

# Solar Investment and Savings Analysis

6/11/12

## Solar Consultant:

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 Kenergy Solar  
 617.291.0408  
 seth@kenergysolar.com

## Proposal For:

Daniel Hellerstein

## Site Location:

1909 Franwall Ave Silver Spring, MD 20902

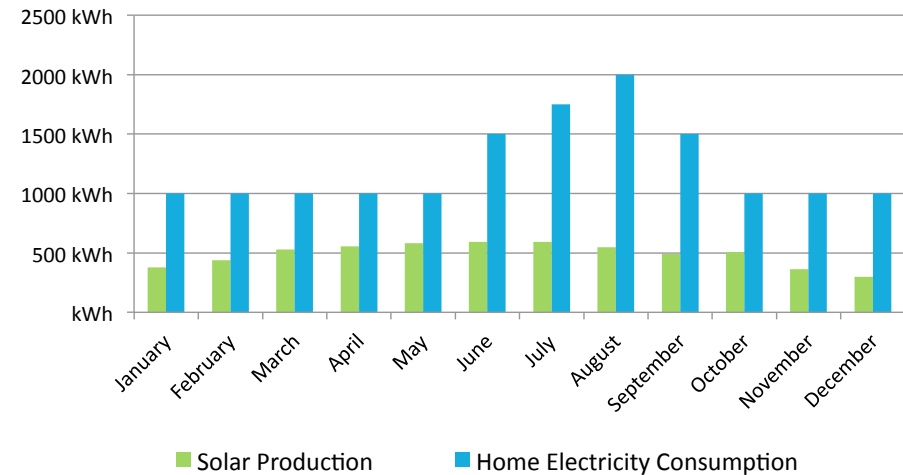
## Utility Savings

|                      |       |
|----------------------|-------|
| Old Bill:            | \$172 |
| New Bill:            | \$104 |
| Savings First Month: | \$69  |
| Savings First Year:  | \$822 |
| % Bill Offset:       | 40%   |



## System Information

|                              |   |
|------------------------------|---|
| Proposed System Size:        | 5.46 kW   |
| Estimated Annual Production: | 5873 kWh  |
| Panels:                      | 21 Helios 260W  |
| Inverter:                    | 1 Solar Edge Inverter and DC Optimizers or Microinver |



## Included Products and Services

- Turnkey installation service, which includes grant filings, interconnection application and completion certificates, county permit filings, inspections, lifetime monitoring, and SREC registration
- 5 Year Workmanship Warranty
- Maintenance Package option includes scheduled annual site visits to inspect your installation which includes cleaning, checking the electrical connections of the wiring, system output, and general condition of your system. Starts at \$100/year.

Note: Incentives and energy savings depend upon several factors that may not be represented in this analysis. The system may be changed based on a detailed engineering site audit. Actual system production and savings will vary based on final system size, design, your energy usage, and utility rates.

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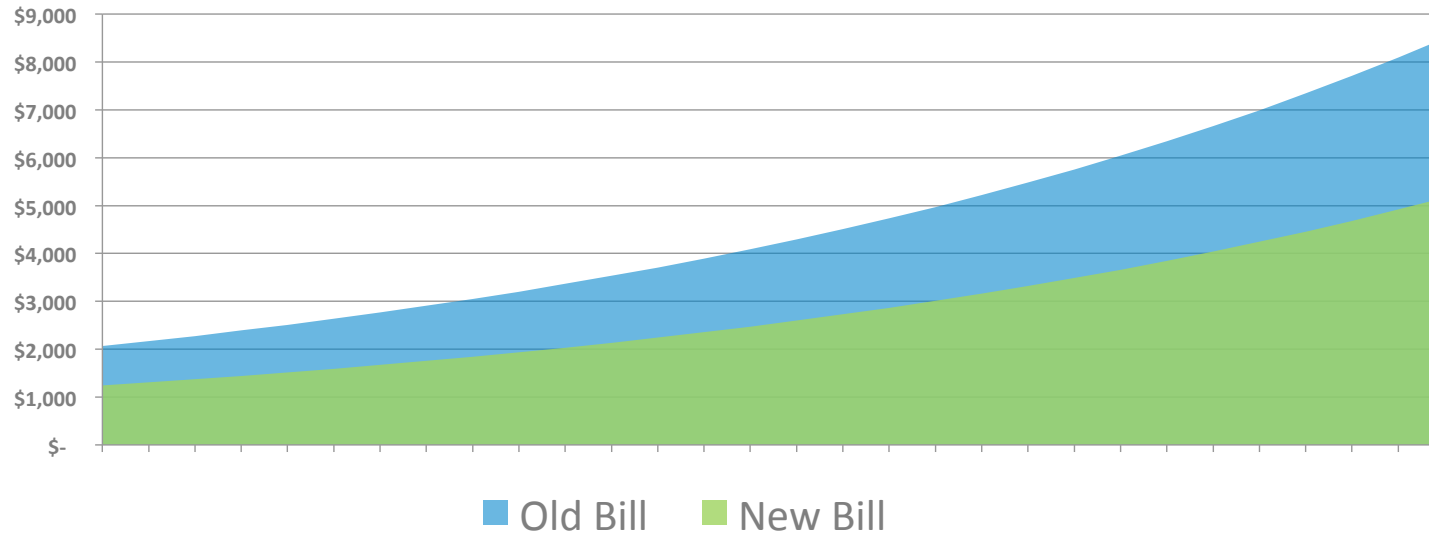
Kenergy Solar

