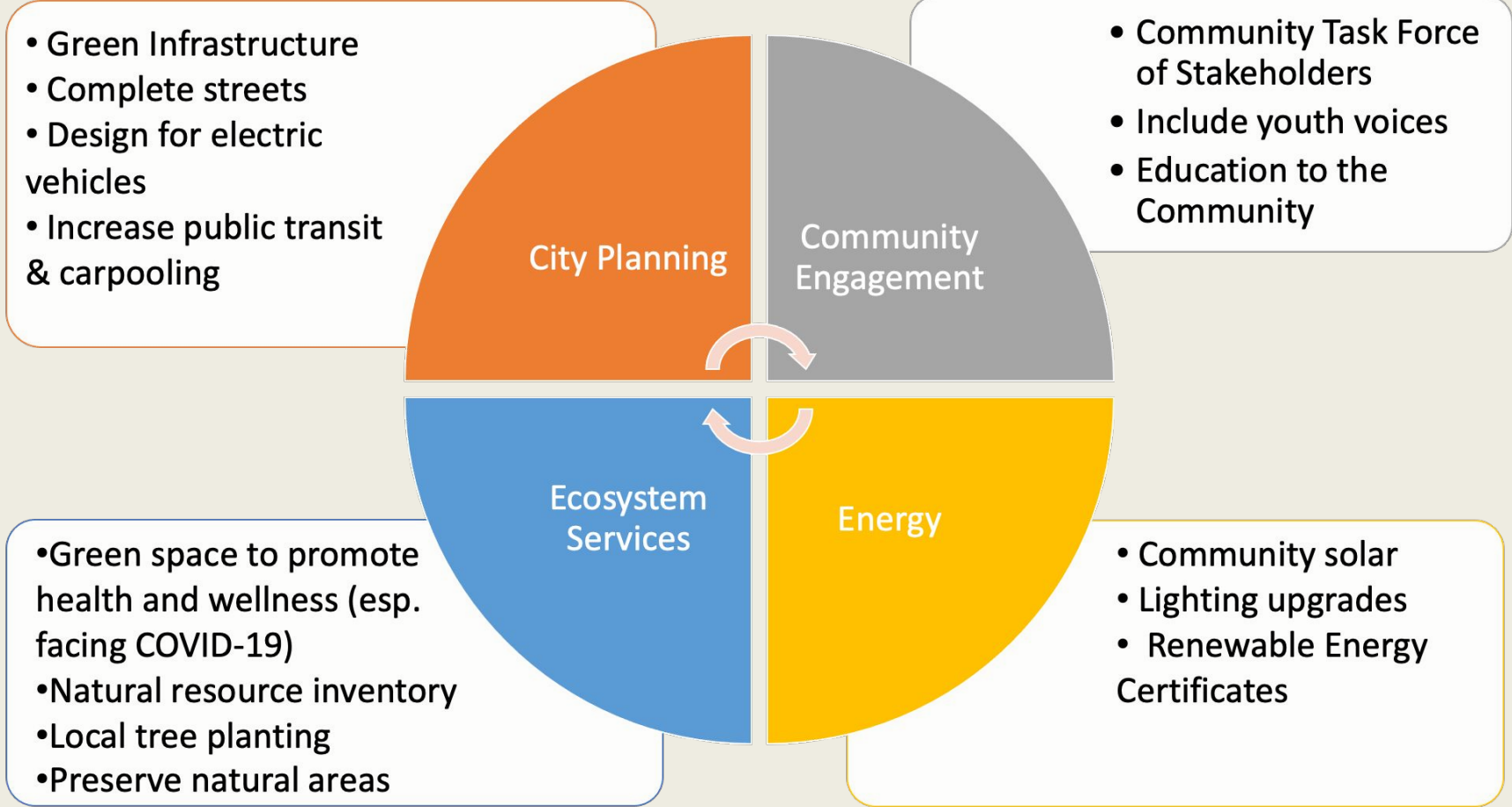




# One way is through actively being a ‘Climate Smart Community’

Climate Smart Communities

## Examples of a “Climate Smart” Community:





# One way is through actively being a ‘Climate Smart Community’



## Examples of a “Climate Smart” Community:

- Green Infrastructure
- Complete streets
- Design for electric vehicles
- Increase public transit

- Community Task Force of Stakeholders
- Include youth voices
- Education to the Community

### NYACK

#### Rockland’s first Bronze Certified Climate Smart Community!

- ❖ Municipal buildings currently use 100% green electricity sources
- ❖ Installing new LED streetlights to cut 68% of their lighting energy needs
- ❖ EV charging stations

