

GIBSON SOLAR

ECONOMIC AND FISCAL CONTRIBUTION TO KING GEORGE COUNTY, VIRGINIA



Prepared for



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About Mangum Economics, LLC

Mangum Economics was founded in 2003 and since then, we have become known as a leader in industry analysis, economic impact assessment, policy and program evaluation, and economic and workforce strategy development. The Mangum Team specializes in producing objective and actionable quantitative economic research that our clients use for strategic decision making in a variety of industries and environments. We know that our clients are unique, and that one size does not fit all. As a result, we have a well-earned reputation for tailoring our analyses to meet the specific needs of specific clients, with a specific audience.

Most of our research falls into four general categories:

- **Energy:** The Mangum Team has produced analyses of the economic and fiscal impact of over 70 GW of proposed solar, wind, battery energy storage, and hydro projects spanning more than thirty states ranging from 1 MW to over 800 MW in capacity, including small-scale distributed facilities. Among those projects was Dominion's 2.6 GW Coastal Virginia Offshore Wind project off of Virginia Beach. In addition, the Mangum Team has also performed economic and fiscal impact analyses for the natural gas, nuclear, oil, transmission line, and pipeline industries.
- **Economic Development and Special Projects:** The Mangum Team has performed hundreds of analyses of proposed economic development projects and existing entities including museums and tourist attractions, hospital systems, industrial development and mixed-use projects, and economic development regions. The Mangum Team has also authored multiple economic development plans and assessed the impacts of international trade and an overseas trade office.
- **Advanced Applied Technology:** The Mangum Team specializes in analyzing how advanced technology developments (like data centers, fiber networks, and advanced manufacturing plants) contribute to the state and local economies. We have worked with local governments, trade associations, developers, and operating firms across the country to show how investments in advanced critical infrastructure transform local economies across the country.
- **Policy Analysis:** The Mangum Team has extensive experience in identifying and quantifying the impacts of legislative and regulatory initiatives. We have performed analyses (benefit-cost analysis, return on investment, risk assessment, empirical, and logic modelling) spanning a wide array of policy initiatives, including economic development, labor, tax, food safety and nutrition, consumer products, transportation, ecommerce, consumer data collection, environmental, and gaming.

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Executive Summary

This report assesses the economic and fiscal contribution that the proposed Gibson Solar project would make to King George County, Virginia.

Gibson Solar is a proposed 100-megawatt (MW) alternating current (AC) solar photovoltaic power generating facility. The project would be located near Route 625 in the eastern portion of King George County, Virginia. The total acreage to be leased or purchased for the project encompasses approximately 1,400 acres of timberland and land used for cattle grazing. The actively used, fenced-in portion of the site would be approximately 650 acres.

The primary findings from the assessment are as follows:

Economic Impact – Construction^{1,2,3}

- Gibson Solar would provide an estimated pulse of economic activity to King George County during its construction phase supporting approximately:
 - 44 direct local construction jobs and 48 indirect and induced local jobs,
 - \$5.6 million in associated local wages and benefits,
 - \$30.7 million in local economic output, and
 - \$1.1 million in state and local tax revenue (in 2026 dollars).

Economic Impact – Ongoing Operations

- Gibson Solar would provide an estimated annual economic impact to King George County during its ongoing operational phase supporting approximately:
 - 1 direct local operational job and 1 indirect and induced local job,
 - \$0.1 million in associated local wages and benefits, and
 - \$0.6 million in local economic output (in 2026 dollars).

Fiscal Contribution

- Assuming revenues are generated from the reassessment of land and from revenues associated with the solar facility, Gibson Solar would generate approximately:
 - \$11.4 million in cumulative county revenue over the facility's anticipated 40-year operational life from taxation of the land and taxation of the associated capital investments (Scenario 1); or

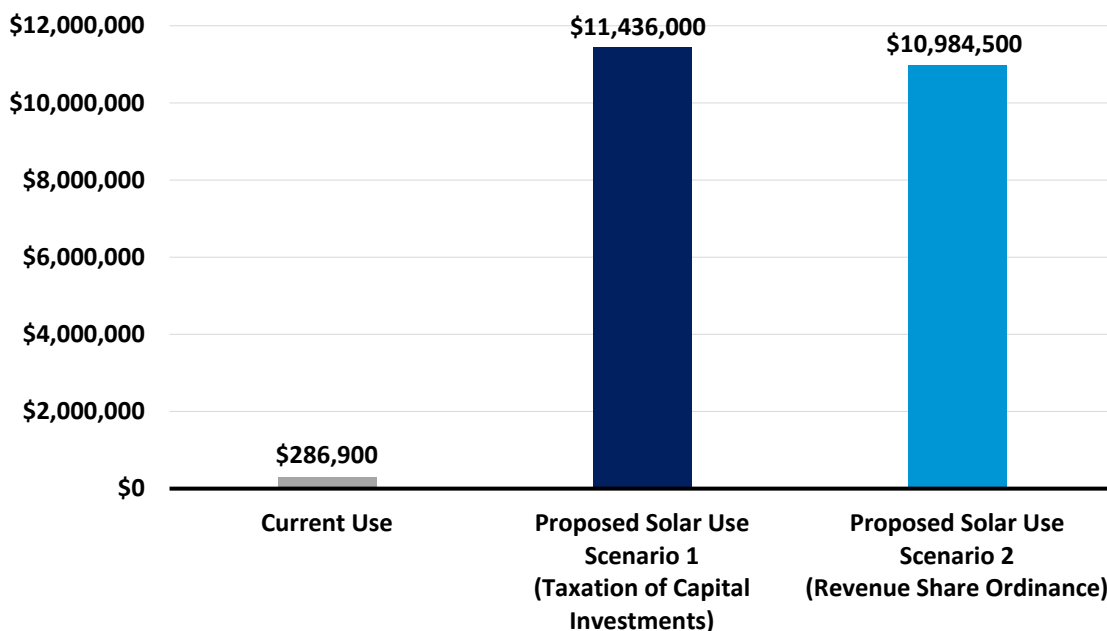
¹ Construction sector jobs are not necessarily new jobs, but the investments made can also support a job during the construction of the project. Please note it is not possible to know with certainty what proportion of jobs would go to county construction contractors or be filled by county residents.

² One construction job equals one person working full-time for one year. Since construction schedules and daily on-site employment vary, the analysis converts these variations into a consistent, full-time job.

³ Please note that construction of the project is expected to take approximately 18 months, but the IMPLAN model and analysis are based on a representative 12-month period.

- \$11.0 million in cumulative county revenue over the facility’s anticipated 40-year operational life from taxation of the land and payments associated with a hypothetical local energy revenue share ordinance (Scenario 2).
- In its current use, the property would generate approximately \$0.3 million in cumulative county revenue – Gibson Solar would provide a 40-fold or 38-fold increase over current revenues respectively.

Estimated Cumulative King George County Revenue over 40 Years



The estimates provided in this report are based on the best information available and all reasonable care has been taken in assessing the quality of that information. However, because these estimates attempt to foresee the consequences of circumstances that have not yet occurred, it is not possible to be certain that they will be representative of actual events. These estimates are intended to provide a good indication of likely future outcomes and should not be construed to represent a precise measure of those outcomes.

Introduction

This report assesses the economic and fiscal contribution that the proposed Gibson Solar project would make to King George County, Virginia. This report was commissioned by Hanwha Renewables and produced by Mangum Economics.

The Project

Gibson Solar is a proposed 100-megawatt (MW) alternating current (AC) solar photovoltaic power generating facility. The project would be located near Route 625 in the eastern portion of King George County, Virginia. The total acreage to be leased for the project encompasses approximately 1,400 acres of timberland and land used for cattle grazing. The actively used, fenced-in portion of the site would be approximately 650 acres.

