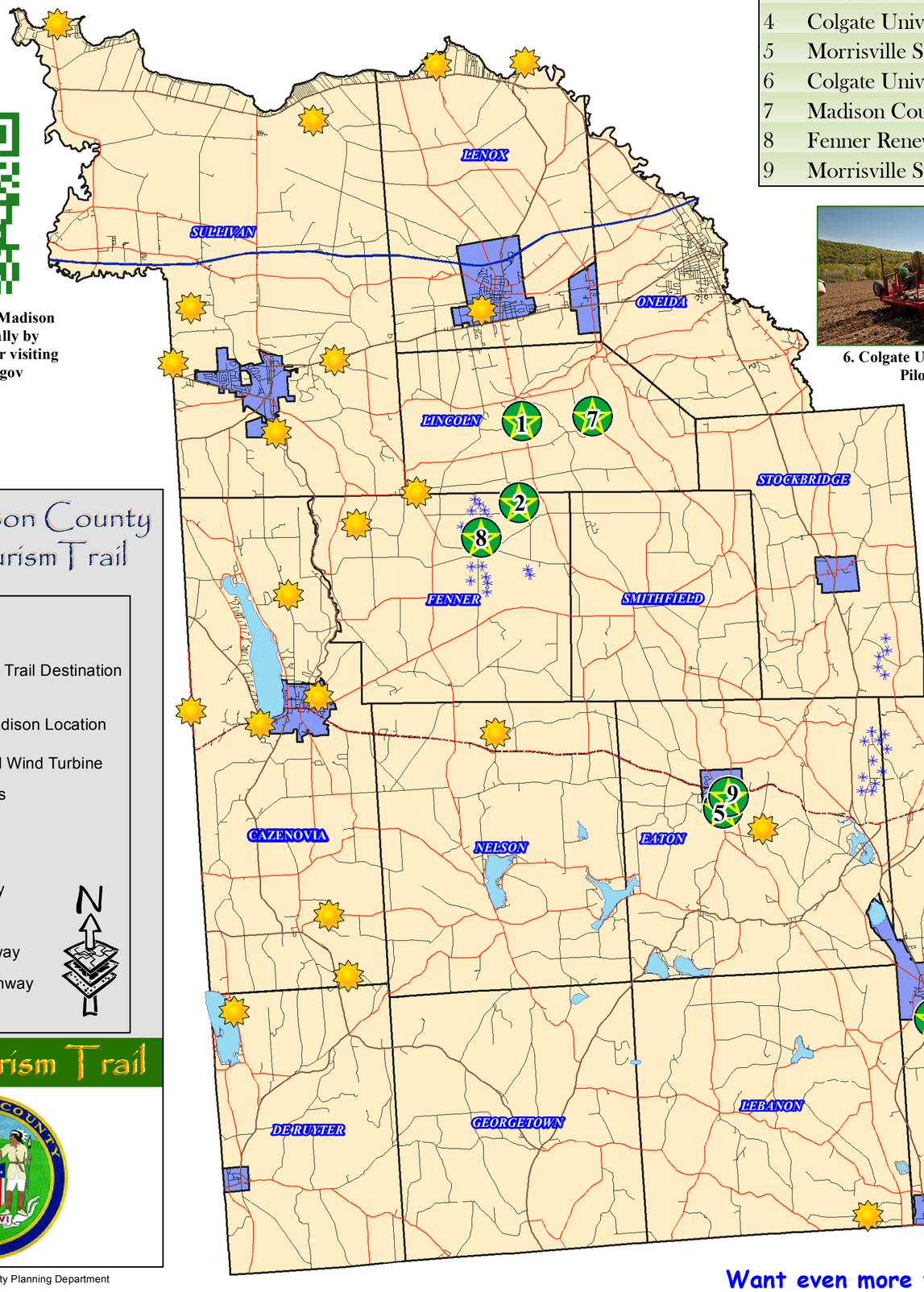
Madison County is known as a leader when it comes to renewable energy and sustainability initiatives. This Eco-Tourism Trail map is a guide to connect the many forward-thinking buildings and projects located throughout our community. We encourage you to use this guide to visit and learn more about how green technologies are working at these destinations.

Eco-Tourism Trail
2013 Edition

1	Oxbow Falls Park Micro-hydro system
2	Nichols Pond Park Solar Power system
3	Madison Wind Farm – 1st Wind Farm in New York State
4	Colgate University Trudy Fitness Center – LEED Gold Building
5	Morrisville State College Sheila Johnson Design Center- LEED Gold Building
6	Colgate University Willow Biomass Pilot Project
7	Madison County Solid Waste Facility – Solar, Gas to Energy, Recycling Center
8	Fenner Renewable Energy Education Center
9	Morrisville State College Renewable Energy Training Center

Some of these destinations have tours available upon request. See back for details.

