

Owner's Engineer

How to exploit the full value of your project



Your Challenge

Solar projects are often lagging behind their full economic potential, which leads to below par returns on investment. The main challenges are:

- How to increase low project returns in highly competitive environments
- How to win highly competitive PPA bids

Our Solution

Exploit the project's full economic potential through Suntrace's step-wise optimisation approach:

1. Due Diligence: Identification of potential shortcomings, uncertainties and risks
2. Optimisation: Unleash the true value and potential of the project
3. Implementation: Hands-on support towards successful implementation (transaction, development, EPC and O&M tender process)

1. Due Diligence

- ✓ Project technical due diligence
- ✓ Identification of the project's potential and possibilities to improve project returns
- ✓ Status and next steps

2. Optimisation

- ✓ Reduction of uncertainties
- ✓ Techno-economic optimisation of plant design and project performance
- ✓ Risk and sensitivity analysis

3. Implementation

- ✓ Support project transaction and project development till realisation
- ✓ Support tender process for highly competitive EPC and O&M bidding

Step-wise Optimisation Approach

How it works



Value Driver	Suntrace Approach	Case Study*																
<p>1. Increase bankable project cash flow</p> <ul style="list-style-type: none"> ➤ Higher P90 value due to reduced uncertainty 	<p>Suntrace uses proven methods to reduce solar uncertainties resulting in:</p> <ul style="list-style-type: none"> ✓ higher bankable P90 energy yield ✓ higher bankable cash flow ✓ reduced uncertainty discount 	<p>P90 yield increased by 2%</p> <table border="1"> <thead> <tr> <th></th> <th>10 MW</th> <th>50 MW</th> <th></th> </tr> </thead> <tbody> <tr> <td>E-IRR</td> <td>+ 0.9</td> <td>+ 1.1</td> <td>%</td> </tr> <tr> <td>NPV</td> <td>+ 0.2</td> <td>+ 1.1</td> <td>m USD</td> </tr> <tr> <td>free cash</td> <td>+ 0.5</td> <td>+ 2.4</td> <td>m USD</td> </tr> </tbody> </table>		10 MW	50 MW		E-IRR	+ 0.9	+ 1.1	%	NPV	+ 0.2	+ 1.1	m USD	free cash	+ 0.5	+ 2.4	m USD
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<p>2. Optimise technical and economic design</p> <ul style="list-style-type: none"> ➤ CAPEX/OPEX/yield optimised according to financial requirements 	<p>Suntrace optimises the relationship between technical design with energy yield together with financing parameters according to the financial environment and strategy to result in highest returns</p>	<p>Optimised design</p> <table border="1"> <thead> <tr> <th></th> <th>10 MW</th> <th>50 MW</th> <th></th> </tr> </thead> <tbody> <tr> <td>E-IRR</td> <td>+ 0.7</td> <td>+ 0.4</td> <td>%</td> </tr> <tr> <td>NPV</td> <td>+ 0.2</td> <td>+ 1.0</td> <td>m USD</td> </tr> <tr> <td>free cash</td> <td>+ 1.2</td> <td>+ 6.3</td> <td>m USD</td> </tr> </tbody> </table>		10 MW	50 MW		E-IRR	+ 0.7	+ 0.4	%	NPV	+ 0.2	+ 1.0	m USD	free cash	+ 1.2	+ 6.3	m USD
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<p>3. Reduce investment cost</p> <ul style="list-style-type: none"> ➤ highly competitive bidding process 	<p>Suntrace provides:</p> <ul style="list-style-type: none"> ✓ technical specifications ✓ professionally leads and manages the competitive EPC and O&M procurement process ✓ implementation supervision 	<p>Reduce EPC price by 5%</p> <table border="1"> <thead> <tr> <th></th> <th>10 MW</th> <th>50 MW</th> <th></th> </tr> </thead> <tbody> <tr> <td>E-IRR</td> <td>+ 1.7</td> <td>+ 1.9</td> <td>%</td> </tr> <tr> <td>NPV</td> <td>+ 0.4</td> <td>+ 1.7</td> <td>m USD</td> </tr> <tr> <td>free cash</td> <td>+ 0.4</td> <td>+ 1.7</td> <td>m USD</td> </tr> </tbody> </table>		10 MW	50 MW		E-IRR	+ 1.7	+ 1.9	%	NPV	+ 0.4	+ 1.7	m USD	free cash	+ 0.4	+ 1.7	m USD
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* Overall Assumptions: Single axis tracked system, 10 MWac and 50 MWac, MENA region, 20 years tenor, interest 4%, leverage 70%, tariff 5 \$cent/kWh, discount rate for NPV 10%

Why Suntrace

- Holistic approach by combining meteorological, technical and financial expertise, all under one roof
- Comprehensive experience from more than 4 GW of solar power plant credentials in more than 30 countries
- Advisory services from initial concept to full realisation covering the whole range of PV and CSP applications including hybrid and storage systems

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