Electricity Production in Virginia

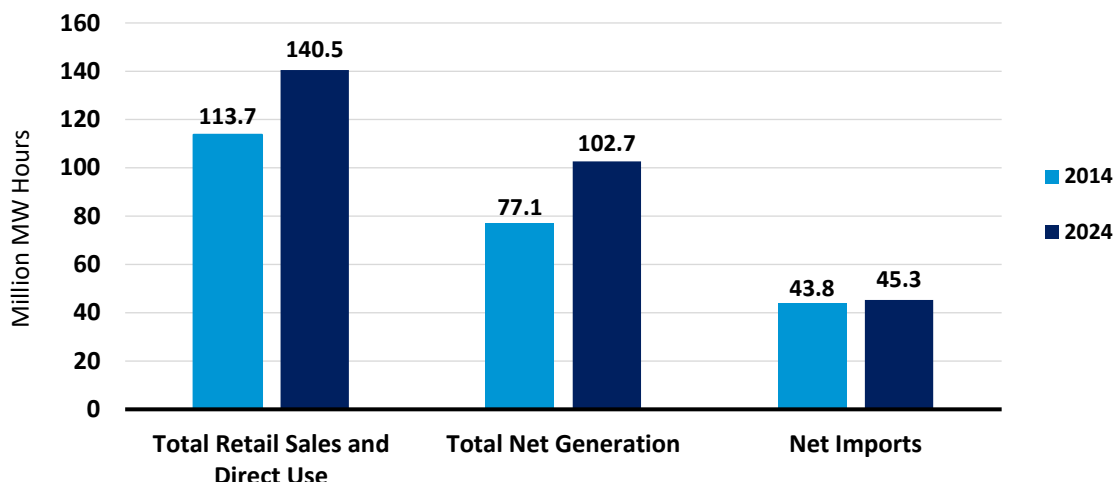
This section provides a backdrop for the proposed Gibson Solar project by profiling Virginia's electricity production sector and the role that solar energy could play in that sector.

Overall Market

As shown in Figure 1, in 2024, electricity sales and direct use in Virginia totaled 140.5 million megawatt hours. However, only 73 percent of that demand was met by in-state utilities, independent producers, and other sources. As a result, Virginia had to import the remaining electricity it consumed from producers in other states. As with all imports, this means that the jobs, wages, and economic output created by that production went to localities in those states, not to localities in Virginia.

Between 2014 and 2024, the total amount of electricity produced in Virginia increased from 77.1 to 102.7 million megawatt hours, while retail and direct consumption of electricity increased from 113.7 to 140.5 million megawatt hours. As a result, net imports of electricity increased by 1.5 million megawatt hours (or 3 percent) during this time.

Figure 1: Demand and Supply of Electricity in Virginia in 2014 and 2024
(in millions of megawatt-hours)⁴



Sources of Production

Figure 2 provides a comparison of the energy sources that were used to produce electricity in Virginia in 2014 and 2024. As these data show, the most significant change between 2014 and 2024 was a decrease in the use of coal and an increase in the use of cleaner-burning low emissions natural gas and zero emissions solar.

While coal was the state’s third largest source of electricity in 2014, accounting for 20.8 million megawatt hours of production, by 2024 its electricity production had fallen to 2.0 million megawatt hours (a 91 percent decrease). In contrast, natural gas accounted for 20.9 million megawatt hours of Virginia’s electricity production in 2014, and its use almost tripled to 61.0 million megawatt hours of production by 2024, making natural gas the state’s largest source of electricity. In addition, solar, which entered the Virginia electricity production market in 2016, increased its share to 7.0 million megawatt hours in 2024.

⁴ Data Source: U.S. Energy Information Administration. “Net Exports” also takes into account losses during transmission. As a result, it does not directly equal the residual of “Total Net Generation” minus “Total Retail Sales and Direct Use.”

Figure 2: Electricity Generation in Virginia by Energy Source in 2014 and 2024
(in millions of megawatt-hours)⁵

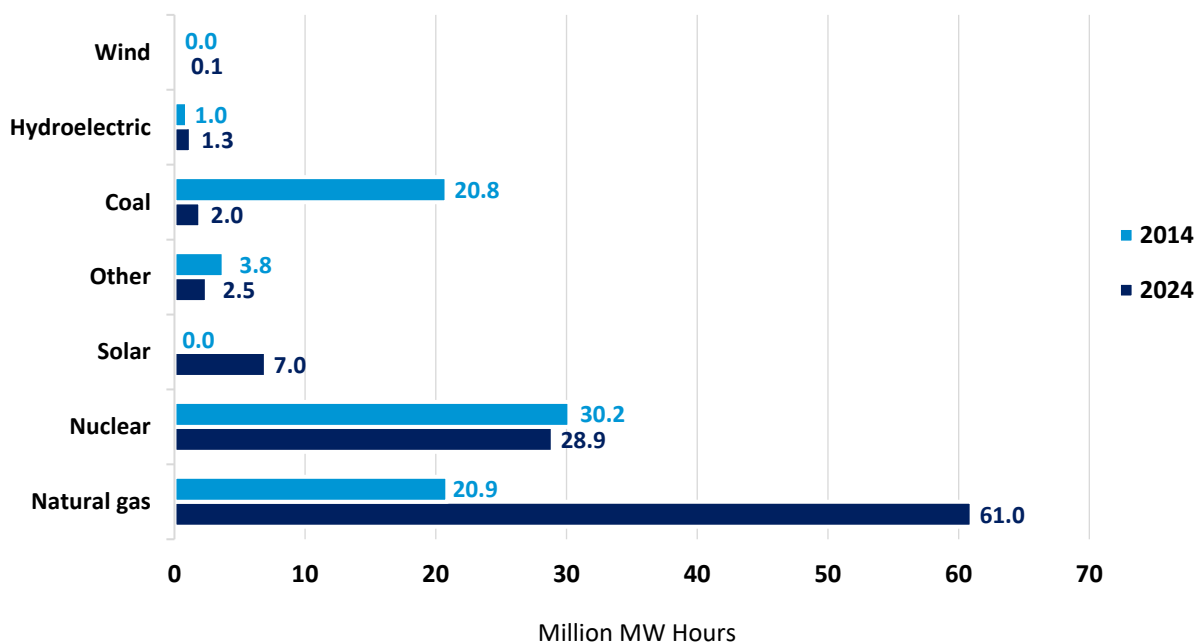
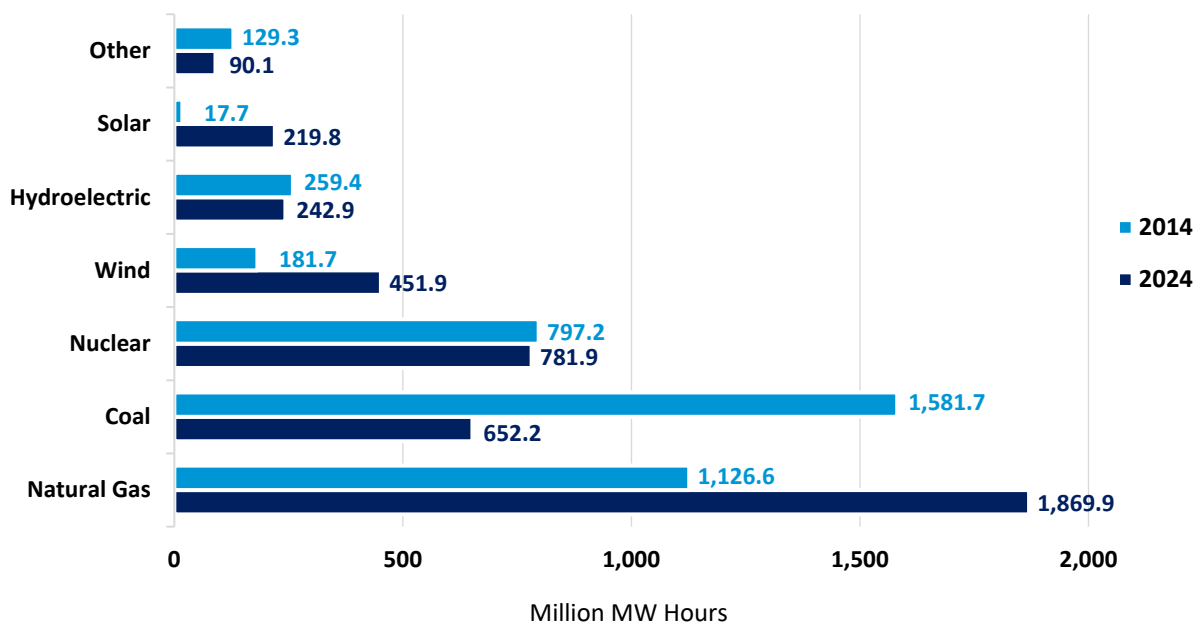


Figure 3 provides similar data for the U.S. as a whole. A quick comparison of Figures 2 and 3 shows that although the degree of reliance on specific energy sources for electricity production is different between the U.S. and Virginia, the trend toward lower-emissions energy sources is the same. Nationally, between 2014 and 2024, the amount of electricity produced using coal decreased from 1,581.7 to 652.2 million megawatt hours (a 59 percent decrease), while the amount of electricity produced by natural gas increased from 1,126.6 to 1,869.9 million megawatt hours (a 66 percent increase).

