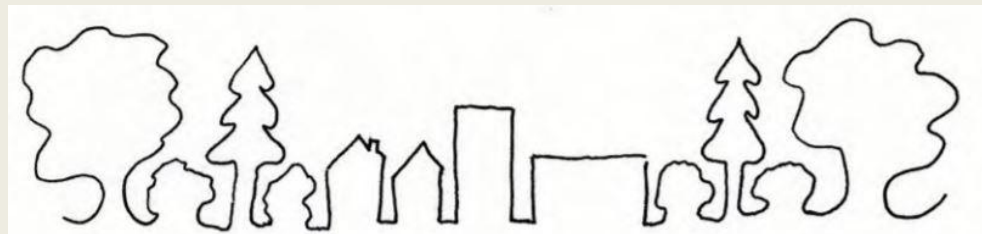


ROCKLAND P.L.U.S PLANNING LAND USE WITH STUDENTS



Visit #2

Considering Your Community & Important Planning Elements



Jamboards!!



Let's share your Jamboards! What did you notice about your community's cool, equitable, and sustainable features

Assess Your Local Community

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



Sustainable Planning through: 'Climate Smart Community' focusing on Mitigation

Climate Smart
Communities

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

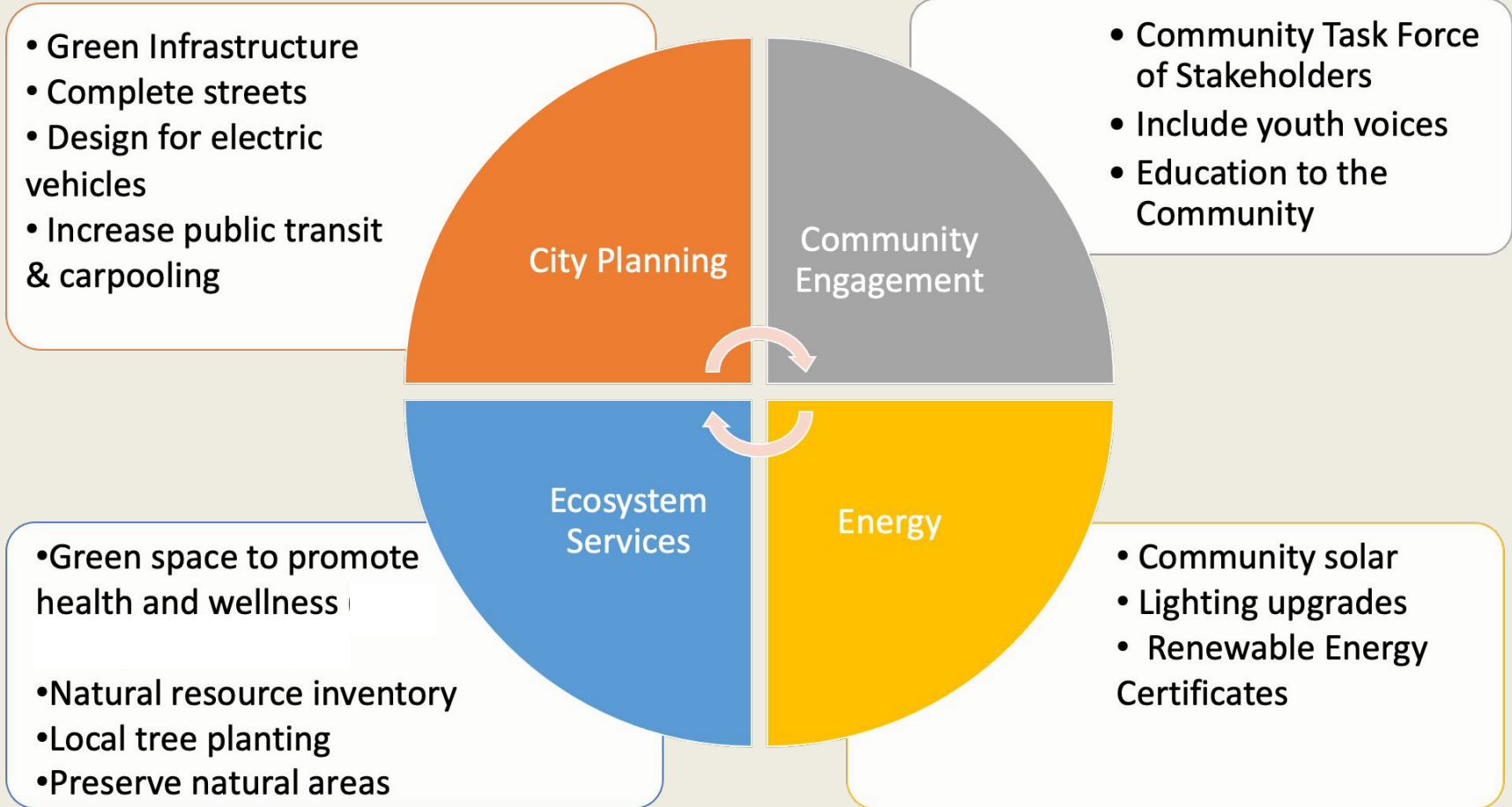




One way is through actively being a **‘Climate Smart Community’** Mitigation

Climate Smart
Communities

Examples of a “Climate Smart” Community (CSC):





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



Examples of a “Climate Smart” Community (CSC):

