GObike Buffalo Bicycle Education Campaign



Final Report | Report Number 18-08 | March 2018



NYSERDA's Promise to New Yorkers:

NYSERDA provides resources, expertise, and objective information so New Yorkers can make confident, informed energy decisions.

Mission Statement:

Advance innovative energy solutions in ways that improve New York's economy and environment.

Vision Statement:

Serve as a catalyst – advancing energy innovation, technology, and investment; transforming New York's economy; and empowering people to choose clean and efficient energy as part of their everyday lives.

GObike Buffalo Bicycle Education Campaign

Final Report

Prepared for:

New York State Energy Research and Development Authority

David McCabe Project Manager, NYSERDA

Prepared by:

Green Options Buffalo DBA GObike Buffalo

Justin Booth Executive Director

Notice

This report was prepared by Green Options Buffalo DBA GOBike Buffalo in the course of performing work contracted for and sponsored by the New York State Energy Research and Development Authority (hereafter "NYSERDA"). The opinions expressed in this report do not necessarily reflect those of NYSERDA or the State of New York, and reference to any specific product, service, process, or method does not constitute an implied or expressed recommendation or endorsement of it. Further, NYSERDA, the State of New York, and the contractor make no warranties or representations, expressed or implied, as to the fitness for particular purpose or merchantability of any product, apparatus, or service, or the usefulness, completeness, or accuracy of any processes, methods, or other information contained, described, disclosed, or referred to in this report. NYSERDA, the State of New York, and the contractor make no representation that the use of any product, apparatus, process, method, or other information will not infringe privately owned rights and will assume no liability for any loss, injury, or damage resulting from, or occurring in connection with, the use of information contained, described, disclosed, or referred to in this report.

NYSERDA makes every effort to provide accurate information about copyright owners and related matters in the reports we publish. Contractors are responsible for determining and satisfying copyright or other use restrictions regarding the content of reports that they write, in compliance with NYSERDA's policies and federal law. If you are the copyright owner and believe a NYSERDA report has not properly attributed your work to you or has used it without permission, please email <u>print@nyserda.ny.gov</u>

Information contained in this document, such as web page addresses, are current at the time of publication.

Abstract

GObike Buffalo created a bicycle safety education campaign using two elements—a billboard campaign promoting the humanizing of people on bikes and a 52-week icon campaign featuring bike safety education and complete streets messaging. GObike also created an online, mobile-friendly bicycle infrastructure map for area cyclists. The bicycle education campaign engaged more than 2,000,000 individuals to date; increased awareness on the social, economic, environmental, and health benefits of complete streets; and encouraged safe urban bicycle riding practices. The online, mobile-friendly map provides safe routes for all types of cyclists and is a key resource for new and existing bicycle infrastructure, including bike fix-it stations; a new bicycle hub; restrooms and water fountains; and new multi-use paths in the area.

Keywords

active transportation, complete streets, bicycle education, maps

Acknowledgements

GObike Buffalo gratefully acknowledges the sponsorship of this project by the New York State Energy Research and Development Authority (NYSERDA).

Table of Contents

Notice	ii				
Abstract	iii				
Keywords	iii				
Acknowledgements	iii				
List of Figures	iv				
Executive SummaryE	S-1				
1 Introduction	1				
2 Approach	2				
3 Outcomes	6				
4 Observations, Findings, and Recommendations	8				
4.1 Online Map	8				
4.2 Bike Education Campaign	9				
5 Environmental and Economic Benefits	10				
6 Conclusion	11				
7 References Cited	12				
Appendix A. Billboard Campaign ImagesA-1					
Appendix B: Icon Educational Messages	B-1				

List of Figures

Figure 1. Example billboard with safety message and image of a local community cyclist	. 2
Figure 2. Bicycle Education Icons	. 4
Figure 3. Example bicycle icon with them and safety message for use in social media	5
Figure 4. Screenshot of online bicycle map	. 5

Executive Summary

The City of Buffalo recently experienced a boom in the cycling population due to the passing of a Complete Streets policy and Bicycle Master Plan Update, resulting in more than 100 miles of bicycle lanes in the city; the launch of 200 Reddy Bikeshare bikes for bikesharing; and the introduction of a weekly Slow Roll Buffalo event, with more 40,000 participants throughout the year. With the continued growth of the Buffalo bike community, encouraging safe interactions between bikes and vehicles became an imperative next step. In addition, due to the influx of rapidly expanding bicycle infrastructure, including multi-use paths, indoor bicycle storage, bicycle fix-it stations, on-street bicycle lanes, and a new bicycle transportation hub, the Buffalo bicycle community needed a robust map to outline the bicycle infrastructure in the area.