Get this map and other Madison County trail maps digitally by scanning this QR code or visiting www.madisoncounty.ny.gov



2013 Madison County Eco-Tourism Trail

Legend

- EcoTourism Trail Destination
- Solarize Madison Location
- Commercial Wind Turbine
- Waterbodies

Roads

Road Type

- US Highway
- Interstate
- State Highway
- County Highway
- Local Road

N

Eco-Tourism Trail

Map Prepared by the Madison County Planning Department

6. Colgate University Biomass Pilot Project

1. Oxbow Falls Park
Micro-hydro system powers restroom

2. Solar at Nichols Pond Park

8. Fenner Renewable Energy Education (FREE) Center

3. Madison Wind Farm
1st Wind Farm in New York State

5. Sheila Johnson Design Center
LEED Gold

7. Solar Array over Landfill
at Madison County Solid Waste Facility

7. Gas to Energy Project
at Madison County Solid Waste Facility

4. Trudy Fitness Center
LEED Gold

9. Morrisville Renewable Energy Training Center

Solarize Madison Installation

Want even more to do along the way? Visit www.madisontourism.com

1. Oxbow Falls Park: 6919 Oxbow Road, Lincoln, NY

In 2011, Madison County, in partnership with Morrisville State College and Assistant Professor Phil Hofmeyer (with his students), installed a micro hydroelectric power generator at Oxbow Falls Disc Golf Park to provide electricity to run the park's bathroom facilities.

Want to learn more? Check out the kiosk planned to be installed during the summer of 2013 near the bathroom to learn more about how flowing water from Clockville Creek generates power for this park.

Contact: Madison County Planning Department
(315) 366-2376 www.madisoncounty.ny.gov/planning/home

2. Nichols Pond Park: 5797 Nichols Pond Rd, Fenner, NY

Nichols Pond Park is a 45-acre County Park that features short nature trails, picnic areas, woodland, and an observation deck overlooking the wetland habitat. The area was once the site of an Oneida Indian Village and is recognized as the battleground of the 1615 Champlain Battle. In 2009, Nichols Pond Park was equipped with a 170 watt solar power system which provides energy to a 110 volt submersible pump supplying potable water to the drinking fountain and lighting to one of the park's pavilions.

Want to learn more? This solar power system can be seen on top of one of the pavilions in the park.

Contact: Madison County Planning Department
(315) 366-2376 www.madisoncounty.ny.gov/planning/home

3. Madison Wind Farm: Stone Road, Madison, NY

The Madison Wind Farm is located in the town of Madison, New York and consists of seven wind turbines. Constructed in 2000, it carries the distinction of being the first wind farm in New York State. The 11.55 megawatt project generates enough electricity to power approximately 3,000 homes a year.

Contact: EDP Renewables North America Company, http://www.edprenovaveis.com/OurCompany/CompanyPresentation/EDPRenewablesNorthAmerica

4. Trudy Fitness Center: Colgate University, Broad St, Hamilton, NY

In May 2012, Colgate University's Trudy Fitness Center received the first LEED Gold certification in Madison County from the US Green Building Council. The LEED (Leadership in Energy and Environmental Design) certification is based on Trudy's green construction, design and technology including 80% of construction waste being diverted from the landfill, 30% more efficient in water use, 20% more efficient in energy use, and utilizing local building materials.

Want to learn more? Check out Colgate's Sustainability webpage at www.colgate.edu/distinctly-colgate/sustainability or call Colgate's Sustainability Office at (315) 228-6487

Contact: Colgate's Director of Sustainability, John Pumilio
(315) 228-6487 or jpumilio@colgate.edu

2013 Madison County Eco-Tourism Trail

Welcome to the first Madison County Eco-Tourism Trail Map! This map highlights the current innovative sustainability projects located in Madison County and is meant to be used as a guide to learn more about each of these initiatives.

Sustainability is a concept that values all the assets of a community and recognizes that communities gain more when those assets are leveraged together. Natural resources are one of Madison County's strongest assets. Many of these projects showcase ways these natural assets - wind, sun, and water—are being used to create clean energy alternatives that promote the local economy.

Madison County is home to several LEED certified buildings, the highest achievable standard for environmentally friendly design, as well as several cutting edge technologies including the only municipality with a flexible photovoltaic film cap over its landfill. These places and projects serve as important educational resources, many of which are open to the public and/or available for tours. Use this guide to learn more about how to visit these destinations first hand!

Advancing these technologies and initiatives is a priority in Madison County. Madison County is fortunate to have so many forward thinking institutions, businesses, and individuals that are dedicated to looking beyond the status quo. These types of projects are creating a momentum that is establishing Madison County as a leader and bringing new vitality to our communities.

To reward future projects, the Eco-Tourism Trail guide will be updated each year to incorporate and highlight new projects and facilities that exemplify and advance sustainability.

5. Sheila Johnson Design Center: MSC, Madison Rd, Morrisville, NY

This dynamic 25,000 square-foot building functions as a sustainable facility for the 21st Century while also maintaining the character of the college's historic tie-stall dairy barn. Designed by Craig Norsted, AIA of Perkins Eastman's New York City office, the building is expected to achieve LEED Silver Certification and is home to Morrisville State College's architectural studies and design program. Green features include ample natural day-lighting, a geothermal heating and cooling system featuring eight ground-source heat pumps that cycle water and glycol through an underground piping loop, insulated low-E glass with argon filling, low VOC finishes and carpet tiles, water-based finishes on the locally sourced laminated wood trusses and woodwork throughout, and recycled steel content and fly ash added to the concrete mix to reduce the overall CO_2 consumption.