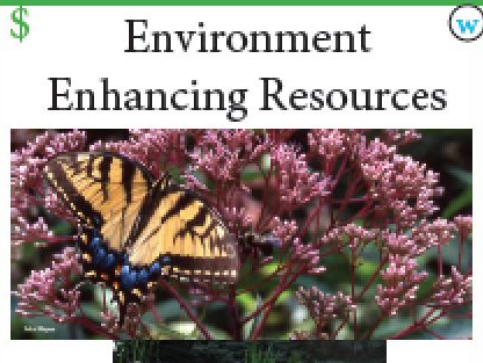
- Green space to promote health and wellness (esp. facing COVID-19)
- Natural resource inventory
- Local tree planting
- Preserve natural areas

Services

- Community solar
- Lighting upgrades
- Renewable Energy Certificates



# Planning Concepts & Planning Cards



## Integrate Wildlife Habitat with Green Space

### What is it:

- Creating a wildlife habitat such as using native wetland plants to enhance an existing wetland, or creating a small pond in your dedicated green space.
- Creating connections to existing water ways, and streams, and planting native plants with winter berries for native birds

### Fast Facts:

- Helps reverse the effects of habitat loss due to development
- Helps reinstate native species where invasive ones have taken over
- Attracts pollinators critical to habitat

### Community Benefits:

- Aesthetically pleasing
- Bring wildlife back to the area and enjoy the ecosystem functions they provide

## Use of the Planning Cards

- The borders are color coded by category
- The front titles can be the same but the backs are different tools and include:
  - Definition
  - Fast facts
  - Benefit/cost savings
- Categories often cross reference to other categories with a small letter on the upper right by the photo.
- The upper left includes from 1 to 5 dollar signs, representing a relative cost for inclusion.



## Conservation of Trees and Plants on Property

### What is it:

- Protecting and preserving trees and plants that are already on the property

### Fast Facts:

- The trees and plants that are already located on the property are part of the ecosystem of that area and provide important benefits like carbon storage, shade, habitat, and slow water absorption

### Community Benefits:

- Aesthetically pleasing
- Trees provide natural shading and can reduce the "heat-island" effect from extensive paved areas
- Trees and plants provide 'ecosystem services' such as nutrient cycling, soil preservation, and habitat for wildlife

# The cards cover a range of planning topics

## water

## energy

## transit

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### Pervious Pavers

T



### Pervious Pavers

③

#### What is it:

- Paving material that allows stormwater to be absorbed through its surface and put back into the ground below, rather than run-off into a storm drain system.
- Can be used to pave sidewalks, parking lots, bike paths, etc.

#### Fast Facts:

- Decreased run-off means decreased soil erosion and less sediments and pollution winding up in watersheds
- Increases infiltration of water

#### Cost Savings:

- Can soak up as much as 70% to 80% of annual rainfall.
- No need to put in detention pond or other storm management solution—more property to work with.

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### Using the Sun



### Rooftop Solar Panels and Daylighting Buildings

②

#### What is it:

- Solar panels on the roof allow the sun to be used for energy
- Daylighting buildings is the use of large, strategically placed windows to take advantage of the sun's light throughout the day

#### Fast Facts:

- Enough sunlight falls on the earth's surface every hour to meet world energy demand for an entire year.
- Daylight is beneficial to mental health

#### Cost Savings:

- reduce dependence on non-renewable resources for energy
- daylighting also reduces electricity bills as it gets rid of the need for lights to be on inside during the day

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### Transit Making Connections

E

E



### Transit Connections

④

#### What is it:

- Bus and train routes that make transit easy for people to navigate and travel within and between towns/ the county without relying on a car
- At train stations there are also bus stops and at bus stops there is bike storage, with connections to bike lanes, and walkable sidewalks

#### Fast Facts:

- Overall, public transit saves the U.S. 4.2 billion gallons of gasoline annually (American Public Transit Association)

#### Community Benefits:

- Cleaner air/ fewer emissions from the decreased individual car usage
- Easier for community members to get to school, work, doctor's appointments, etc.

# The cards 'hit the highlights' but many more benefits exist for each topic!

## Vegetated Natural Areas & Green Infrastructure:

- ❖ Provide **habitat**
- ❖ **Reduce** polluted runoff
- ❖ **Clean & Cool** the air
- ❖ More singing birds & plants lead to **less depression, anxiety, stress**
- ❖ **Fewer emergency asthma** attacks
- ❖ Increase equity in the **fight against COVID-19**
- ❖ **Reduction in crime and violence**