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| System Cost                            |                 |
|--|-----------------|
| Total Cost:                            | \$28,938        |
| State and Local Rebates:               | (\$1,000)       |
| Tax on Rebates:                        | \$330           |
| Federal Tax Credit:                    | (\$8,681)       |
| Savings First Year:                    | (\$822)         |
| SRECs First Year:                      | (\$1,527)       |
| <b>Final System Cost After Year 1:</b> | <b>\$17,237</b> |

| Financial Benefits                |          |
|-----------------------------------|----------|
| Net Present Value:                | \$21,274 |
| Cumulative Savings Over 30 Years: | \$45,975 |
| 30 Year IRR (Post Tax):           | 7%       |
| Payback in Year:                  | 10       |



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# Solar Investment and Savings Analysis

## Cash Flow Analysis

6/11/12

Proposal For: Daniel Hellerstein

Solar Consultant: Seth Stulgis

seth@kenegysolar.com

| Assumptions      |        |
|------------------|--------|
| Cost per watt:   | \$5.30 |
| Elect. Inflation | 5%     |

| Year                 | Electric Bill Without Solar | Electric Bill With Solar | Savings on Electric Bill | System Cost &        |                     | State & Local                |                 | Federal Tax Credit | Federal & State Taxes  |  | Overall Savings | Cumulative Cash Flow |
|----------------------|-----------------------------|--------------------------|--------------------------|----------------------|---------------------|------------------------------|-----------------|--------------------|------------------------|--|-----------------|----------------------|
|                      |                             |                          |                          | Inverter Replacement | Maintenance Package | Rebates/Property Tax Credits | SRECs           |                    | (On SRECs and Rebates) |  |                 |                      |
| 0                    | \$0                         | \$0                      | \$0                      | -\$28,938            | No                  |                              |                 |                    |                        |  | -\$28,938       | -\$28,938            |
| 1                    | \$2,065                     | \$1,243                  | \$822                    |                      | \$0                 | \$1,000                      | \$1,527         | \$8,681            | -\$834                 |  | \$12,031        | -\$16,907            |
| 2                    | \$2,168                     | \$1,305                  | \$863                    |                      | \$0                 |                              | \$1,526         |                    | -\$504                 |  | \$2,389         | -\$14,518            |
| 3                    | \$2,277                     | \$1,371                  | \$906                    |                      | \$0                 |                              | \$1,525         |                    | -\$503                 |  | \$2,431         | -\$12,087            |
| 4                    | \$2,390                     | \$1,440                  | \$950                    |                      | \$0                 |                              | \$1,334         |                    | -\$440                 |  | \$2,284         | -\$9,803             |
| 5                    | \$2,510                     | \$1,513                  | \$997                    |                      | \$0                 |                              | \$1,333         |                    | -\$440                 |  | \$2,331         | -\$7,472             |
| 6                    | \$2,636                     | \$1,589                  | \$1,047                  |                      | \$0                 |                              | \$762           |                    | -\$251                 |  | \$1,808         | -\$5,664             |
| 7                    | \$2,767                     | \$1,669                  | \$1,099                  |                      | \$0                 |                              | \$761           |                    | -\$251                 |  | \$1,860         | -\$3,804             |
| 8                    | \$2,906                     | \$1,753                  | \$1,153                  |                      | \$0                 |                              | \$571           |                    | -\$188                 |  | \$1,724         | -\$2,080             |
| 9                    | \$3,051                     | \$1,841                  | \$1,210                  |                      | \$0                 |                              | \$570           |                    | -\$188                 |  | \$1,780         | -\$300               |
| 10                   | \$3,203                     | \$1,934                  | \$1,270                  |                      | \$0                 |                              | \$380           |                    | -\$125                 |  | \$1,650         | \$1,350              |
| 11                   | \$3,364                     | \$2,031                  | \$1,333                  |                      | \$0                 |                              | \$380           |                    | -\$125                 |  | \$1,712         | \$3,062              |
| 12                   | \$3,532                     | \$2,133                  | \$1,399                  |                      | \$0                 |                              | \$190           |                    | -\$63                  |  | \$1,588         | \$4,651              |
