

NY CDG Ontario 2, LLC / BW Solar Holding, Inc.
Cost-Benefit Analysis

Prepared by:



Prepared for:
Ontario County IDA

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Executive Summary

The Ontario County Industrial Development Agency (the “Agency”) received an application for financial assistance from NY CDG Ontario 2, LLC c/o BW Solar Holding, Inc. (the “Applicant”) related to a proposed project located at State Route 96 in the Town of Phelps (the “Site”). The proposed project includes the development of approximately 26 acres of vacant land into a 5-megawatt community distributed generation solar facility (the “Project”). As part of the Agency’s deliberations, the Agency requested a cost-benefit analysis from MRB Group to enumerate the economic and fiscal benefits and costs of the Project on the County and the Region¹ and the Project’s contribution to New York State’s renewable energy goals.

First, MRB Group evaluated the economic and fiscal impacts of the proposed Project anticipated during the construction phase. Economic impacts assessed in this analysis include direct and indirect changes to jobs, wages, and sales. In terms of fiscal impacts of the Project, MRB Group estimated the new tax revenue as well as the presumed costs of the financial assistance being considered by the Agency.

Summary of Economic Impacts

	Direct	Indirect	Total
Construction Jobs	7	4	11
Construction Wages	\$542,878	\$246,505	\$789,383

The Applicant provided estimates of locally-sourced labor and materials to be used in the construction phase of the Project. Given an estimated \$1.3 million in local spending, we were able to assess the one-time economic impact. We estimate that the construction phase of the Project will produce 7 direct, on-site construction jobs and 4 indirect jobs. Therefore, in total, the construction phase of the Project will create 11 jobs generating \$789,383 million in wages in the Region.

Once constructed, the new solar facility will be serviced by contractors for snow removal, landscaping, and periodic maintenance, but there will be no employees of the Applicant on-site during the operation phase. As such, economic impacts are assessed during the one-time construction phase only.

¹ The IDA defines two regions in its policies: a 6-county area including Ontario, Monroe, Livingston, Wayne, Seneca, and Yates Counties, and 9-county labor region of Ontario, Monroe, Livingston, Wayne, Seneca, Yates, Steuben, Schuyler, and Chemung Counties. For ease of reference, we refer to both as simply the “Region.”

In terms of fiscal benefits, the Project will increase tax revenues for the State, County, Town, and Phelps-Clifton Springs Central School District. The one-time sales tax revenues associated with the construction of the project are estimated to be \$8,486. The Applicant has requested a PILOT agreement from the Agency of \$5,000 per MW with a 2% annual escalation, plus the otherwise applicable taxes on the land, for a 15-year term. Under the terms of the requested PILOT, property tax revenue will increase by \$432,335 over 15 years. Therefore, the total fiscal benefits of the Project will be \$440,821 to all jurisdictions.

Summary of Fiscal Benefits

	State	County	Town	School	Total
Sales Tax, One-Time	\$7,104	\$1,381			\$8,486
Increase in Property Tax, Total*		\$89,294	\$35,121	\$307,921	\$432,335
Total Fiscal Benefits	\$7,104	\$90,675	\$35,121	\$307,921	\$440,821

*Difference between property taxes without project and PILOT payments with project over term of PILOT.

As shown in the table below, the value of the requested exemptions includes \$533,299 in foregone sales tax revenue and \$3.4 million in foregone property tax revenue over 15 years. The value of the property tax abatement shows the difference between the hypothetical “full-value” tax revenue and the revenue to be collected under the requested PILOT. However, the Applicant has noted that without these abatements, the Project will not move forward. Therefore, these values are theoretical, rather than a true cost to the taxing jurisdictions.

Summary of Exemptions

	State	County	Town	School	Total
Cost of Sales Tax Exemption, One-Time	\$284,426	\$248,873			\$533,299
Value of Property Tax Abatement, Total*		\$707,653	\$278,336	\$2,440,277	\$3,426,266

*Difference between hypothetical full-value taxes and PILOT payments over term of PILOT.

In accordance with recent changes to GML Section 859-a(5), the contribution of the project to the State’s renewable energy goals was evaluated. According to the Applicant, the Project will result in the production of approximately 9,549 MWh of clean energy per year, contributing to the 6 GW of solar generation capacity goal set by the New York State Climate Leadership and Community Protection Act (CLCPA). Other environmental impacts are described in the body of the report.

