



# REPORT

FEASIBILITY STUDY FOR A  
PHOTOVOLTAIC POWER PLANT

INVESTOR

Date

 **SOLARLINK**

# WHY SOLAR?

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Investing in solar energy is becoming very popular around the world, as more and more people become aware of the importance of preserving our planet and the need to switch to renewable energy sources. Solar power plants represent an excellent way to reduce the use of fossil fuels, as well as environmental pollution, while at the same time enabling electricity savings.

With the help of solar energy, through energy savings, electricity bills are reduced, but it also produces excess electricity that is handed back to the electricity distribution grid, which generates additional income.

Also, investing in solar is profitable because the price of electricity from fossil fuels is expected to rise, while the cost of building solar power plants will decrease.

Solar power plants don't pollute, don't emit harmful gases into the atmosphere and don't consume limited resources such as fossil fuels. On the other hand, they contribute to reducing global warming and promoting sustainable development and energy efficiency.

The availability of funds and subsidies to help with incentives to invest in solar contributes to reducing the required initial investment, accelerating the return on investment (ROI) and ensuring the safety and stability of the business.

Investing in solar energy has numerous benefits, not only for individuals and businesses, but also for the entire planet. More and more people are realizing the importance of switching to renewable energy sources and investing in the future. Be among them!



# SUMMARY

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Power of the PV power  
plant [kWp]

Annual energy production  
[kWh]

Annual energy savings  
[EUR]

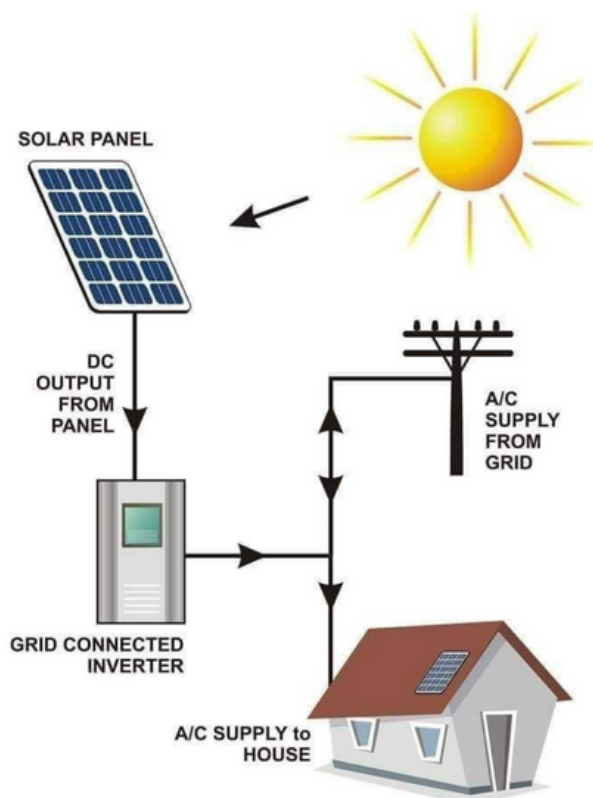
CO<sub>2</sub> emissions reduction for  
30 years [tons]

Estimated value of the  
investment [EUR]

Return on investment  
[years]



# EQUIPMENT RECOMMENDATION



## PV MODULES

Nominal power [Wp]      Quantity

## INVERTERS

Nominal power [kW]      Quantity

DC cables lenght :                      m

Mounting system type - example :

Note: This is an equipment recommendation based on basic calculations. Consultation with an expert to check the adequacy of the equipment is recommended.

# GENERAL INFORMATIONS

## Input data

Object location (coordinates) :

| Input data per roof |  |  |  |  |  |  |  |  |  |  |
|---------------------|--|--|--|--|--|--|--|--|--|--|
| Roof number         |  |  |  |  |  |  |  |  |  |  |
| Tilt angle [°]      |  |  |  |  |  |  |  |  |  |  |
| Azimuth angle [°]   |  |  |  |  |  |  |  |  |  |  |
| Free surface [m²]   |  |  |  |  |  |  |  |  |  |  |

### Energy consumption

Jan : kWh  
 Feb : kWh  
 Mar : kWh  
 Apr : kWh  
 May : kWh  
 June : kWh  
 July : kWh  
 Aug : kWh  
 Sept : kWh  
 Oct : kWh  
 Nov : kWh  
 Dec : kWh