| 13                   | \$3,708                     | \$2,241                  | \$1,468                  |                      | \$0                 |                              | \$190           |                    | -\$63                  |  | \$1,657         | \$6,308              |
| 14                   | \$3,894                     | \$2,353                  | \$1,540                  |                      | \$0                 |                              | \$190           |                    | -\$63                  |  | \$1,730         | \$8,038              |
| 15                   | \$4,089                     | \$2,472                  | \$1,617                  | -\$1,092             | \$0                 |                              | \$190           |                    | -\$63                  |  | \$714           | \$8,752              |
| 16                   | \$4,293                     | \$2,596                  | \$1,697                  |                      | \$0                 |                              | \$189           |                    | -\$63                  |  | \$1,886         | \$10,638             |
| 17                   | \$4,508                     | \$2,727                  | \$1,780                  |                      | \$0                 |                              | \$189           |                    | -\$62                  |  | \$1,970         | \$12,608             |
| 18                   | \$4,733                     | \$2,864                  | \$1,869                  |                      | \$0                 |                              | \$189           |                    | -\$62                  |  | \$2,058         | \$14,666             |
| 19                   | \$4,970                     | \$3,009                  | \$1,961                  |                      | \$0                 |                              | \$189           |                    | -\$62                  |  | \$2,150         | \$16,816             |
| 20                   | \$5,218                     | \$3,160                  | \$2,058                  |                      | \$0                 |                              | \$0             |                    | \$0                    |  | \$2,058         | \$18,874             |
| <b>20-Year Total</b> | <b>\$68,281</b>             | <b>\$41,244</b>          | <b>\$27,037</b>          | <b>-\$30,030</b>     | <b>\$0</b>          | <b>\$1,000</b>               | <b>\$12,186</b> | <b>\$8,681</b>     | <b>-\$4,351</b>        |  | <b>\$18,874</b> |                      |
| 21                   | \$5,479                     | \$3,319                  | \$2,160                  |                      | \$0                 |                              | \$0             |                    | \$0                    |  | \$2,160         | \$21,034             |
| 22                   | \$5,753                     | \$3,486                  | \$2,267                  |                      | \$0                 |                              | \$0             |                    | \$0                    |  | \$2,267         | \$23,301             |
| 23                   | \$6,041                     | \$3,662                  | \$2,379                  |                      | \$0                 |                              | \$0             |                    | \$0                    |  | \$2,379         | \$25,680             |
| 24                   | \$6,343                     | \$3,846                  | \$2,497                  |                      | \$0                 |                              | \$0             |                    | \$0                    |  | \$2,497         | \$28,176             |
| 25                   | \$6,660                     | \$4,040                  | \$2,620                  |                      | \$0                 |                              | \$0             |                    | \$0                    |  | \$2,620         | \$30,796             |
| 26                   | \$6,993                     | \$4,243                  | \$2,750                  |                      | \$0                 |                              | \$0             |                    | \$0                    |  | \$2,750         | \$33,546             |
| 27                   | \$7,342                     | \$4,457                  | \$2,886                  |                      | \$0                 |                              | \$0             |                    | \$0                    |  | \$2,886         | \$36,432             |
| 28                   | \$7,710                     | \$4,681                  | \$3,029                  |                      | \$0                 |                              | \$0             |                    | \$0                    |  | \$3,029         | \$39,461             |
| 29                   | \$8,095                     | \$4,917                  | \$3,178                  |                      | \$0                 |                              | \$0             |                    | \$0                    |  | \$3,178         | \$42,639             |
| 30                   | \$8,500                     | \$5,164                  | \$3,336                  |                      | \$0                 |                              | \$0             |                    | \$0                    |  | \$3,336         | \$45,975             |
| <b>30-Year Total</b> | <b>\$137,196</b>            | <b>\$83,059</b>          | <b>\$54,137</b>          | <b>-\$30,030</b>     | <b>\$0</b>          | <b>\$1,000</b>               | <b>\$12,186</b> | <b>\$8,681</b>     | <b>-\$4,351</b>        |  | <b>\$45,975</b> |                      |

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