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Introduction

The Ontario County Industrial Development Agency received an application for financial assistance from NY CDG Ontario 2, LLC c/o BW Solar Holding, Inc. related to a proposed project located at State Route 96 in the Town of Phelps. The proposed project includes the development of approximately 26 acres of vacant land into a 5-megawatt community distributed generation solar facility. As part of the Agency's deliberations, the Agency requested a cost-benefit analysis from MRB Group to enumerate the economic and fiscal benefits and costs of the Project on the County and the Region² and the Project's contribution to New York State's renewable energy goals.

MRB Group evaluated the economic and fiscal impacts of the proposed Project anticipated during the construction phase. Economic impacts assessed in this analysis include direct and indirect changes to jobs, wages, and sales. In terms of fiscal impacts of the Project, MRB Group estimated the new tax revenue as well as the presumed costs of the financial assistance being considered by the Agency.

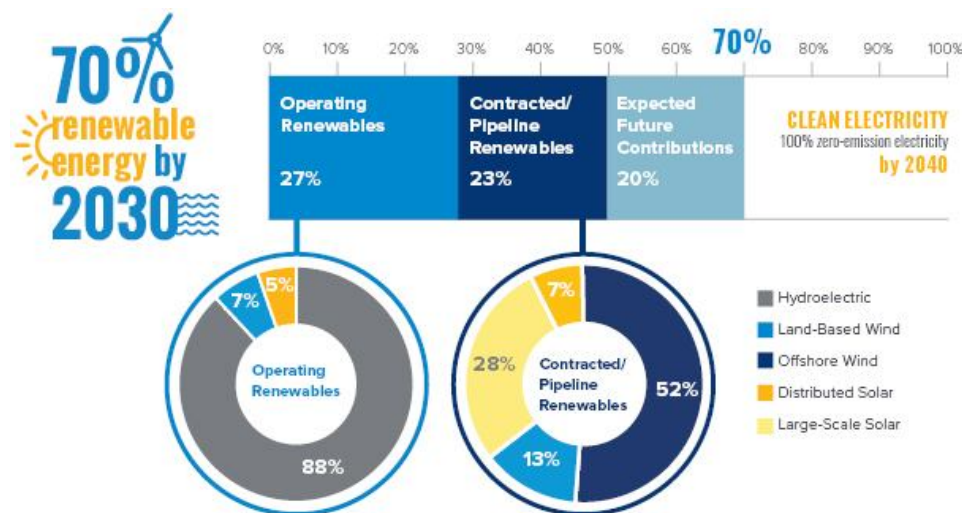
² The IDA defines two regions in its policies: a 6-county area including Ontario, Monroe, Livingston, Wayne, Seneca, and Yates Counties and 9-county labor region of Ontario, Monroe, Livingston, Wayne, Seneca, Yates, Steuben, Schuyler, and Chemung Counties. For ease of reference, we refer to both as simply the "Region."

Environmental Consideration

In accordance with the new requirements of Section 859-a(5) of New York State General Municipal Law, the contribution of the Project to the State’s renewable energy goals was evaluated.

According to the Applicant, the Project will result in the following impacts:

- The Project will add 5.0 MW of community generation on 26 acres of land, advancing the Governor’s 6 GW renewable energy goal.
- The Project will produce approximately 9,549 MWh of energy in its first year – enough to power approximately 665 homes.
- The Project will help utility companies meet their requirement of 70% of energy sales from renewable sources by 2030 as dictated by the April 8, 2020 amendment to the NYS Energy Plan and the NYS Climate Leadership and Community Protection Act.
- Once installed, this Project will represent a 13% increase over Ontario County’s current 39.1 MW of installed solar capacity (per NYSERDA Data from March 2021).
- Over the first 15 years of operation, the Project will generate approximately 139,291 MWh of renewable energy.



Economic Impact Analysis

The Project would have economic impacts on the Region in a number of ways. This includes one-time impacts to jobs, earnings, and sales during the construction phase of the Project, which we estimate for the entire Region.³

Methodology

One-time, construction-phase impacts have “direct” and “indirect” components. For the construction phase:

- Direct jobs, wages, and sales are those that occur on-site related to labor and materials used in the construction of the Project.
- Indirect jobs, wages, and sales are those caused by the direct impacts, and result from business-to-business purchases (e.g. a contractor buying a piece of equipment from a dealer) and from workers spending a portion of their wages locally.