Nationwide, as in Virginia, the reliance on renewable energy sources such as solar increased during this time but at a slower pace than in Virginia. Between 2014 and 2024, the amount of electricity produced using solar increased by 202.1 million megawatt hours to 5 percent of total electricity production in the nation as compared to 7 percent of total electricity production in Virginia.

⁵ Data Source: U.S. Energy Information Administration. The “Other” category includes battery, wood, petroleum, other biomass, “other”, other gas, and pumped storage.

Figure 3: Electricity Generation in the United States by Energy Source in 2014 and 2024
(in millions of megawatt-hours)⁶



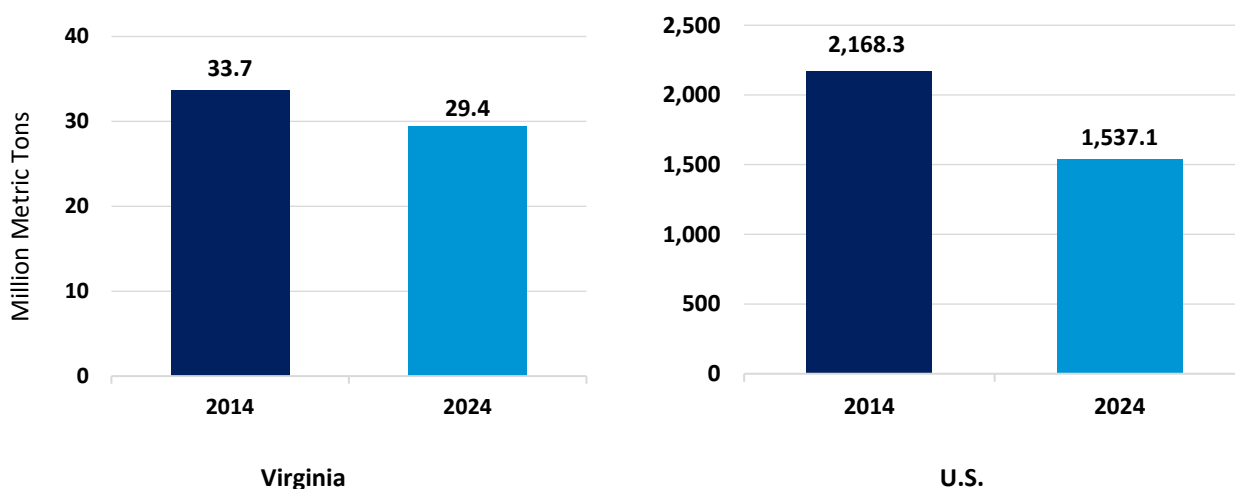
Impact on the Environment

In discussing the impact of these trends on the environment, it is important to understand that electricity production is one of the U.S.'s largest sources of greenhouse gas emissions. Figure 4 depicts carbon dioxide emissions from electricity production in 2014 and 2024 for both Virginia and the U.S.

As these data indicate, between 2014 and 2024, as the share of electricity produced in Virginia by coal fell by 91 percent, carbon dioxide emissions from electricity production fell from 33.7 to 29.4 million metric tons (a 13 percent decrease). Where at the national level, as the share of electricity produced by coal fell by 59 percent, carbon dioxide emissions from electricity production fell from 2,168.3 to 1,537.1 million metric tons (a 29 percent decrease).

⁶ Data Source: U.S. Energy Information Administration. "Other" includes battery, geothermal, other, other biomass, other gas, petroleum, pumped storage, and wood.

Figure 4: Carbon Dioxide Emissions from Electricity Production (millions of metric tons)⁷

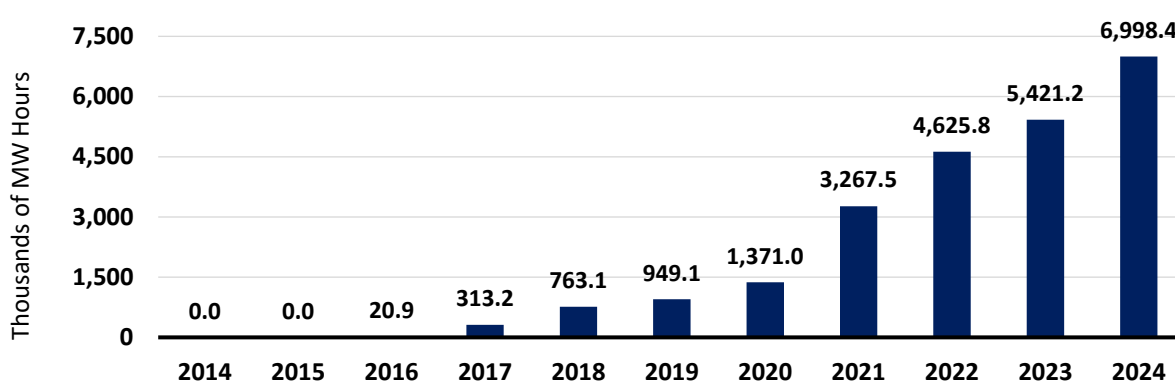


Virginia Solar Industry Trends

Virginia ranks 8th in the nation in terms of operable utility-scale solar capacity. With a total of 37 projects in the development pipeline totaling over 3,500 megawatts of capacity, Virginia ranks 11th in the nation in terms of proposed utility-scale solar capacity.⁸ Total investment into the solar industry in Virginia amounts to \$10.7 billion as of the second quarter of 2026.⁹

Figure 5 depicts the progression of solar energy generation in Virginia from 2014 to 2024 expressed in thousands of megawatt-hours. Solar entered the electricity market in Virginia in 2016 with 20.9 thousand megawatt hours. Generation has continued to grow throughout the period, reaching a new peak in 2024, with solar generation totaling 6,998.4 thousand megawatt-hours.

Figure 5: Solar Generation in Virginia (in thousands of megawatt-hours) – 2014 to 2024¹⁰



⁷ Data Source: U.S. Energy Information Administration.

⁸ Data Source: U.S. Energy Information Administration. Based on preliminary data for 2025. This total does not include MW associated with Gibson Solar.

⁹ Data Source: Solar Energy Industries Association. Includes residential, community, commercial, and utility solar.

¹⁰ Data Source: U.S. Energy Information Administration.