Maximum authorized power : kW

### PV module

Nominal power : Wp  
 Length : mm  
 Width : mm

### Roof type :

### Electricity data

Base price of electricity : EUR / MWh  
 Additional grid fees : %  
 Total electricity price : EUR / MWh  
 Selling price of electricity : EUR / MWh

Investment cost : EUR / kWp

## Output data

|                                                          |                |
|----------------------------------------------------------|----------------|
| Recommended power based on the electricity consumption : | kWp            |
| Maximum power based on the free roof surface :           | kWp            |
| Final power of the PV plant :                            | kWp            |
| Total estimated annual energy production :               | kWh            |
| Total used area of the roofs :                           | m <sup>2</sup> |
| Annual energy savings in kWh :                           | kWh            |
| Annual energy savings in % :                             | %              |
| Annual energy savings in EUR :                           | EUR            |
| Total energy savings in the exploitation period :        | kWh            |
| Annual energy surplus in kWh :                           | kWh            |
| Annual energy surplus in % :                             | %              |
| Total energy surplus in the exploitation period :        | kWh            |
| CO2 emissions reduction during the exploitation period : | tons           |
| Estimated annual maintenance costs :                     | EUR            |
| Estimated value of the investment :                      | EUR            |
| ROI :                                                    | years          |

[illegible]

# MONTHLY ENERGY DATA

|        | Energy consumption | Energy production | Energy surplus | Energy savings | Monthly HT expenses with a PV power plant | Monthly HT expenses without a PV power plant |
|--------|--------------------|-------------------|----------------|----------------|-------------------------------------------|----------------------------------------------|
| Jan :  | kWh                | kWh               | kWh            | kWh            | EUR                                       | EUR                                          |
| Feb :  | kWh                | kWh               | kWh            | kWh            | EUR                                       | EUR                                          |
| Mar :  | kWh                | kWh               | kWh            | kWh            | EUR                                       | EUR                                          |
| Apr :  | kWh                | kWh               | kWh            | kWh            | EUR                                       | EUR                                          |
| May :  | kWh                | kWh               | kWh            | kWh            | EUR                                       | EUR                                          |
| June : | kWh                | kWh               | kWh            | kWh            | EUR                                       | EUR                                          |
| July : | kWh                | kWh               | kWh            | kWh            | EUR                                       | EUR                                          |
| Avg :  | kWh                | kWh               | kWh            | kWh            | EUR                                       | EUR                                          |
| Sept : | kWh                | kWh               | kWh            | kWh            | EUR                                       | EUR                                          |
| Oct :  | kWh                | kWh               | kWh            | kWh            | EUR                                       | EUR                                          |
| Nov :  | kWh                | kWh               | kWh            | kWh            | EUR                                       | EUR                                          |
| Dec :  | kWh                | kWh               | kWh            | kWh            | EUR                                       | EUR                                          |

The graph shows the diagram of the estimated electricity production from the solar power plant on a monthly basis during the year, as well as the energy consumption, surplus and savings.

# FINANCIAL DATA

The cash-flow diagram shows the inflows and outflows of money during the operational period of the power plant with annual maintenance costs included.

| Year   | Status | Year   | Status |
|--------|--------|--------|--------|
| 2026 : | EUR    | 2041 : | EUR    |
| 2027 : | EUR    | 2042 : | EUR    |
| 2028 : | EUR    | 2043 : | EUR    |
| 2029 : | EUR    | 2044 : | EUR    |
| 2030 : | EUR    | 2045 : | EUR    |
| 2031 : | EUR    | 2046 : | EUR    |
| 2032 : | EUR    | 2047 : | EUR    |
| 2033 : | EUR    | 2048 : | EUR    |
| 2034 : | EUR    | 2049 : | EUR    |
| 2035 : | EUR    | 2050 : | EUR    |
| 2036 : | EUR    | 2051 : | EUR    |
| 2037 : | EUR    | 2052 : | EUR    |
| 2038 : | EUR    | 2053 : | EUR    |
| 2039 : | EUR    | 2054 : | EUR    |
| 2040 : | EUR    | 2055 : | EUR    |