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

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

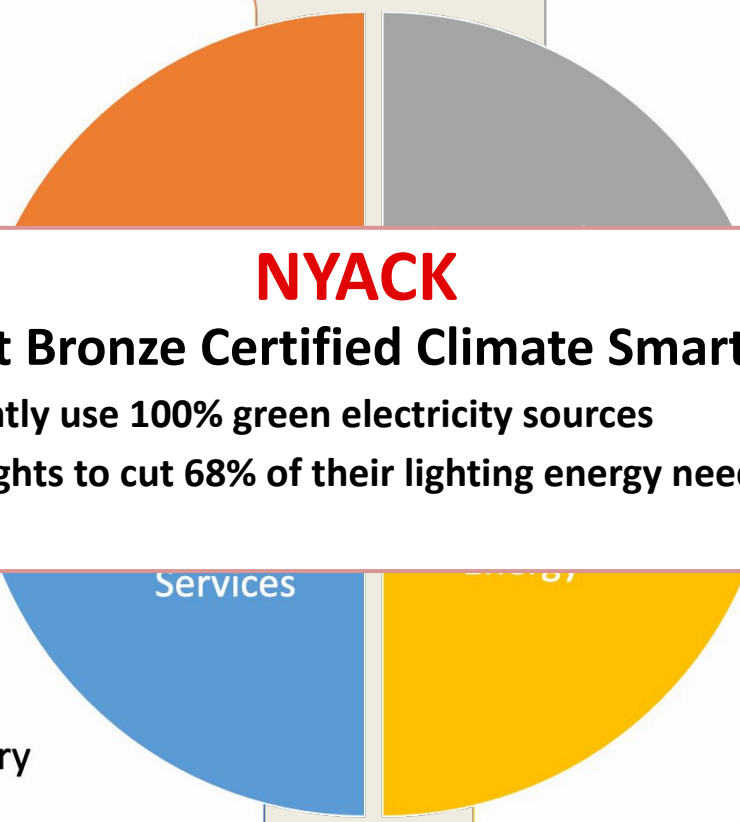
NYACK

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

- Community solar
- Lighting upgrades
- Renewable Energy Certificates



It's not just Villages - also Rockland County!

The County is participating in both the CSC and Clean Energy Community (CEC) programs. They worked with a consultant to develop an Action Strategy to:

- ✓ Reduce GHG emission
- ✓ Achieve net-zero GHG emission
- ✓ Increase renewable energy usage
- ✓ Ensure Climate Justice
- ✓ Create a CSC Coordinator Role
- ✓ Create a CSC Task Force



CSC & CEC are interconnected. They strengthen each other

LOCAL IMPACTS: WE ALSO NEED ADAPTATION Planning for Sea Level Rise (SLR) in the Hudson Valley