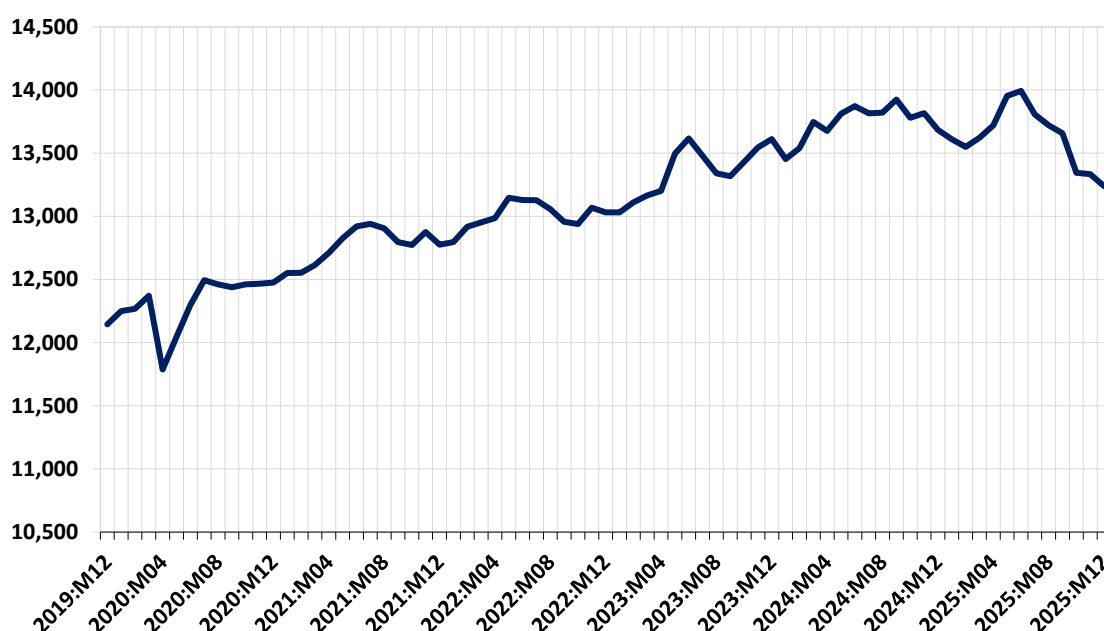
Local Economic Profile

This section provides context for the economic and fiscal impact assessments to follow by profiling the local economy of King George County.

Total Employment

Figure 6 depicts the trend in total employment in King George County during the six-year period from December 2019 through December 2025. As these data show, total employment in the county experienced a sharp decline in April 2020 due to the labor dislocations caused by the COVID-19 pandemic. Since then, employment generally increased, before decreasing again midway through 2025. As of December 2025, total employment in the county stood at 13,239 jobs, which represents an overall increase in employment of 9.0 percent (or 1,095 jobs) over the six-year period. To put this number in perspective, over this same period, total statewide employment in Virginia increased by 4.6 percent.¹¹

Figure 6: Total Employment in King George County – December 2019 through December 2025¹²



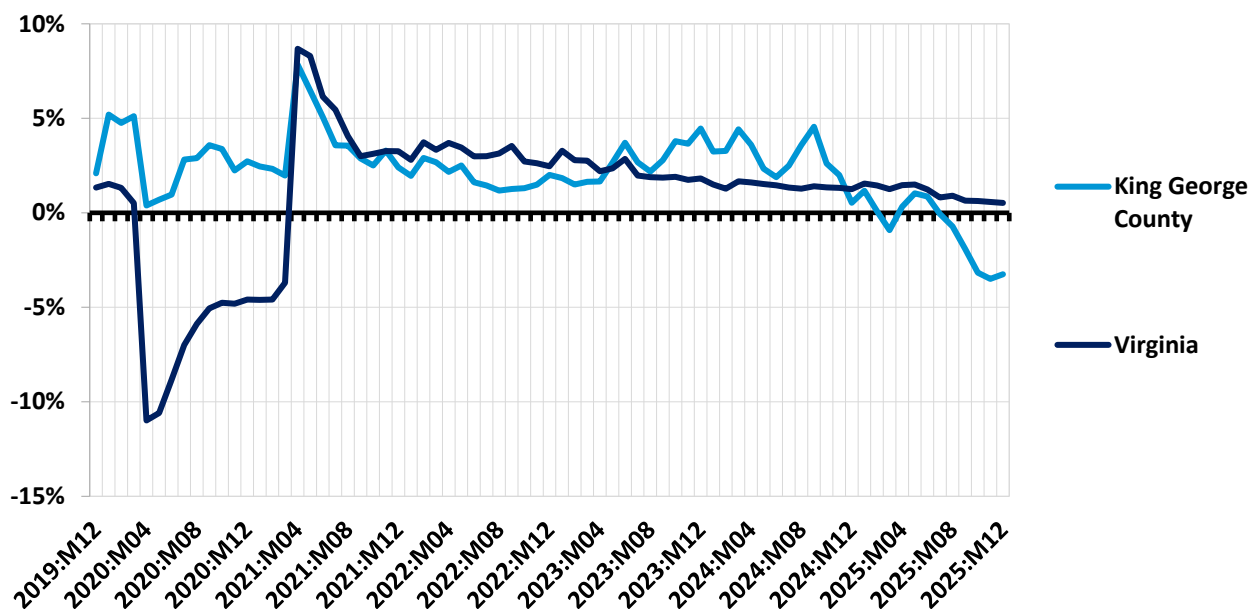
To control for seasonality and provide a point of reference, Figure 7 compares the year-over-year change in total employment in King George County to that of the state of Virginia over the same six-year period. Any point above the zero line in this graph indicates an increase in employment, while any point below the zero line indicates a decline in employment. As these data show, the year-over-year change in King George County was positive until a recent decline during 2025. As of December 2025, the year-

¹¹ Data Source: U.S. Bureau of Labor Statistics. A six-year period is used to show a view of local employment pre and post the COVID-19 pandemic.

¹² Data Source: U.S. Bureau of Labor Statistics.

over-year change in total employment in King George County was minus 3.3 percent as compared to 0.5 percent statewide in Virginia.

Figure 7: Year-Over-Year Change in Total Employment –December 2020 through December 2025¹³



Employment and Wages by Industry Supersector

To provide a better understanding of the underlying factors motivating the total employment trends depicted in Figures 6 and 7, Figures 8 through 10 provide data on private employment and wages in King George County by industry supersector.¹⁴

Figure 8 provides an indication of the distribution of private sector employment across industry supersectors in King George County in 2024. As these data indicate, the county's largest industry sectors that year were Professional and Business Services (3,175 jobs), followed by Trade, Transportation and Utilities (1,205 jobs), and Leisure and Hospitality (688 jobs).

Figure 9 provides a similar ranking for average private sector weekly wages by industry supersector in King George County in 2024. As these data show, the highest paying industry sectors that year were Professional and Business Services (\$1,965 per week), Construction (\$1,276 per week), and Financial Activities (\$1,203 per week). To provide a point of reference, the average private sector weekly wage across all industry sectors in King George County that year was \$1,349 per week.

¹³ Data Source: U.S. Bureau of Labor Statistics. A six-year period is used to show a view of local employment pre and post the COVID-19 pandemic.

¹⁴ A "supersector" is the highest level of aggregation in the coding system that the Bureau of Labor Statistics uses to classify industries.

Figure 8: Private Employment by Industry Supersector in King George County – 2024¹⁵