Want to learn more? Take a guided tour online at www.morrisville.edu/tour/videos.aspx?subcat=62

Contact: Anne Englot at englotas@morrisville.edu or call 315-684-6598 for a tour
Summer contact is Amy Cornue at cornueal@morrisville.edu or call 315-684-6041

6. Willow Biomass Pilot Project: Colgate University, Hamilton St, Hamilton, NY

Fallow and marginal cropland are excellent places to grow short rotation crops, such as willow, that can be used for biomass energy. Through the use of biomass (wood chips), Colgate University is offsetting 75% of the campus' heat and hot water needs, saving millions of dollars. Furthermore, unlike natural gas or fuel oil, willow is carbon neutral; the carbon released as carbon dioxide during willow combustion came from carbon within our environment, not from carbon sequestered in fossil fuels. In May 2009, Colgate University planted its own 7.5-acre plot with 60,000 8-inch willow shoots which is expected to yield 900 dry tons of biomass over a 20 year period.

Want to learn more? Watch this video about Colgate's willow plot and biomass heating plant: http://www.youtube.com/watch?v=BHRNod9bg1w

Contact: Colgate's Director of Sustainability, John Pumilio
(315) 228-6487 or jpumilio@colgate.edu

7. Madison County Solid Waste Facility: Buyea Rd, Lincoln, NY

Madison County is the first municipality in the country to utilize a solar cap over its landfill. The flexible photovoltaic film panels installed in 2011 cover one acre of the landfill and generate 40 megawatts hours of electricity per year which is used to power the Recycling Facility on site. The landfill is also equipped to capture methane, a byproduct of decomposition, which is used to power an on-site internal combustion engine. The engine produces 1,300 MW of electricity—enough to power 1,000 homes a year. The methane gas collection system at the County landfill is made possible through a public/private partnership with Waste Management Inc. In the summer of 2012, the Madison County ReUse Store opened at the Solid Waste Facility - find a variety of household merchandise at below-market prices, while also helping to keep more material from the landfill.

Want to learn more? Tours of the renewable energy technologies and the landfill are available by contacting (315) 361-8408. Watch a video about the new ReUse Store: www.youtube.com/watch?v=cxjZkNT5ZIM

Contact: Madison County Solid Waste Department
(315) 361-8408 www.madisoncounty.ny.gov/solid-waste/home

8. FREE Center: 5520 Bellinger Rd, Fenner, NY

The Fenner Renewable Energy Education Center (FREE Center), located at the Fenner Wind Farm, serves as an educational resource for all generations and houses renewable energy exhibits and displays. The mission is to provide knowledge to the public and illuminate the benefits and feasibility of many renewable energy and sustainable practices.

Want to learn more? Visit www.thefreecenter.org . Guided tours for groups of 10 or more are available from May 1st to October 31st by contacting (315) 440-7601. Self guided tours are available at any time.

Contact: The FREE Center, (315) 440-7601 or via e-mail: info@thefreecenter.

Solarize Madison: Locations throughout Madison County

These are the locations of the homes, farms, businesses, and municipalities that took advantage of Solarize Madison, a volume purchasing solar PV program. Solarize Madison was the first program of its kind in New York State and was organized by Madison County and Central New York Regional Planning & Development Board in partnership with Morrisville State College. Two NY-based Solar PV companies were selected to installed the systems: Arista Power and ETM Solar Works. In total 28 systems, totaling 177 kW, were installed under the program in 2012.

Want to learn more? See solar PV systems up close during the National ASES Solar Tour which takes place annually on the first Saturday of October. Also visit, www.solarizemadison.com for testimonials and information on the second round of the Solarize program launching in 2013!

Contact: Madison County Planning Department
(315) 366-2376 www.madisoncounty.ny.gov/planning/home

9. MSC Renewable Energy Training Center: Morrisville, NY

Morrisville State College Renewable Energy Training Center (RETC) is an alliance of employers, training providers, economic development partners and schools, working together to provide technical short courses for individuals seeking marketable skills in renewable energy fields. Courses focus on renewable energy topics such as wind, solar, hydro, geothermal and bioenergy resources and systems. Some of the innovative technologies on site include:

-10 kW Bergey Excel-S wind turbine	-Controlled Environment aquaponics greenhouse
-Skystream 3.7 wind turbine	-Wood gasification power pallet (two 20kW units)
-Solar photovoltaics and thermal systems	-Wood gasification BioMax 100 Cogeneration facility (100 kW)
-Dairy anaerobic digester (50 kW)	-1 kW micro hydroelectricity system
-Biodiesel production facility (50-gal batch processor)	

Want to learn more? Visit the RETC website: retc.morrisville.edu to learn about upcoming events and ongoing classes.

Contact: Philip Hofmeyer, Ph.D., Assistant Professor, RETC
(315) 684-6046 hofmeypv@morrisville.edu