As such, GObike Buffalo created a bicycle safety education campaign of two elements—a billboard campaign promoting the humanizing of people on bikes and a 52-week icon campaign featuring bike safety education and complete streets messaging. GObike also created an online, mobile-friendly bicycle infrastructure map for area cyclists.

The bicycle education campaign engaged more than 2,000,000 individuals to date; increased awareness on the social, economic, environmental, and health benefits of complete streets; and encouraged safe urban bicycle riding practices. The online, mobile-friendly map provides safe routes for all types of cyclists and is a key resource for new and existing bicycle infrastructure, restrooms and Buffalo points of interest.



1 Introduction

Tremendous improvements in bicycle infrastructure, bicycling amenities, and encouragement of cyclists resulted in increasing population of people on bikes in the City of Buffalo. In order to encourage safe bicycle riding habits, routes, and interactions between motorists and cyclists, an educational outreach campaign and online map were developed.

GObike Buffalo created a bicycle safety education campaign using two elements—a billboard campaign humanizing people on bikes and a 52-week icon campaign featuring bike safety education and complete streets messaging.

GObike Buffalo also created an online, mobile-friendly bicycle infrastructure map for area cyclists. The online map features safe routes and rides with amenities, including a bike infrastructure: multi-use pathways, fix-it stations, and bike parking; restrooms; water fountains; and points of interest.

2 Approach

GObike Buffalo launched an awareness campaign on local billboards as well as online advertising platforms, including social media and the GObike Buffalo website. The billboard campaign, based on the national bike advocacy group People for Bike's Travel with Care campaign, featured nine images of people on bikes with the message, "I Like Bike," and a sub-message encouraging motorists to engage in safe interactions with people on bicycles. Messages included travel with care, share the street, let's ride together, and powered by people. The ads included GObike Buffalo's slogan, I Like Bike, to reinforce positivity around people on bikes. Example billboard images are included in Figure 1, with a full compilation of images in Appendix A.

The goals of the billboard and education campaign were to

- Encourage safe interactions between motorists and cyclists
- Highlight the importance of complete streets infrastructure in bicycle/pedestrian safety
- Educate cyclists on the rules of the road

The target audience for the bicycle safety education campaign included

- Western New York cyclists, including GObike Buffalo members and event participants
- Western New York drivers
- Government officials, including the City of Buffalo, City Councilmembers, and local representatives
- Non-cyclists/Buffalo progressives, interested in creating stronger, healthier communities and safer street

Figure 1. Example billboard with safety message and image of a local community cyclist



The billboard campaign ran for 14 weeks (May 29, 2017 to September 3, 2017) at 11 locations in the City of Buffalo. The estimated campaign impression (total individuals seeing the campaign) was 2,162,784, with an average weekly impression rate of approximately 200,000.

GObike Buffalo also developed a weekly bicycle safety message with a corresponding icon, to be released for 52 weeks. The bicycle education icon campaign was originally outlined to include 52 unique icons with a bicycle safety message. Due to budgetary and marketing concerns, the 52 icons were reduced to nine icons featuring 52 unique messages. The messages included bicycle safety education, complete streets facts and benefits, and motorist safety education (e.g., how to safely interact with both pedestrians and cyclists). The icons are included as Figure 2. The icon, message, and sub-message are distributed via social media (Instagram/Twitter) and displayed on the GObike Buffalo website, as demonstrated in Figure 3. Appendix B includes a comprehensive overview of all messages to be included in the campaign. The nine messages included the following:

- Bike Safety: Protect Yourself and Others
- Bike Smart: Biking Tips and Tricks
- Hop On, Let's Ride: Intro to Biking
- Bike the Bike: Ride with Confidence
- Complete Streets: Infrastructure
- Rule the Road: Rules for Bikes and Motorists
- Know Your Ride: Bikes and Bike Maintenance
- Protect Your Ride: Theft Prevention
- Complete Streets: Benefits