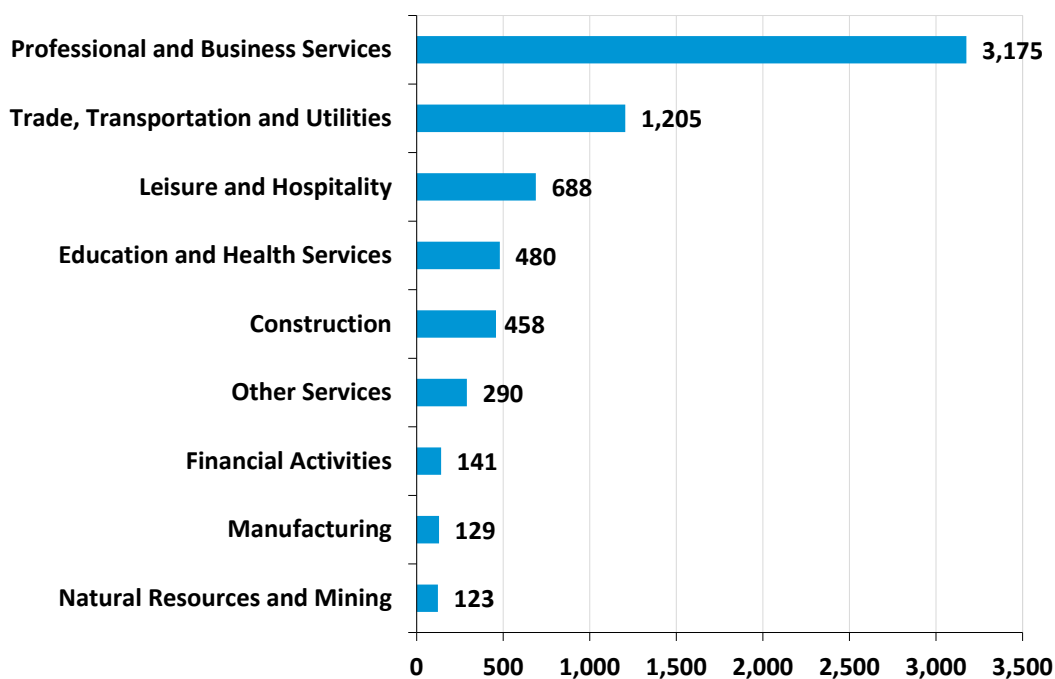
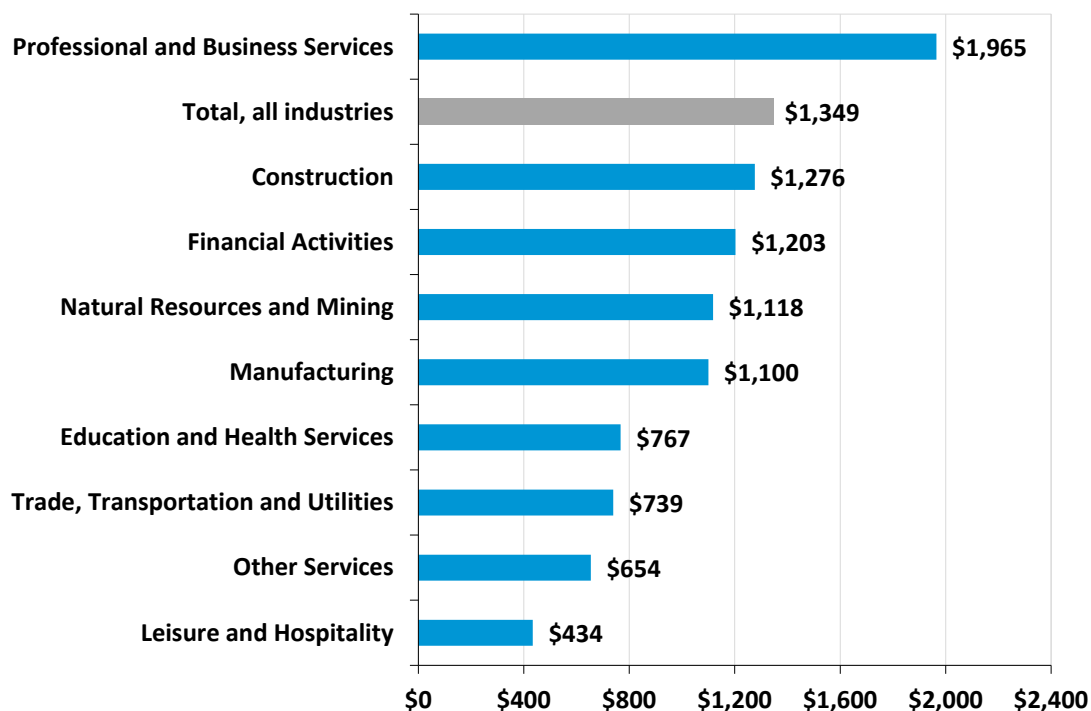


Figure 9: Average Private Weekly Wages by Industry Supersector in King George County – 2024¹⁶

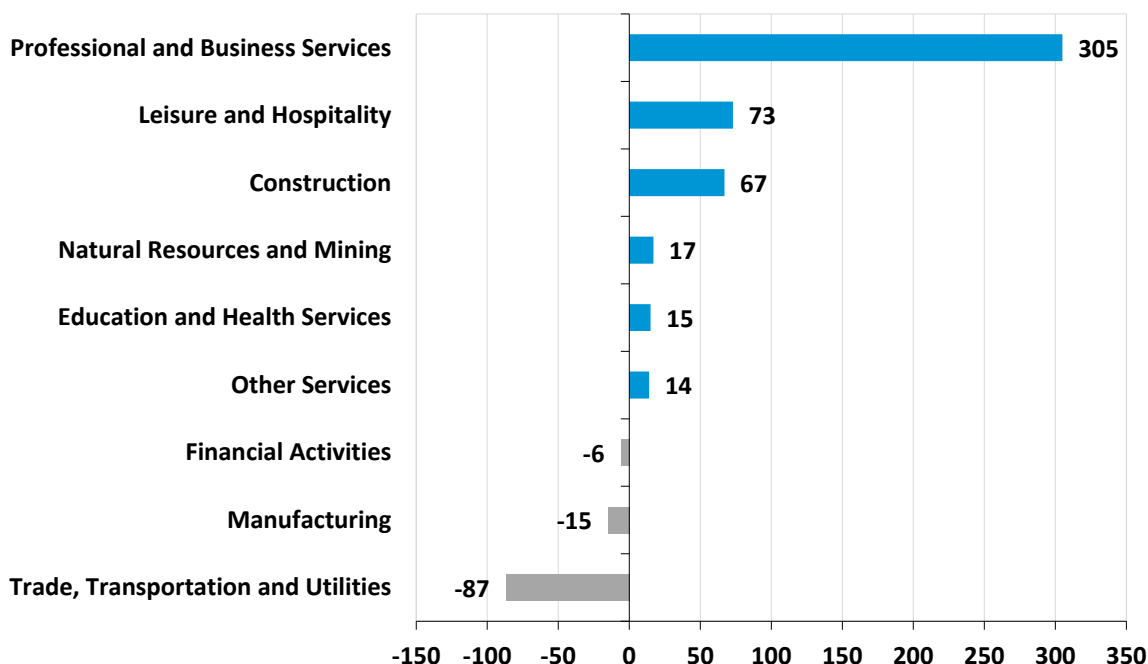


¹⁵ Data Source: U.S. Bureau of Labor Statistics. Data on the Information sector has been suppressed due to data confidentiality. 2024 data is used due to the suppression of multiple sectors in 2025 preliminary data.

¹⁶ Data Source: U.S. Bureau of Labor Statistics. Data on the Information sector has been suppressed due to data confidentiality. 2024 data is used due to the suppression of multiple sectors in 2025 preliminary data.

Figure 10 details the year-over-year change in private sector employment from 2023 to 2024 in King George County by industry supersector. Over this period, the largest employment gains occurred in the Professional and Business Services (up 305 jobs), Leisure and Hospitality (up 73 jobs), and Construction (up 67 jobs) sectors. Employment losses occurred in the Trade, Transportation and Utilities (down 87 jobs), Manufacturing (down 15 jobs), and Financial Activities (down 6 job) sectors.