To estimate the direct and indirect impacts, MRB Group employed the Emsi⁴ economic modeling system. We used data from the Applicant, from the Agency, and from publicly-available and proprietary data sources as inputs to the Emsi modeling system. Where needed, we adjusted the Emsi model to best match the Project specifics. We then reported the results of the modeling.

³ There will be no on-site employees during the operation phase, so economic impacts are only assessed for the one-time construction phase.

⁴ Emsi, formerly “Economic Modeling Systems, Intl.,” uses data from the US Bureau of Labor Statistics, the US Bureau of Economic Analysis, the US Census, and other data sources to model out economic impacts.

Construction Phase

The Applicant provided estimates of the total cost of construction of the Project, which is \$7.2 million. The Agency’s Uniform Tax Exemption Policy’s (UTEP) requires that 80% of materials be sourced from a 6-county region (Ontario, Monroe, Livingston, Wayne, Seneca, and Yates) and that 80% of labor be sourced from a 9-county region (Ontario, Monroe, Livingston, Wayne, Seneca, Yates, Steuben, Schuyler, and Chemung).

In discussions with the Applicant, the Applicant noted that some of the materials used in the Project cannot be sourced locally.⁵ The Applicant provided the dollar value of materials and labor that could be sourced locally, which we report in the table to the right. For the purposes of our analysis, we have therefore assumed the Applicant will spend at least \$1.3 million on materials and labor within the Region.

In-region construction spending of \$1.3 million (direct “sales” in the table) was used as an input into the Emsi economic modeling system. According to the model, this level of spending will result in the creation of 7 direct jobs and direct earnings of \$542,878. Indirect impacts resulting from direct spending were also modeled, and these include 4 new jobs, \$246,505 in new earnings, and \$789,383 in new sales. Therefore, the total, one-time, construction-phase impacts of the Project would be 11 jobs, \$789,383 in earnings, and nearly \$2.0 million in sales.

Construction Spending in Region

	\$ Region
Materials	\$300,000
Labor	\$1,000,000
Total	\$1,300,000

Source: Applicant, MRB

Economic Impact of Construction Phase, One-Time

	Direct	Indirect	Total
Jobs	7	4	11
Earnings	\$542,878	\$246,505	\$789,383
Sales	\$1,300,000	\$675,206	\$1,975,206

Source: Emsi, MRB

⁵ The Agency’s UTEP allows for the Applicant to request a waiver for materials and labor that cannot be sourced locally. In the interest of clarity, we note that no such waiver has yet been granted.

Fiscal Impact Analysis

The Project would also have fiscal impacts in terms of new tax revenues and the cost of tax exemptions, described below.

Assumptions

To assess the fiscal impacts of the Project, the following assumptions were made:

- The current full market value of the property is \$220,400, and the current taxable value (TV) is \$204,972.
- The future assessed value (AV) of the project is the total Project cost of \$7,377,322 multiplied by the current equalization rate of 93%.
- An annual escalation factor of 2% was applied to the current tax rates of the County, Town, and School District.
- Yearly PILOT payment distributions were calculated using the portion of each taxing jurisdiction’s tax rate relative to the total tax rate.

Future Assessed Value

Line	Value
Full Market Value	\$220,400
Current TV	\$204,972
Construction Cost	\$7,377,322
Equalization Rate	93%
Future AV	\$6,860,909

Estimated Tax Rates - 2% Escalation

Year	Escalation Factor	County Tax Rate	Town General Fund Tax Rate	School Tax Rate
Current	1.0000	\$6.787959	\$2.669856	\$23.4076
1	1.0200	\$6.923718	\$2.723253	\$23.8758
2	1.0404	\$7.062193	\$2.777718	\$24.3533
3	1.0612	\$7.203436	\$2.833273	\$24.8404
4	1.0824	\$7.347505	\$2.889938	\$25.3372
5	1.1041	\$7.494455	\$2.947737	\$25.8439
6	1.1262	\$7.644344	\$3.006691	\$26.3608
7	1.1487	\$7.797231	\$3.066825	\$26.8880
8	1.1717	\$7.953176	\$3.128162	\$27.4258
9	1.1951	\$8.112239	\$3.190725	\$27.9743
10	1.2190	\$8.274484	\$3.254540	\$28.5338
11	1.2434	\$8.439974	\$3.319630	\$29.1045
12	1.2682	\$8.608773	\$3.386023	\$29.6866
13	1.2936	\$8.780949	\$3.453743	\$30.2803
14	1.3195	\$8.956568	\$3.522818	\$30.8859
15	1.3459	\$9.135699	\$3.593275	\$31.5036