Figure 2. Bicycle Education Icons



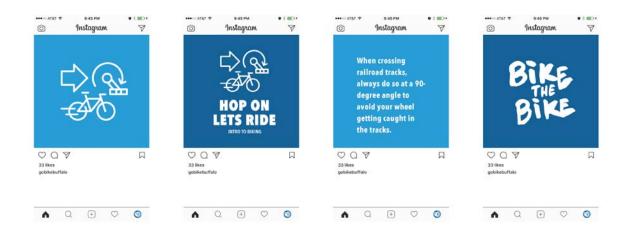
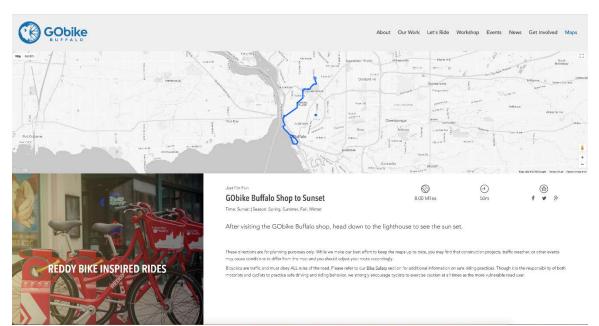


Figure 3. Example bicycle icon with them and safety message for use in social media

Figure 4. Screenshot of online bicycle map



An online, mobile-friendly map was launched on October 4, 2017, featuring 17 custom rides and routes in the City of Buffalo. The routes are sortable based on start location, time of day, season, and reason for ride. The maps include features such as points of interest, rest areas, drinking fountains, and indoor bike storage, shown in Figure 4. Go to https://gobikebuffalo.org/maps/rides/ to view the map online.

3 Outcomes

Lessons-learned for the development of the online, mobile-friendly map include the following:

- Creating an interactive, user-friendly map with specifications necessary to be useful to cyclists requires a broader scope. A static map is comparably easy to create but allowing functions to be fully integrated was not feasible under the budget outlined.
- Project feasibility analysis is likely necessary to fully understand available technology and current limitations. For example, much of the preliminary phase of the map development required researching existing data collection methods (Strava, Ride with GPS) and investigating how these data sources could be used to create a more integrated map. Though Strava provides insightful data to bicyclists preferred paths, purchase of the data and integration into the map were not feasible due to budget and web developer skill set.
- Map development is a specialized skill in web development; therefore, the contractor hired should have experience specific to map development.
- Using an existing platform does allow improvement of the platform for all users. For example, by using the Google Application Programming Interfaces for the base of the map, adding bicycle infrastructure to Google's global map was necessary in order to provide routes. Therefore, both GObike Buffalo's map and Google's map added bicycle infrastructure as a result—allowing increased project impact. However, customization is limited due to development constraints imposed by using Google's defined parameters.

Benefits of the project include encouragement of community members to ride their bikes, encouraging use of bicycle infrastructure such as indoor bike storage facilities, a bike fix-it station, a new bicycle hub with a bike vending machine, restrooms and lockers for cyclists, local bike shops, and multi-use pathways. The map was also used as part of a bicycle tourism marketing campaign, funded through a New York State Consolidated Funding Opportunity grant, to encourage bicycle tourism in Western New York.

The current ratio of each type of ride is currently as follows: "just for fun" rides comprise the highest percentage (47%), with "social", "commute" and "for exercise" next at ~15% each. However, website analytics demonstrate though the "commutes" tab represents a very low percentage of that traffic but the most often clicked ride off the main page list is the "commute" route "rail trail to downtown" (234 hits). Next most popular is "circles around the city" (131 hit). While users may not be going to the site searching for commuting routes per se but are definitely finding value in the commutes. This suggests an interest in commuting via bicycle from the downtown-employee dense North Buffalo neighborhood to Downtown Buffalo.

Lessons-learned for the bicycle education campaign include the following:

- The billboard campaign was originally launched in 2015 using the People for Bikes format and local Buffalo celebrities and community leaders, as available. Due to the desire to create localized imagery for the campaign, the 2016 campaign pictured average cyclists in their natural settings, with an emphasis on using diverse populations representative of the Buffalo cycling population and showing diverse types of bicycles to reflect the many species of Buffalo cyclists. If this campaign were to be relaunched, the natural settings would be preferred, but the "celebrity" cyclist would also be included as GObike Buffalo observed an increase in social media sharing with celebrity cyclists. For example, a local band member was featured in the campaign, and after tweeting the billboard from the band's twitter handle, this campaign image received more than 20,000 impressions alone, reaching a far greater audience than anticipated.
- While 52 unique icons were originally planned, nine icons were used with 52 unique messages in order to create more consistency and reduce the amount of social media and marketing management necessary for the campaign.
- The benefit of the project is continued humanizing of people on bikes to motorists in the Buffalo community. Encouraging motorists to share the road and mutual respect between cyclists and motorists is beneficial as bicycle infrastructure and the number of people on bikes continue to increase.
- The benefit of the icon campaign is to educate both cyclist and motorists on the laws regarding bicyclist and motorist interactions, as well as the benefits of complete streets implementation in our community. Feedback for the campaign has been very positive from the cycling community.