Figure 10: Change in Private Employment by Industry Supersector in King George County from 2023 to 2024¹⁷



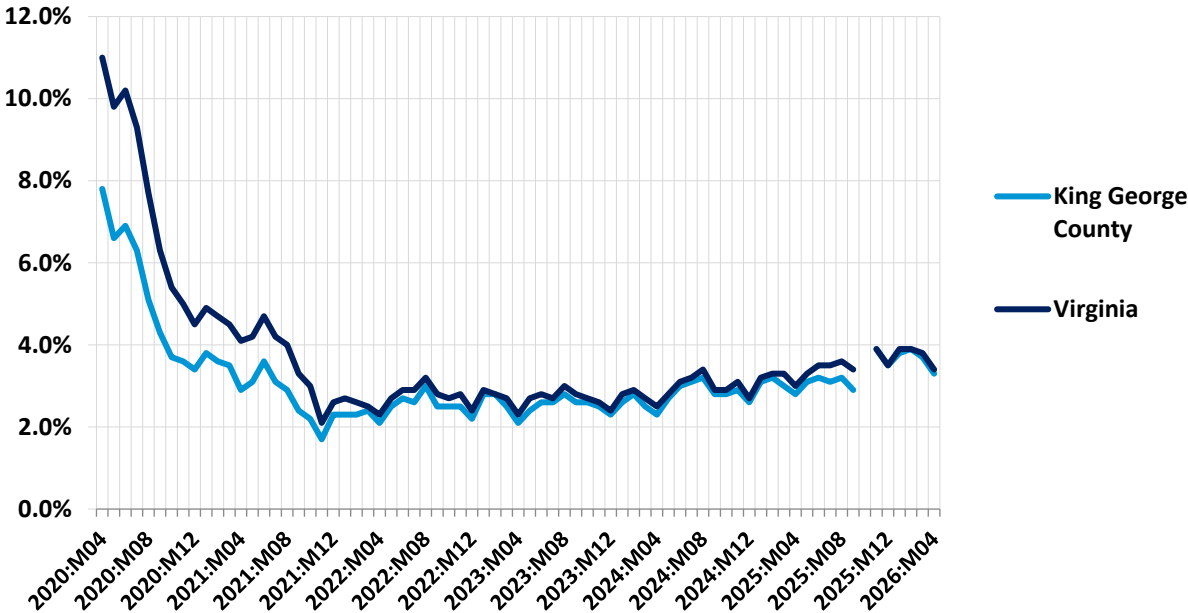
Unemployment

Figure 11 illustrates the trend in King George County's unemployment rate over the six-year period from April 2020 through April 2026 and benchmarks those data against the statewide trend for Virginia. As these data show, the county and state experienced high unemployment rates during the beginning of the period as a result of the labor dislocations caused by the COVID-19 pandemic. Additionally, unemployment rates in King George County tracked slightly below the statewide trend throughout most of the six-year period. As of April 2026, unemployment stood at 3.3 percent in King George County compared to 3.4 percent in Virginia as a whole.

¹⁷ Data Source: U.S. Bureau of Labor Statistics. *Data on the Information sector has been suppressed due to data confidentiality. 2023 and 2024 data is used due to the suppression of multiple sectors in 2025 preliminary data.*



Figure 11: Unemployment Rate – April 2020 to April 2026¹⁸



¹⁸ Data Source: U.S. Bureau of Labor Statistics. A six-year period is used to show a view of local employment pre and post the COVID-19 pandemic. Data unavailable for October 2025 due to the 2025 lapse in appropriations.

Economic Impact

This section quantifies the economic and fiscal contribution that the proposed Gibson Solar project would make to King George County. The analysis separately evaluates the pulse of economic activity that would occur during the construction phase of the project, as well as the annual economic activity that the project would generate during its ongoing operational phase.

Method

To empirically evaluate the likely local economic impact attributable to the proposed Gibson Solar project, the analysis employs a regional economic impact model called IMPLAN.¹⁹ The IMPLAN model is one of the most commonly used economic impact simulation models in the U.S., and in Virginia is used by UVA's Weldon Cooper Center, the Virginia Department of Planning and Budget, the Virginia Employment Commission, and other state agencies and research institutes. Like all economic impact models, the IMPLAN model uses economic multipliers to quantify economic impact.

Economic multipliers measure the ripple effects that an expenditure generates as it makes its way through the economy. For example, as when the Gibson Solar project purchases goods and services – or when contractors hired by the facility use their salaries and wages to make household purchases – thereby generating income for someone else, which is in turn spent, thereby becoming income for yet someone else, and so on, and so on. Through this process, one dollar in expenditures generates multiple dollars of income. The mathematical relationship between the initial expenditure and the total income generated is the economic multiplier.

One of the primary advantages of the IMPLAN model is that it uses regional and national production and trade flow data to construct region-specific and industry-specific economic multipliers, which are then further adjusted to reflect anticipated actual spending patterns within the specific geographic study area that is being evaluated. As a result, the economic impact estimates produced by IMPLAN are not generic. They reflect as precisely as possible the economic realities of the specific industry, and the specific study area, being evaluated.

In the analysis that follows, these impact estimates are divided into three categories. First-round direct impact measures the direct economic contribution of the entity being evaluated (e.g., own employment, wages paid, goods and services purchased by the Gibson Solar project). Second-round indirect and induced impact measures the economic ripple effects of this direct impact in terms of business to business, and household (employee) to business, transactions. Total impact is simply the sum of the preceding two. These categories of impact are then further defined in terms of employment (the jobs that are created), labor income (the wages and benefits associated with those jobs), and economic output (the total amount of economic activity that is created in the economy).

¹⁹ IMPLAN is produced by IMPLAN Group, LLC.

Construction Phase

This portion of the section assesses the economic and fiscal contribution that the pulse of economic activity associated with construction of Gibson Solar would provide to King George County.

Economic Impact Assumptions

The analysis is based on the following assumptions:

- Total capital investment associated with Gibson Solar would be approximately \$225.0 million.²⁰
- Construction of Gibson Solar is expected to take approximately 18 months, but the IMPLAN model and analysis are based on a representative 12-month period.

Economic Impact

Applying these assumptions in the IMPLAN model results in the following estimates of the economic and fiscal impact on King George County. As shown in Table 1, construction of Gibson Solar would directly support approximately: 1) 44 jobs, 2) \$3.6 million in wages and benefits, and 3) \$23.3 million in economic output to King George County (in 2026 dollars).

Taking into account the economic ripple effects that direct investment and the per diem spending of non-local construction workers would generate, the total estimated impact on King George County would support approximately: 1) 92 jobs, 2) \$5.6 million in wages and benefits, 3) \$30.7 million in economic output, and 4) \$1.1 million in state and local tax revenue (in 2026 dollars).

Table 1: Estimated Economic and Fiscal Impact on King George County from Construction of Gibson Solar (2026 Dollars)^{21,22,23}

Economic Impact	Employment	Wages and Benefits	Economic Output
1st Round Direct Economic Activity	44	\$3,550,000	\$23,228,600
2nd Round Indirect and Induced Economic Activity	48	\$2,019,000	\$7,490,800
Total Economic Activity	92	\$5,569,000	\$30,719,400
Fiscal Impact			
State and Local Tax Revenue			\$1,104,500

**Totals may not sum due to rounding.*

²⁰ Data Source: Hanwha Renewables. Investment estimate is subject to change based on final design and vendor contracts.

²¹ Construction sector jobs are not necessarily new jobs, but the investments made can also support a job during the construction of the project. Please note that it is not possible to know with certainty what proportion of these jobs would go to county construction contractors or be filled by county residents.

²² One construction job equals one person working full-time for one year. Since construction schedules and daily on-site employment vary, the analysis converts these variations into a consistent, full-time job.

²³ Wages and Benefits are included in the Economic Output associated with the project.

Ongoing Operations Phase

This portion of the section assesses the annual economic impact that Gibson Solar would provide to King George County during its anticipated 40-year operational phase.

Economic Impact Assumptions

The analysis is based on the following assumptions:

- Gibson Solar would source locally available services and materials for maintenance of the facility.²⁴

Economic Impact

Applying these assumptions in the IMPLAN model results in the following estimates of annual economic impact. As shown in Table 2, annual operation of Gibson Solar would on average directly support approximately: 1) 1 job, 2) \$75,800 in wages and benefits, and 3) \$0.4 million in economic output to King George County (in 2026 dollars).

Taking into account the economic ripple effects that direct impact would generate, the total estimated annually supported impact on King George County would be approximately: 1) 2 jobs, 2) \$0.1 million in wages and benefits, and 3) \$0.6 million in economic output (in 2026 dollars).