Property Tax Revenue

The Applicant has requested a 15-year PILOT that would allow for the payment of \$5,000 per megawatt per year, escalated at 2% per year, in addition to the present land taxes on the property. The 5-megawatt facility proposed would therefore pay a total of \$25,000 plus present land taxes of \$6,871 in PILOT payments in the first year. Assuming an escalation factor of 2% per year, over the life of the 15-year agreement, PILOT payments would total approximately \$551,162.

Property Tax Revenue – County

The estimated tax revenue for Ontario County under the proposed PILOT is \$113,836 over the 15-year term. Compared to anticipated property tax revenue generated if the Project does not move forward (that is, land-only taxes), this represents an increase of \$89,294.

Property Tax or PILOT Revenue - County

Year	Tax Rate	Current Taxable Value	Land-Only Taxes	Future Taxable Value	Taxes w/o PILOT	PILOT Payment w/ Project*	Increase in Revenue
1	6.9237	\$204,972	\$1,419	\$6,860,909	\$47,503	\$6,583	\$5,163
2	7.0622	\$204,972	\$1,448	\$6,860,909	\$48,453	\$6,714	\$5,267
3	7.2034	\$204,972	\$1,477	\$6,860,909	\$49,422	\$6,849	\$5,372
4	7.3475	\$204,972	\$1,506	\$6,860,909	\$50,411	\$6,986	\$5,479
5	7.4945	\$204,972	\$1,536	\$6,860,909	\$51,419	\$7,125	\$5,589
6	7.6443	\$204,972	\$1,567	\$6,860,909	\$52,447	\$7,268	\$5,701
7	7.7972	\$204,972	\$1,598	\$6,860,909	\$53,496	\$7,413	\$5,815
8	7.9532	\$204,972	\$1,630	\$6,860,909	\$54,566	\$7,561	\$5,931
9	8.1122	\$204,972	\$1,663	\$6,860,909	\$55,657	\$7,713	\$6,050
10	8.2745	\$204,972	\$1,696	\$6,860,909	\$56,770	\$7,867	\$6,171
11	8.44	\$204,972	\$1,730	\$6,860,909	\$57,906	\$8,024	\$6,294
12	8.6088	\$204,972	\$1,765	\$6,860,909	\$59,064	\$8,185	\$6,420
13	8.7809	\$204,972	\$1,800	\$6,860,909	\$60,245	\$8,348	\$6,548
14	8.9566	\$204,972	\$1,836	\$6,860,909	\$61,450	\$8,515	\$6,679
15	9.1357	\$204,972	\$1,873	\$6,860,909	\$62,679	\$8,686	\$6,813
TOTAL			\$24,542		\$821,489	\$113,836	\$89,294

*\$5,000 / Mw plus 'Land-Only' Taxes

Property Tax Revenue – Town

The estimated tax revenue for the Town under the proposed PILOT is \$44,774 over the 15-year term. Compared to anticipated revenue generated if the Project does not move forward, this represents an increase of \$35,121.

Property Tax or PILOT Revenue - Town General Fund

Year	Tax Rate	Current Taxable Value	Land-Only Taxes	Future Taxable Value	Taxes w/o PILOT	PILOT Payment w/ Project*	Increase in Revenue
1	2.72325	\$204,972	\$558	\$6,860,909	\$18,684	\$2,589	\$2,031
2	2.77772	\$204,972	\$569	\$6,860,909	\$19,058	\$2,641	\$2,072
3	2.83327	\$204,972	\$581	\$6,860,909	\$19,439	\$2,694	\$2,113
4	2.88994	\$204,972	\$592	\$6,860,909	\$19,828	\$2,748	\$2,155
5	2.94774	\$204,972	\$604	\$6,860,909	\$20,224	\$2,803	\$2,198
6	3.00669	\$204,972	\$616	\$6,860,909	\$20,629	\$2,859	\$2,242
7	3.06683	\$204,972	\$629	\$6,860,909	\$21,041	\$2,916	\$2,287
8	3.12816	\$204,972	\$641	\$6,860,909	\$21,462	\$2,974	\$2,333
9	3.19073	\$204,972	\$654	\$6,860,909	\$21,891	\$3,034	\$2,380
10	3.25454	\$204,972	\$667	\$6,860,909	\$22,329	\$3,094	\$2,427
11	3.31963	\$204,972	\$680	\$6,860,909	\$22,776	\$3,156	\$2,476
12	3.38602	\$204,972	\$694	\$6,860,909	\$23,231	\$3,219	\$2,525
13	3.45374	\$204,972	\$708	\$6,860,909	\$23,696	\$3,284	\$2,576
14	3.52282	\$204,972	\$722	\$6,860,909	\$24,170	\$3,349	\$2,627
15	3.59327	\$204,972	\$737	\$6,860,909	\$24,653	\$3,416	\$2,680
TOTAL			\$9,653		\$323,110	\$44,774	\$35,121