Inundation Map

Mid Hudson projections

- 5"-27" by 2050
- 10"-54" by 2080
- 11"-71" by 2100

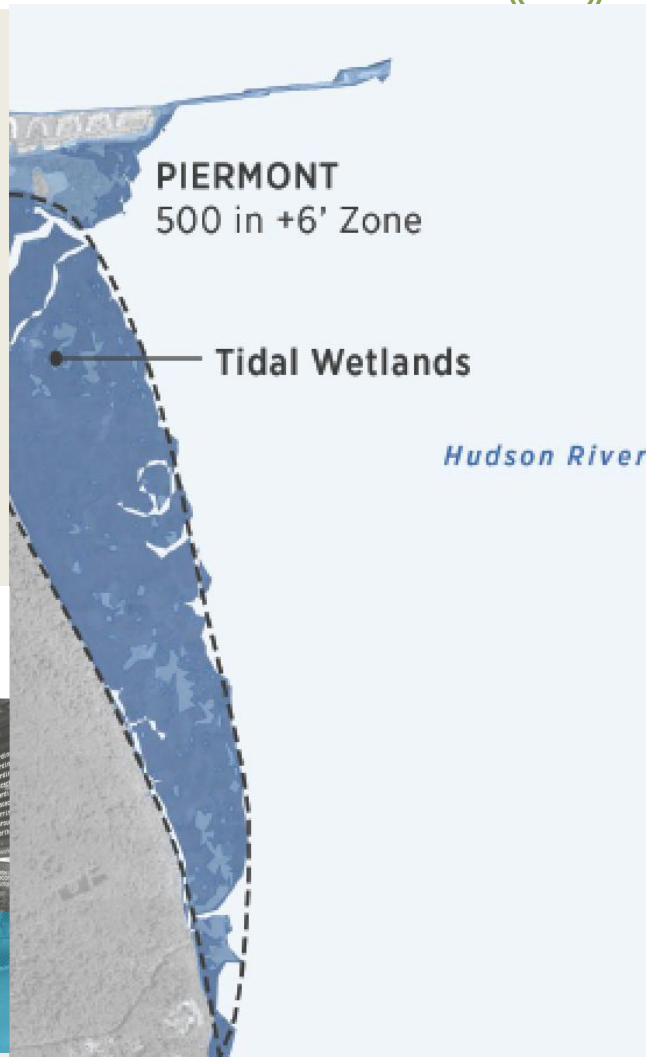
 Regional Plan Association

Under Water

How Sea Level Rise Threatens the Tri-State Region



A Report of The Fourth Regional Plan
December 2016



1 ft. SLR: (2050)

- Increased areas of permanent waterfront flooding (Floods already at high tide & with storms in Piermont)

3 ft. SLR: (2080)

- Metro North partial flooding
- Extended area of permanent flooding
- ~9% of Piermont's existing homes underwater

6 ft. SLR: (2100)

- Flooding critical infrastructure
 - Railroads
 - Wastewater treatment
 - Power plants
 - 3 large regional airports
- Increased residential flooding

Regional Planning Efforts are Considering These Issues: Adaptation

Photo from lohud.com: Stony Point homeowners rebuilding after Sandy



Photo-simulation: Elevated roadway (black) & floating homes.



Photo-simulation: Elevated seawall & removable floodwall.



Are these planning efforts examples of **MITIGATION** or **ADAPTATION**?

Green Infrastructure Adaptation: Local Examples



**Nyack Memorial Park
Permeable pavement**



**Rockland County Country Club
- Green Roof**



**Bowline Point Park, Haverstraw -
Rain Garden**



**Valley Cottage Library
- Vegetated swales**



**Home for Heroes, Pearl River-
Bio-Retention area**



**Tappan Zee High School -
multiple approaches**

Green Infrastructure: Examples



Rain Barrels

Vegetated Islands for 'run on'



Maintaining Original Trees & Shrubs



NYS Trees for Tribs on streambanks

How can we plan sustainably – Creating change through innovation



Photo Google Maps

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

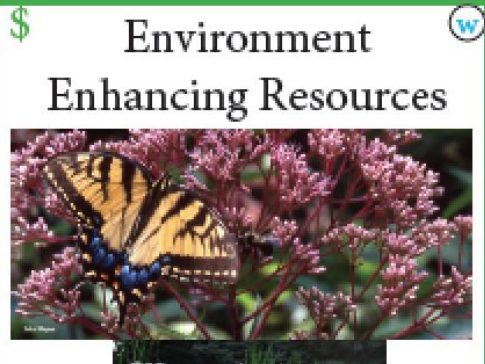
How can we plan sustainably – Creating change through innovation



Bus from Adelaide,
Australia

(L) Bus Rapid Transit Design (R) 1st Solar Electric Bus

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

\$\$

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 reduce **anxiety, stress, and depression**
- ❖ **Fewer emergency asthma** attacks
- ❖ Increase equity in the **fight against COVID-19**
- ❖ **Reduction in crime and violence**



Your Site Information



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