Table 2: Estimated Annual Economic Impact on King George County from the Ongoing Operation of Gibson Solar (2026 Dollars)

Economic Impact	Employment	Wages and Benefits	Economic Output
1st Round Direct Economic Activity	1	\$75,800	\$358,100
2nd Round Indirect and Induced Economic Activity	1	\$68,200	\$220,800
Total Economic Activity	2	\$144,000	\$578,900

**Totals may not sum due to rounding.*

²⁴ Data Source: Hanwha Renewables.

Fiscal Impact

This section quantifies the direct fiscal contribution that the proposed Gibson Solar project would make to King George County. The analysis considers two scenarios. Both scenarios include the additional revenue that Gibson Solar would generate for King George County over a 40-year period from the increased land assessments associated with reassessing the site as solar use property. Scenario 1 then describes the additional revenue Gibson Solar would generate for King George County from taxes levied on the capital investment, while Scenario 2 assumes tax revenue generated from the capital investment will be replaced with revenue associated with a hypothetical locally adopted revenue share ordinance or other payment agreement, calculated based on the project's total generation capacity.

It should be noted at the outset, however, that the analysis that follows likely understates the actual fiscal impact that Gibson Solar would have on the county as it only accounts for the direct fiscal impact that the project would generate. It does not take into account any additional tax revenue that would be generated as a result of the indirect economic activity attributable to the ongoing operation of Gibson Solar.

Fiscal Impact Assumptions

The analysis is based on the following assumptions:

- Total capitalized investment in Gibson Solar would be approximately \$225.0 million.²⁵
- Gibson Solar would be situated on approximately 650 fenced-in acres within an approximate 1,400-acre tract of leased or purchased land.²⁶
- The actively used, fenced-in acreage would be removed from the land use program and reassessed at a solar use value of \$10,000 per acre.²⁷
- Gibson Solar's total generation capacity would be 100 MW AC.²⁸
- Gibson Solar would be independently owned.²⁹
- Gibson Solar would have an operational life of approximately 40 years.³⁰
- Gibson Solar would become operational in 2029.³¹
- Tax rates remain constant throughout the analysis.

²⁵ Data Source: Hanwha Renewables. Investment estimate is subject to change based on final design and vendor contracts.

²⁶ Data Source: Hanwha Renewables.

²⁷ Data Source: Actual future assessment value for solar projects in King George County is currently unknown. Estimated future assessment value is based on experience with comparable projects in Virginia.

²⁸ Data Source: Hanwha Renewables.

²⁹ Data Source: Hanwha Renewables.

³⁰ Data Source: Hanwha Renewables.

³¹ Data Source: Hanwha Renewables.

Taxation of Land

Table 3 details the increased tax revenue associated with removing the affected acreage from the land use program and reassessing the 650-acre fenced-in site as solar use property. The county real estate tax revenue from the fenced-in acreage after reassessment is estimated to be approximately \$37,700 per year, for a cumulative total of approximately \$1.7 million over the project's anticipated 40-year operational life. This cumulative total includes the one-time rollback taxes of approximately \$0.1 million. In contrast, the property currently generates approximately \$7,200 per year, for a cumulative total of approximately \$0.3 million over 40 years (in 2026 dollars).³²

Table 3: Estimated Cumulative County Revenue Generated by Gibson Solar Over 40 Years from Taxation of Land (2026 Dollars)

Estimated Increased Appraised Value of Property – Solar Use	\$6,500,000
King George County Real Estate Tax Rate (per \$100) ³³	\$0.58
Annual County Tax Revenue – Solar Use	\$37,700
Cumulative Revenue over 40 Years	\$1,508,000
One-time Rollback Taxes ³⁴	\$142,500
Total Cumulative Revenue over 40 Years	\$1,650,500

**Totals may not sum due to rounding.*

Scenario 1: Taxation of Capital Investment

Table 4 details the additional annual revenue that Gibson Solar would generate for King George County over a 40-year period from taxes levied on the capital investment. This estimate is calculated as: 1) the taxable portion of capital investments based on the stepdown local tax exemption pursuant to Virginia Code §58.1-3660, times 2) the State Corporation Commission's (SCC) current utility assessment ratio for King George County, times 3) the SCC's current depreciation guidelines for solar facilities, times 4) King George County's real property tax rate of \$0.58 per \$100 of assessed value pursuant to Virginia Code §58.1-2606.

As the data in Table 4 indicate, based on these calculations, the estimated additional county revenue from taxation of capital investment associated with Gibson Solar would be approximately \$0.2 million in the project's first year of operation. That figure is projected to increase to approximately \$0.4 million by year 11, and then decrease to approximately \$50,400 in year 34 and thereafter as the value of the

³² Data Source: Derived from data on King George County's online property records database.

³³ Data Source: King George County Fiscal Year 2026-27 Adopted Tax Rates.

³⁴ Rollback taxes are estimated based on the difference between the land use value assessment tax and the tax on the fair market value for the affected acreage for five complete tax years plus the current year, including simple interest. Does not account for changes in assessment values.

exemption is reduced and the equipment continues to depreciate, for a cumulative total of approximately \$9.8 million over the anticipated 40-year operational life of the project (in 2026 dollars).

Table 4: Estimated Cumulative County Revenue Generated by Taxation of Capital Investment Over 40 Years – Scenario 1 (2026 Dollars)

Year	Total Capital Investment Subject to Exemption ³⁵	Depreciated Value of Taxable Capital Investment ³⁶	Annual County Tax Revenue ³⁷
1	\$225,000,000	\$39,123,000	\$226,900
2	\$225,000,000	\$39,123,000	\$226,900
3	\$225,000,000	\$39,123,000	\$226,900
4	\$225,000,000	\$39,123,000	\$226,900
5	\$225,000,000	\$39,123,000	\$226,900
6	\$225,000,000	\$58,684,500	\$340,400
7	\$225,000,000	\$58,684,500	\$340,400
8	\$225,000,000	\$58,684,500	\$340,400
9	\$225,000,000	\$58,482,400	\$339,200
10	\$225,000,000	\$57,491,200	\$333,400
11	\$225,000,000	\$75,255,300	\$436,500
12	\$225,000,000	\$73,777,300	\$427,900
13	\$225,000,000	\$72,212,400	\$418,800
14	\$225,000,000	\$70,543,100	\$409,200
15	\$225,000,000	\$68,778,200	\$398,900
16	\$225,000,000	\$66,909,000	\$388,100
17	\$225,000,000	\$64,926,800	\$376,600
18	\$225,000,000	\$62,831,500	\$364,400
19	\$225,000,000	\$60,597,200	\$351,500
20	\$225,000,000	\$58,241,100	\$337,800
21	\$225,000,000	\$55,737,200	\$323,300
22	\$225,000,000	\$53,085,600	\$307,900
23	\$225,000,000	\$50,277,400	\$291,600
24	\$225,000,000	\$47,295,400	\$274,300
25	\$225,000,000	\$44,139,400	\$256,000
26	\$225,000,000	\$40,783,600	\$236,500
27	\$225,000,000	\$37,236,400	\$216,000
28	\$225,000,000	\$33,471,900	\$194,100
29	\$225,000,000	\$29,490,000	\$171,000
30	\$225,000,000	\$25,256,100	\$146,500
31	\$225,000,000	\$20,778,700	\$120,500
32	\$225,000,000	\$16,031,700	\$93,000

³⁵ Data Source: Hanwha Renewables.

³⁶ Accounts for the State Corporation Commission's depreciation guidelines for solar facilities and the current utility assessment ratio for public utilities in King George County.

³⁷ Calculated pursuant to Virginia Code §58.1-2606. Gibson Solar would be taxable at a rate not exceeding King George County's real property tax rate of \$0.58 per \$100 of assessed value.