Based on lessons-learned from this project, GObike Buffalo provided guidance to the New York Bicycle Coalition (NYBC) and associated bicycle advocacy groups in their initiatives to create an Albany-based Travel with Care campaign. NYBC plans to duplicate this project across the state of New York. GObike Buffalo will continue to assist in their campaign development.

4 Observations, Findings, and Recommendations

4.1 Online Map

The complete streets committee, committee, including representatives from the City of Buffalo offices of Strategic Planning and the Department of Public Works, GObike Buffalo, Buffalo Green Fund, Buffalo Niagara Medical Campus, Buffalo Niagara Riverkeeper, Greater Buffalo Niagara Regional Transportation Council, NYS Department of Transportation, Olmsted Parks Conservancy, Partners for a Livable WNY, the University at Buffalo and Citizens Regional Transit Corporation and the Wellness Institute of Greater Buffalo, and local cyclists provided invaluable input on project development. Their suggestions greatly improved the development of the map. For example, including restrooms and water fountains on the map proved a great suggestion for a resource that is often overlooked for people on bicycles. Communities interested in creating a bicycle map or bicycle education campaign should reach out to diverse populations for input suggestions as many people's experience with their bicycle differ greatly.

The map could be expanded to include additional bicycle infrastructure information and places to cycle. For example, the local mountain biking community is an excellent resource for off-road bicycle infrastructure areas. Additional information could be included on mountain bike facilities as well as indoor bike facilities, as they increase.

Currently missing from the map functionality is real-time, turn-by-turn guidance, necessary for people on bikes. The static nature of the map results in difficulty for cyclists in using the map while on their bicycles as there is no way to be fed the directions. This functionality is imperative for the use of the map by cyclists.

For the billboard campaign, GObike Buffalo successfully included diversity in race, gender, and age for those pictured. Our success can be attributed to seeking out individuals instead of putting out a call for willing participants, as conducted previously. The first iteration of our campaign included the City of Buffalo Mayor Byron Brown, Slow Roll Buffalo founder, a member of a popular local rock band, as well as local cyclists and community leaders who commute via bicycle.

Data collection for bicycle counts and movements, including commuter numbers from our municipal planning organization, could be integrated into the map development in order to better understand preferred routes for cyclists. In addition, this data would be helpful in identifying areas with high bike and pedestrian crashes to concentrate bicycle safety messages in these areas.

4.2 Bike Education Campaign

For the education campaign, though 52 unique icons were planned, the design team suggested nine icons with repeating messages to create a banded, repeated theme, and create more synergy within the campaign.

Our billboard campaign ran in congruence with a bike tourism campaign led by a local partner, Shared Mobility, Inc. This allowed broader impact as the bike tourism campaign led to a significant influx of visitors to the GObike Buffalo website and allowed the bicycle map to serve visitors using Buffalo bike share (Reddy Bikeshare) as well as bicycle commuters.

Recommendations for repeating this campaign include the following:

- Allowing the campaign to be published under a creative commons license allows the sharing of the material with other bike organizations, thus increasing the campaign's impact and providing similar-missioned organizations with a reduced-cost, ready-made campaign to launch within their own community.
- Messages to cyclists were based on the feedback of the Complete Streets committee, fellow cyclists, and League of American Bicyclists Certified Instructors. We recommend organizations use this extensive message vetting in their own campaign to ensure safety messages are thoroughly developed.

5 Environmental and Economic Benefits

Establishing a bicycle educational plan and online, mobile-friendly map allows

- Positive interactions between cyclists and motorists
- Encourages the reduction of vehicle miles traveled and greenhouse gas emissions by promoting the use of bicycles to commute, run errands, and recreate
- Contributes to community goals of creating an efficient and sustainable transportation system
- Provides continued Complete Streets implementation advocacy and education

The economic benefits of Complete Streets implementation, based on NYSERDA-funded impact analysis completed in 2016, report 45% of merchants in a complete streets corridor experience increased economic health, with 26% reporting an increase in sales and 71% reporting a neutral impact.