# Green Infrastructure Local Examples



## Rockland Country Club, Sparkill Green Roofs



Courtesy of Cornell Cooperative Extension Rockland County



# Green Infrastructure Local Example



## Nyack Memorial Park, Nyack

Porous Pavement





# Green Infrastructure Local Example



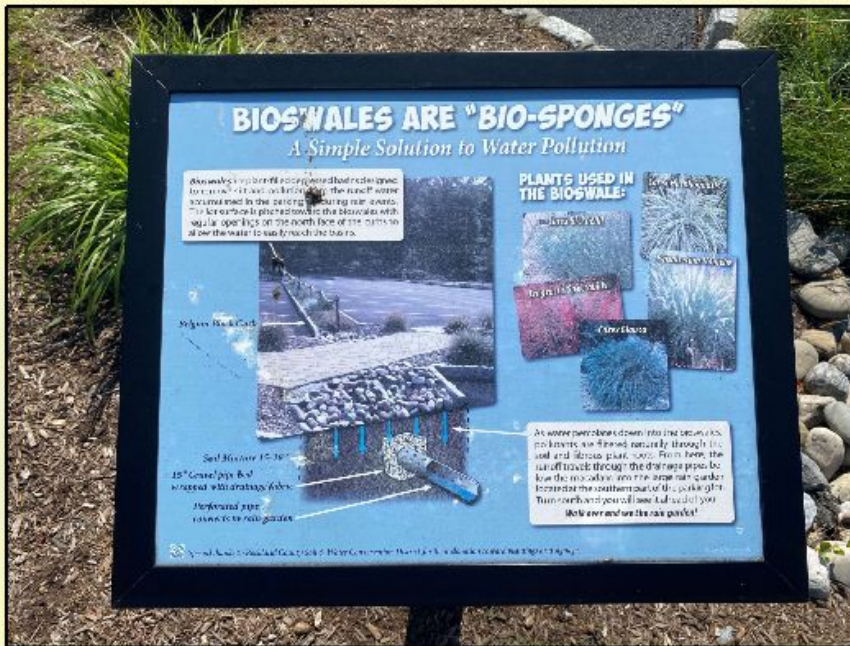
## Bowline Point Park, Haverstraw Rain Gardens





# Green Infrastructure Local Example

## Valley Cottage Library Rain Garden, Vegetated Swales





# Green Infrastructure Local Example



## Home for Heroes, Pearl River

Bio-Retention Area





# Green Infrastructure Local Example

## Tappan Zee High School Rain Gardens, Grass Swale, Conservation Area, Porous Pavement



# Green Infrastructure Local Example



## Bonus: Trees for Tribs



Trees for Tribs is a NYSDEC program that improves water quality and prevents flooding. These trees are stream buffers, another form of green infrastructure.

## Children's Park in Ramapo



# Green Infrastructure Additional Example



Rain Barrels



Maintaining Original Trees & Shrubs

Vegetated Islands for 'run on'





# How can we plan sustainably – Creating change through innovation



Photo Google Maps

**Repurposing for New Uses: The Filling  
Station & The Market, Rte. 9, Palisades**



# How can we plan sustainably – Creating change through innovation



## Net Zero Design

- Reduction
- Reclamation
- Absorption
- Generation



<https://building.agu.org/about-the-project/net-zero-design/>

**Net Zero Building, AGU Science Organization in D.C.**



# How can we plan sustainably – Creating change through innovation



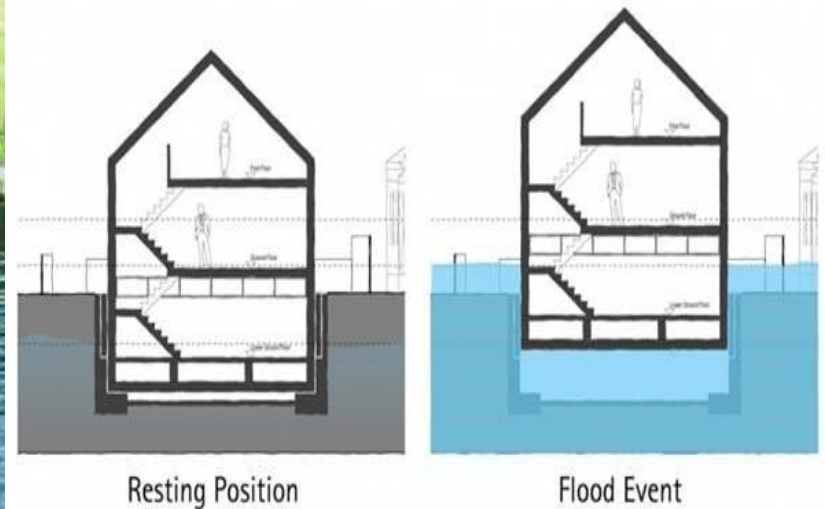
Bus from Adelaide,  
Australia

**(L) Bus Rapid Transit Design (R) 1<sup>st</sup> Solar Electric Bus**

# How can we plan sustainably – Creating change through innovation



Amphibious House  
near Marlow, River  
Thames, U.K.



**Resilient waterfront design**



# Your Site Information



- Consider your site location & orientation
- What are the community/county strengths you want to build on or link to
- What are the weaknesses you identified that you can help address
- Consider the history & if there are pieces you can amplify or preserve
- S.E.E.E. the space – Social, Equitable, Economic and Environmental Strengths & Challenges