Year	Total Capital Investment Subject to Exemption ³⁵	Depreciated Value of Taxable Capital Investment ³⁶	Annual County Tax Revenue ³⁷
33	\$225,000,000	\$10,997,900	\$63,800
34	\$225,000,000	\$8,694,000	\$50,400
35	\$225,000,000	\$8,694,000	\$50,400
36	\$225,000,000	\$8,694,000	\$50,400
37	\$225,000,000	\$8,694,000	\$50,400
38	\$225,000,000	\$8,694,000	\$50,400
39	\$225,000,000	\$8,694,000	\$50,400
40	\$225,000,000	\$8,694,000	\$50,400
Cumulative Revenue			\$9,785,500

**Totals may not sum due to rounding.*

Scenario 1: Total Fiscal Impact

Table 5 combines the results from the calculations depicted in Tables 3 and 4 to provide an estimate of the total cumulative fiscal contribution that Gibson Solar would make to King George County over its 40-year anticipated operational life under Scenario 1. As these data indicate, that cumulative total is approximately \$11.4 million (in 2026 dollars).

Table 5: Estimated Total Cumulative County Revenue from Gibson Solar Over 40 Years – Scenario 1 (2026 Dollars)

County Revenue from Taxation of Land	\$1,650,500
County Revenue from Taxation of Capital Investments	\$9,785,500
Total Cumulative Revenue over 40 Years	\$11,436,000

**Totals may not sum due to rounding.*

Scenario 2: Revenue Share Ordinance

The following section describes the additional annual revenue that Gibson Solar would generate for King George County assuming the county adopts an energy revenue share ordinance under Virginia Code §58.1-2636. Pursuant to the Virginia Code, a locality currently may assess an annual revenue share of up to \$1,540 per megawatt (MW) alternating current (AC) generation capacity of a solar facility with a 10 percent escalator to be applied every five years. Section 58.1-3660 stipulates that capital investment associated with the solar project will be exempt from taxation if the county adopts an energy revenue share ordinance.

Table 6 details the additional county revenue generated from a revenue share ordinance including the 10 percent escalator. Based on a total generation capacity of 100 MW AC and an assumed

commissioning date in 2029, a revenue share ordinance would generate approximately \$9.3 million over the anticipated 40-year operational life of the project (in 2026 dollars).

Table 6: Estimated Cumulative County Revenue Generated by a Revenue Share Ordinance Over 40 Years – Scenario 2 (2026 Dollars)

Year	MW	Revenue Share per MW with Escalator	Annual County Revenue
1	100	\$1,540	\$154,000
2	100	\$1,540	\$154,000
3	100	\$1,694	\$169,400
4	100	\$1,694	\$169,400
5	100	\$1,694	\$169,400
6	100	\$1,694	\$169,400
7	100	\$1,694	\$169,400
8	100	\$1,863	\$186,300
9	100	\$1,863	\$186,300
10	100	\$1,863	\$186,300
11	100	\$1,863	\$186,300
12	100	\$1,863	\$186,300
13	100	\$2,050	\$205,000
14	100	\$2,050	\$205,000
15	100	\$2,050	\$205,000
16	100	\$2,050	\$205,000
17	100	\$2,050	\$205,000
18	100	\$2,255	\$225,500
19	100	\$2,255	\$225,500
20	100	\$2,255	\$225,500
21	100	\$2,255	\$225,500
22	100	\$2,255	\$225,500
23	100	\$2,480	\$248,000
24	100	\$2,480	\$248,000
25	100	\$2,480	\$248,000
26	100	\$2,480	\$248,000
27	100	\$2,480	\$248,000
28	100	\$2,728	\$272,800
29	100	\$2,728	\$272,800
30	100	\$2,728	\$272,800
31	100	\$2,728	\$272,800
32	100	\$2,728	\$272,800
33	100	\$3,001	\$300,100
34	100	\$3,001	\$300,100
35	100	\$3,001	\$300,100
36	100	\$3,001	\$300,100
37	100	\$3,001	\$300,100
38	100	\$3,301	\$330,100

Year	MW	Revenue Share per MW with Escalator	Annual County Revenue
39	100	\$3,301	\$330,100
40	100	\$3,301	\$330,100
Cumulative Revenue			\$9,334,000

**Totals may not sum due to rounding.*

Scenario 2: Total Fiscal Impact

Table 7 combines the results from the calculations depicted in Tables 3 and 6 to provide an estimate of the total cumulative fiscal contribution that Gibson Solar would make to King George County over its 40-year anticipated operational life under Scenario 2. As these data indicate, that cumulative total is approximately \$11.0 million (in 2026 dollars).

Table 7: Estimated Total Cumulative County Revenue from Gibson Solar Over 40 Years – Scenario 2 (2026 Dollars)

County Revenue from Taxation of Land	\$1,650,500
County Revenue from Revenue Share Ordinance	\$9,334,000
Total Cumulative Revenue over 40 Years	<u>\$10,984,500</u>

**Totals may not sum due to rounding.*

Siting Agreement

Siting agreements add significant value to the overall fiscal impact of solar projects to their host localities. The Code of Virginia §15.2-2316.7 stipulates that a solar project is required to request a meeting with its potential host locality to discuss a voluntary siting agreement. The terms and conditions of a siting agreement vary by locality and project and can include the mitigation of any impact of the solar facility, payments for capital improvements, payments to address fiscal needs, and assistance with the local deployment of broadband.

Due to the variance in the value and payment schedule of siting agreements negotiated between localities and solar projects in Virginia, as well as the fact that these agreements are often confidential until a project is approved, the study does not include the siting agreement details for Gibson Solar.

Current Use

This section provides a benchmark for the previous estimates of the economic and fiscal contribution that Gibson Solar would make to King George County by estimating the economic and fiscal contribution that the site makes to the county in its current use.

Economic Impact Assumptions

The analysis is based on the following assumptions:

- Gibson Solar would be situated on wooded land, timberland, and land currently used to graze cattle. The owner would relocate the cattle elsewhere and continue operations.³⁸

Economic Impact

Applying these inputs in the IMPLAN model results in the following estimates of annual economic impact. As shown in Table 8, in its current use, the proposed project site directly supports approximately: 1) less than 1 job, 2) \$6,200 in wages and benefits, and 3) \$9,000 in economic output to King George County (in 2026 dollars).

Taking into account the economic ripple effects that direct impact generates, on average, the total annually supported impact on King George County is approximately: 1) less than 1 job, 2) \$6,200 in wages and benefits, and 3) \$9,400 in economic output (in 2026 dollars).

Table 8: Total Estimated Annual Economic Impact of the Project Site on King George County – Current Use (2026 Dollars)³⁹

Economic Impact	Employment	Wages and Benefits	Economic Output
1st Round Direct Economic Activity	< 1	\$6,200	\$9,000
2nd Round Indirect and Induced Economic Activity	< 1	\$10	\$400
Total Economic Activity	< 1	\$6,200	\$9,400

**Totals may not sum due to rounding.*

³⁸ Data Source: Hanwha Renewables. Subject to change based on final design.

³⁹ Calculations based data from the U.S. Department of Agriculture and IMPLAN Group, LLC for Virginia and King George County.

Fiscal Impact Assumptions

The analysis is based on the following assumptions:

- The current assessment value of the affected acreage is approximately \$1.2 million.⁴⁰

Fiscal Impact

Table 9 details the estimated tax revenue that the proposed project site generates for King George County in its current use. As the data in Table 9 indicate, the current county real estate tax revenue from the project site is estimated to be approximately \$7,200 per year, for a cumulative total of approximately \$0.3 million over 40 years (in 2026 dollars).

Table 9: Estimated Cumulative County Revenue Generated by the Project Site Over 40 Years from Taxation of Land – Current Use (2026 Dollars)

Estimated Assessed Value of Property – Current Use	\$1,236,500
King George County Current Real Estate Tax Rate (per \$100)	\$0.58
Annual County Real Estate Tax	\$7,200
Cumulative Revenue	<u>\$286,900</u>

**Totals may not sum due to rounding.*

The estimates provided in this report are based on the best information available and all reasonable care has been taken in assessing the quality of that information. However, because these estimates attempt to foresee the consequences of circumstances that have not yet occurred, it is not possible to be certain that they will be representative of actual events. These estimates are intended to provide a good indication of likely future outcomes and should not be construed to represent a precise measure of those outcomes.

⁴⁰ Data Source: King George County's online property records database. Includes the value of an affected structure.