In addition, through the study, Measuring the Impact of Complete Streets Projects (May 2016), the health impact of complete streets was probed within the surveys of residents, merchants, and streetscape users. Respondents rated the change in their walking and biking behaviors along their corridor since the streetscape changes were implemented. Per the study, residents reported they were walking and biking more frequently in complete street-treated corridors. More than a quarter of surveyed merchants reported employees were walking "much more" or "somewhat more" frequently to work, and 31.2% reported employees were biking "much more" or "somewhat more" frequently to work. Additionally, 40% Merchants also reported an increase in customers walking and biking more frequently to the business.

Environmental benefits may be measured through an increase in modeshare split for bicycles. The Greater Buffalo Niagara Regional Transportation Council collects combined bicycle and pedestrian counts for the City of Buffalo, but this data was not integrated into this grant initiative.

6 Conclusion

The bicycle map and education campaign are evergreen resources for area cyclists to find safe riding routes in the Western New York region. Both resources provide complete streets education and impact information. In order to increase the impact of the online map, GObike Buffalo will continue to add features, routes, and amenities. Outreach for the bicycle education campaign will continue throughout the next year. However, the number of cyclists in the area continues to be estimated through census surveys. Without a dedicated effort to collect data on bicyclist counts, it is difficult to estimate the impact of the resources on increasing the number of cyclists in the region.

7 References Cited

Lenker, J., Maisel, J., and Ranahan, M. 2016. Measuring the Impact of Complete Streets Projects: Preliminary Field Testing. NYSERDA.



