



Potential Economic Impact: Benton Solar Project

Prepared by Brigid Tuck, Updated July 20, 2023

KEY FINDINGS

Benton Solar, LLC plans an \$188 million solar development project investment in Benton County. Extension’s analysis finds the project will contribute an estimated \$90.1 million in economic activity during construction and \$4.3 million in annual operations. The project will support an estimated 330 jobs during construction and 13 during ongoing annual operations. During the anticipated 30-year life of the project, it will generate \$127.5 million of economic activity in the county.

PROJECT OVERVIEW

With its \$188 million capital investment, Benton Solar will install photovoltaic solar arrays, producing up to 100 megawatts of energy. The 1,111.9-acre project footprint will be located between Duelm and Saint Cloud. The project also includes access roads, a collector substation, an overhead transmission line, a MET tower, temporary laydown yards, and an operations and maintenance (O&M) office.

The proposed project will contribute to the economy in two ways. First, Benton Solar will invest in site development and solar panel installation. The economic impact of these construction activities is shorter term in nature and will dissipate when the construction ends. Second, the solar energy project will generate economic activity annually due to ongoing O&M. These impacts are longer term and will occur annually, as long as the project is operating at planned levels.

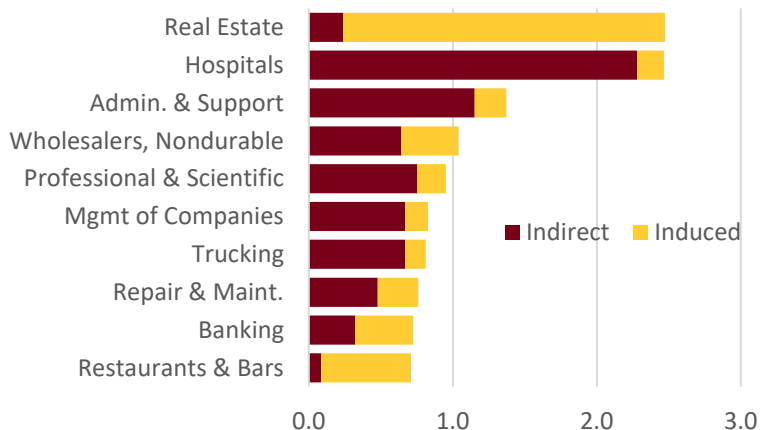
CONSTRUCTION

Benton Solar plans to invest more than \$188 million in the development project. Of this, an estimated \$71.8 million will be direct activity in Benton County (Table 1). Most of the activity will be construction activity (crews installing solar arrays, underground electric cabling, and an overhead transmission line, etc.). The remaining will be professional services, such as legal and architectural services.

Table 1: Economic Contribution, Construction of Proposed Benton Solar Project, Benton County, \$188 million in total investment

	Output (millions)	Employment	Labor Income (millions)
Direct	\$71.8	210	\$31.2
Indirect	\$9.9	60	\$3.1
Induced	\$8.4	60	\$2.3
Total	\$90.1	330	\$36.6

Chart 1: Top Industries Affected, Construction of Proposed Benton Solar Project, Benton County, Indirect and Induced Effects (millions)



In total, the Benton solar project construction will generate an estimated \$90.1 million in economic activity in the county. The project will support 330 jobs: 210 construction and related jobs at the site and 120 jobs at other businesses. The top impacts beyond the construction site will flow to industries including real estate, health care and administrative and support services (Chart 1). These impacts will dissipate after construction is complete.

In addition to output and employment impacts, the construction project will generate tax collections. The model estimates \$2.7 million in state and local tax collections from the project, including \$591,020 in property taxes (to fund local services, such as schools).

OPERATIONS AND MAINTENANCE

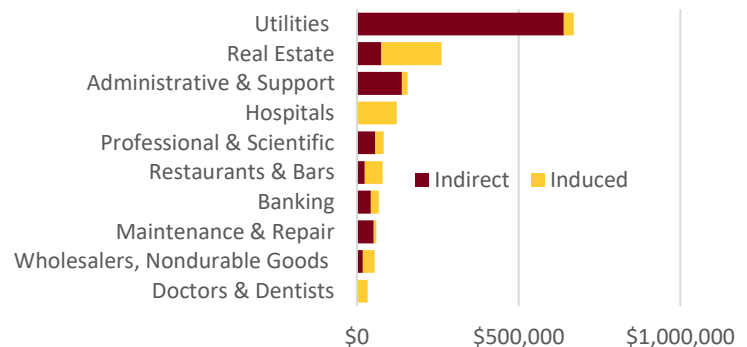
Benton Solar plans to spend approximately \$5.5 million annually to operate and maintain the solar site. Of this, an estimated \$2.8 million will be with businesses within the county (Table 2). An estimated \$295,170 will be wages and benefits for the employees on site.

The direct and ripple effects will create an estimated \$4.3 million in annual activity (totaling \$127.5 million during the life of the project). The project will support \$645,000 in labor income annually.

Table 2: Economic Contribution, O&M of Proposed Benton Solar Project, Benton County, \$5.5 million in annual spending

	Output	Employment	Labor Income
Direct	\$2,818,800	3	\$295,170
Indirect	\$723,440	5	\$187,730
Induced	\$707,750	5	\$162,100
Total	\$4,249,990	13	\$645,000

Chart 2: Top Industries Affected, O&M of Proposed Benton Project, Benton County, Indirect and Induced Effects



Benton Solar anticipates employing three people to perform O&M at the solar site. As a result of spending, the project will support an estimated 13 total workers in the county annually. The top impacts beyond Benton Solar's expenditures for O&M will be industries including utilities, real estate, and administrative and support services (Chart 2).

The project's O&M will also generate ongoing tax collections. On an annual basis, Benton Solar plans to pay \$630,000 in property taxes. Further, the model estimates \$164,350 in collections from the multiplier effects. Through the project period, this equates to \$23.8 million in property tax revenue.

SUMMARY OF METHODS

Economic impact is comprised of direct, indirect, and induced effects. Direct effect is the initial investment by a business. Benton Solar, LLC provided Extension with its budget for construction and operations. Indirect and induced effects are the multiplier (or ripple) effects. Broadly, indirect effects stem from the business purchasing goods and services and induced effects stem from household spending of income. Extension used the input-output model, IMPLAN, to calculate the indirect and induced effects.

For more about Extension, visit www.exnsion.umn.edu/community-development. There is also a technical report explaining Extension's approach to the analysis. Contact Brigid Tuck, tuckb@umn.edu, to obtain a copy.