*\$5,000 / Mw plus 'Land-Only' Taxes

Property Tax Revenue – School

The estimated tax revenue for the Phelps-Clifton Springs Central School District under the proposed PILOT is \$392,552 over the 15-year term. Compared to anticipated revenue generated if the Project does not move forward, this represents an increase of \$307,921.

Property Tax or PILOT Revenue - School District

Year	Tax Rate	Current Taxable Value	Land-Only Taxes	Future Taxable Value	Taxes w/o PILOT	PILOT Payment w/ Project*	Increase in Revenue
1	23.87580	\$204,972	\$4,894	\$6,860,909	\$163,810	\$22,700	\$17,806
2	24.35331	\$204,972	\$4,992	\$6,860,909	\$167,086	\$23,154	\$18,162
3	24.84038	\$204,972	\$5,092	\$6,860,909	\$170,428	\$23,617	\$18,525
4	25.33719	\$204,972	\$5,193	\$6,860,909	\$173,836	\$24,089	\$18,896
5	25.84393	\$204,972	\$5,297	\$6,860,909	\$177,313	\$24,571	\$19,273
6	26.36081	\$204,972	\$5,403	\$6,860,909	\$180,859	\$25,062	\$19,659
7	26.88803	\$204,972	\$5,511	\$6,860,909	\$184,476	\$25,563	\$20,052
8	27.42579	\$204,972	\$5,622	\$6,860,909	\$188,166	\$26,075	\$20,453
9	27.97430	\$204,972	\$5,734	\$6,860,909	\$191,929	\$26,596	\$20,862
10	28.53379	\$204,972	\$5,849	\$6,860,909	\$195,768	\$27,128	\$21,279
11	29.10446	\$204,972	\$5,966	\$6,860,909	\$199,683	\$27,671	\$21,705
12	29.68655	\$204,972	\$6,085	\$6,860,909	\$203,677	\$28,224	\$22,139
13	30.28028	\$204,972	\$6,207	\$6,860,909	\$207,750	\$28,788	\$22,582
14	30.88589	\$204,972	\$6,331	\$6,860,909	\$211,905	\$29,364	\$23,034
15	31.50361	\$204,972	\$6,457	\$6,860,909	\$216,143	\$29,952	\$23,494
TOTAL			\$84,632		\$2,832,829	\$392,552	\$307,921

*\$5,000 / Mw plus 'Land-Only' Taxes

Sales Tax Revenue, Construction Phase

As our economic impact analysis states, we anticipate approximately \$789,383 in total new earnings during the construction phase of the project. We assume 90% of this newly generated construction phase spending will be spent in New York State, and at least 20% will be spent in Ontario County. From there, we conservatively estimate that 25% of that spending amount will be subject to sales tax. Applying the County’s sales tax rate of 3.5% and the State’s sales tax rate of 4.0%, we conclude that the construction phase earnings will lead to approximately \$1,381 in sales tax revenue for the County, and approximately \$7,104 for the State.

County Sales Tax Revenue

Line	Value
Total New Earnings	\$789,383
% Spent in County	20%
\$ Spent in County	\$157,877
% Taxable	25%
\$ Taxable	\$39,469
County Sales Tax Rate	3.50%
\$ County Sales Tax Revenue	\$1,381

Source: Applicant, MRB

State Sales Tax Revenue

Line	Value
Total New Earnings	\$789,383
% Spent in State	90%
\$ Spent in State	\$710,445
% Taxable	25%
\$ Taxable	\$177,611
State Sales Tax Rate	4.00%
\$ State Sales Tax Revenue	\$7,104

Source: Applicant, MRB