LET'S RIDE TOGETHER





POWERED BY PEOPLE





POWERED BY PEOPLE





TUKEBIKE SHARE THE STREET



TUKEBIKE **POWERED BY PEOPLE** GObike BUFFALO

LET'S RIDE TOGETHER



T IS BON **TRAVEL WITH CARE** GObike BUFFALO



		₽ <u>}</u> @	<u>\$</u>	¢ ب <u>أ</u>	F	<u>রুহি।</u> 1	J.	<u>Ŝ</u>
Bike Safety	Bike Smart	Hop On Lets Ride	Bike The Bike	Complete Streets	Rule the Road	Know Your Ride	Protect Your Ride	Complete Streets
Protect Yourself & Others	Biking Tips & Tricks	Intro to Biking	Ride with Confidence	Infrastructure	Rules for Bikes & Motorists	Bikes and Bike Matainence	Theft Prevention	Benefits
#BikeSafety #GoBikeBuffalo #BikeBFLO #ILikeBike #BikeTheBike	#BikeSmart #GoBikeBuffalo #BikeBFLO #ILikeBike #BikeTheBike #BikeSafety	#LetsRide #GoBikeBuffalo #BikeBFLO #ILikeBike #BikeTheBike #BikeSafety	#BikeTheBike #GoBikeBuffalo #BikeBFLO #ILikeBike #BikeTheBike #BikeSafety	#CompleteStreets #GoBikeBuffalo #BikeBFLO #ILikeBike #BikeTheBike #BikeSafety	#RuleTheRoad #GoBikeBuffalo #BikeBFLO #ILikeBike #BikeTheBike #BikeSafety	#KnowYourRide #GoBikeBuffalo #BikeBFLO #ILikeBike #BikeTheBike #BikeSafety	#ProtectYourRide #GoBikeBuffalo #BikeBFLO #ILikeBike #BikeTheBike #BikeSafety	#GoBikeBuffalo #BikeBFLO #ILikeBike #BikeTheBike #BikeSafety
Cyclists, drivers, and pedestrians: be predictable. Obey street signs, signals and road markings.	Bikes belong on the street. Sidewalks are only allowed for children 14 and under.	You can bicycle in your regular clothing; gear can help improve the comfort of your ride. "Let's Ride! You can always bike in regular clothes. Gear can help you get more cofmortable-try synthetic base layers in winter to avoid getting sweaty then getting cold."]	Ride in a straight line; don't swerve between cars.	Street trees, benches, bike racks, and rain gardens beautify our shared spaces while reducing water runoff that pollutes our water supply.		Perform an ABC Quick Check before each ride A=Air; B=Brakes; C=Chain/Crank; Quick=quick release	Always lock your bike, even if you are only walking away for a minute.	What are complete streets? Streets that are rethought for everyone, including people on bikes, on foot and taking public transportation. [cyclists, pedestrians, and public transportation users.]
Bicyclists, use hand signals to communicate your intentions to turn, change lanes or stop.	Bicyclists , always ride in the same direction as traffic.	Bicyclists, use the rightmost lane intended for your direction of travel	Avoid the door zone! Always leave at least three feet between you and parked cars.	Traffic calming helps complete the streets. This includes measures to lower automobile speeds and clearly define car lanes.	Drivers and bicyclists, respect each other's right of way.	For a comfortable and safe ride, make sure your bike fits properly with the saddle adjusted for your height.		Complete Streets make active living and active transportation easy.
Helmets should be snug and not move when fit properly.	Always check behind you before turning or changing lanes.	Tie your shoes and tuck in your pant legs (or roll them up) to keep the chain clear.	Cyclists , You have the right to the use of the road and take the space you need to safely operate.	Complete streets create a green dividend money saved on reduced car use can be used instead to help grow the local economy.	and pedestrians and do not drive while distracted.	Carry a spare tube, patch kit, tire levers, hand pump/CO2 cartridge, wrench and some change.	Lock up in well-lit, well-traveled areas and don't leave your bike outside overnight.	Businesses with complete streets infrastructure see higher rates of economic activity.
New York State requires helmets for everyone under the age of 14. We recommend that everyone wear a helmet.	When on a multi-use path, be courteous and communicate when passing.	When crossing railroad tracks, always do so at a 90-degree angle to avoid your wheel getting caught in the tracks.	Assume the other person doesn' t see you. Look ahead for hazards or situations to avoid that may cause you to fall, like potholes, gravel, sewer grates or train tracks.	Protected bike lanes use planters, curbs, parked cars, or posts to separate cars and bicycles.	Drivers, pass only when it is necessary and safe to do so; slow down, and give at least three feet of space.	situation where your bike may	Take photos of your bike and its serial number and register it with Bike Index.	
New York State requires a white front light and red rear light from dusk to dawn.	Ride in a position on the road where other users can see you.	Bicyclists use the bike lane if it is available and safe.	markings, are generally placed		Drivers, let bicyclists clear intersections before making right turns.	Remember to hydrate, and always carry water even on cooler days.	Bike theft is a crime! If your bike is stolen, file a police report, alert local bike shops and spread the word on social media.	
New York State requires a sound making devised, such as a bell or a horn.	Bicyclists may ride two abreast, except when being overtaken by a motorist.			Permeable sidewalks, streets, and rain gardens absorb water and reduce stormwater run-off.	Drivers, yield to bicyclists as you would to motorists and do not underestimate their speed.		When parking, take removable items like lights, saddlebags and pumps with you.	
				Curb extentions-or "bumpouts" -reduce the crossing distance for pedestrians and may slow motorists at an intersection.	Obey the speed limit. Speed kills.			Everyone is a Pedestrian at some point during the day! When you are not in your vehicle, you are a pedestrian.
					Drivers, yield to pedestrians in crosswalks and stop before the crosswalk to give other vehicles an opportunity to see the crossing pedestrians so they can stop too.			The pedestrian fatality rate for Latinos is over 60 percent higher than the rate for whites, and the rate for African Americans is almost 75 percent higher than for whites.
					Pass bicyclists as you would any other vehicle—when it's safe to move over into an adjacent lane.			Air pollution from traffic is linked with leukemia, lung cancer, heart disease, respiratory illness, and premature death.
					Make eye contact with other road users.			The transportation sector is the fastest growing carbon dioxide source in the United States with emission rates rising 2 percent per year.
					Most roads are not wide enough for a car and bike to safely share the same lane side by side.			

NYSERDA, a public benefit corporation, offers objective information and analysis, innovative programs, technical expertise, and support to help New Yorkers increase energy efficiency, save money, use renewable energy, and reduce reliance on fossil fuels. NYSERDA professionals work to protect the environment and create clean-energy jobs. NYSERDA has been developing partnerships to advance innovative energy solutions in New York State since 1975.

To learn more about NYSERDA's programs and funding opportunities, visit nyserda.ny.gov or follow us on Twitter, Facebook, YouTube, or Instagram.

New York State Energy Research and Development Authority

17 Columbia Circle Albany, NY 12203-6399 toll free: 866-NYSERDA local: 518-862-1090 fax: 518-862-1091

info@nyserda.ny.gov nyserda.ny.gov



State of New York Andrew M. Cuomo, Governor

New York State Energy Research and Development Authority Richard L. Kauffman, Chair | Alicia Barton, President and CEO