

Revenue Calculation in the Monitoring Platform - Application Note

Revision History

- Version 2.0, April 2024: Updated text and images
- Version 1.0, December 2014: First Version

Contents

Overview	1
Flat rate calculations.....	1
Configure flat rate calculations	1
Time of use	3
Time of use periods and rates.....	4
Configure time of use rates	4
Transition from flat rate to time of use rate.....	5

Overview

This application note describes how to configure the revenue calculation for a site in the SolarEdge Monitoring platform.

Revenue Calculation is part of the performance analysis of a PV site. The revenue value is an estimate of expected revenues and is used as an indication of the system's Return on Investment (ROI).

Revenue calculation is based on time periods and their corresponding rates, and periodic reporting from the SolarEdge inverter. This data may be inconsistent with utility bills when there are continuous communication issues, hourly rate changes, or differences in the accuracy of different meters.

The SolarEdge Monitoring platform displays the Revenue in the Site Dashboard and **Reports**, and the system owner can also view Revenue in the mySolarEdge App.

Sites usually have rates defined by their contract and they are set at the site level. SolarEdge monitoring supports two models of revenue calculation: flat rate and time of use. The default for new sites is "No revenue calculation" and the revenue is not displayed.

Flat rate calculations

The flat rate calculation uses a fixed rate per kWh, regardless of production time. In this model, the revenue for a given period is calculated as follows:

$$(Rate\ per\ kWh) \times (produced\ kWh\ in\ given\ period)$$

If the rate changes during the selected period, a revenue calculation is calculated for each period separately and sums them up.

Configure flat rate calculations

You can choose flat rate calculation during your site's creation or configure it when the site exists.

To configure a flat rate revenue calculation for a new site:

1. Log in to the [Monitoring Platform](#).
2. Click **Create Site**.
3. In **Add Site Details**, from the **Revenue Calculation** dropdown list, select **Flat Rate** and enter the rate.

By default, the currency is selected according to your site's location. You can change it if necessary.

Create Site

● 1. Address ● 2. Site Details ● 3. Contact Info ○ 4. Equipment (Optional)

Add Site Details

Residential Commercial

Site Name: Greenfields farm Installation Date: 04/05/2023

Est. Peak Power: 9.8 kWp Account: Turbo Solar Group: North district

Revenue Calculation: Flat Rate 0.12 USD \$ Alerts Profile: SolarEdge Default

Notes: Optional (Not visible by system owners)

Back Next

Cancel

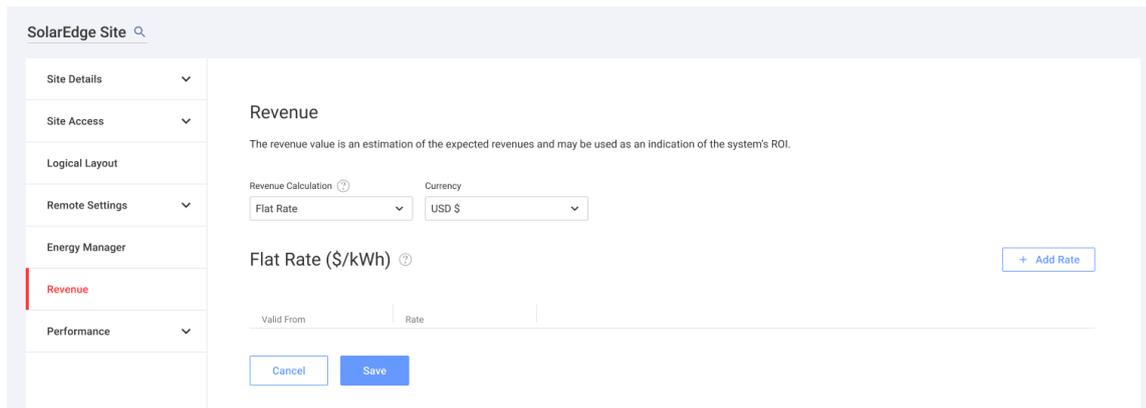
To configure a flat rate revenue calculation for an existing site:



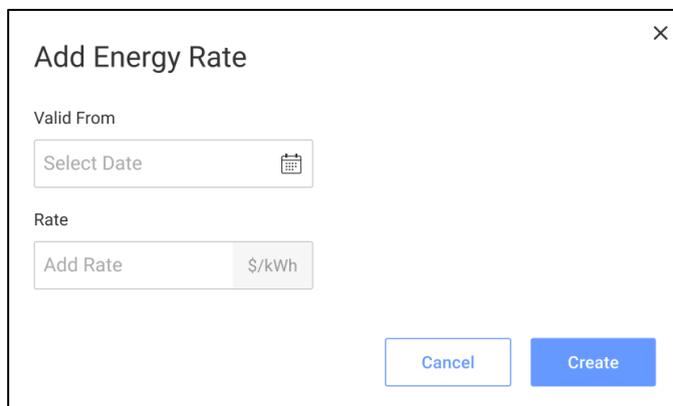
NOTE

Only account managers, operators, and account administrators have permission to edit revenue calculation.

1. Log in to the [Monitoring Platform](#).
2. To access your site, click the **Site Name**.
3. Click the **Admin** view.
4. From the **Admin** menu, click **Revenue**.



5. From the **Revenue Calculation** dropdown list, select **Flat Rate**.
6. From the **Currency** dropdown list, select your currency.
7. To specify the rates for the site, click **Add Rate**.
The **Add Energy Rate** pop-up is displayed.



8. From the **Valid From** dropdown list, select the date the rate is valid from.
9. From the **Rate** dropdown list, select the rate.
10. Click **Create**.
The new entry is added to the rates table.
11. Click **Save**.
Your **Energy Rates** are saved. Revenue is calculated according to the new rates, during the effective period.
If rates change, repeat the above steps to add a new rate.

Time of use

Time of Use rate programs are offered in various countries to promote energy consumption when electricity demand is low, such as off-peak hours, and to lower consumption levels when electricity demand is high, such as on-peak hours. This ensures greater power reliability.

Time of Use programs define rates that vary periodically based on how much power is needed at that time, for example:

- **Seasonal:** Summer and winter rates are often higher, as more cooling or heating is required during these seasons, than in spring and fall
- **Weekly:** Weekday rates are often higher than weekend or holiday rates, as the overall energy demand increases during weekdays, because of industrial and commercial consumption

- **Daily:** In cooler regions more heating is required during the dark hours which results in higher rates, while in warmer regions rates are often lower during the night, as less heating is required

Time of use periods and rates

In many cases, time of use programs define three different rate-periods, as described below:

- **Peak:** Electricity demand is high
- **Shoulder/Part-Peak:** Electricity demand is moderate
- **Off-peak:** Electricity demand is low

Set rates separately for each period. Rates can vary by the season or market segment.

Configure time of use rates

You can configure your revenue calculation on time of use plans at site level in site administration. This configuration is only available for an existing site, and not at the site creation stage. If you want to use this plan, create a site, then change its revenue calculation plan, as described below.

To configure Time of use revenue calculation for an existing site:

1. Click the **Admin** view.
2. From the **Admin** menu, click **Revenue**.

3. From the **Revenue Calculation** dropdown list, select **Time of Use Rate**.
4. From the **Currency** dropdown list, select your currency.
5. From the **Time of Use Calendar** dropdown list, select the Time of Use calendar that matches your site.



NOTE

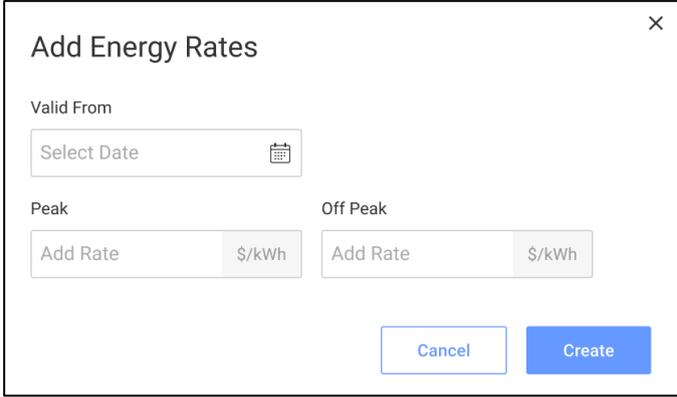
The calendar is a matrix representing the peak, part-peak, and off-peak periods. For detailed information about the calendar, click  and open the plan file in .xls format. A table of rates and the start date is displayed.



NOTE

The first calendars to appear are the ones associated with the country where the site is located. If you need help finding a calendar for your region, contact [SolarEdge Support](#).

6. To specify the rates for the site, click **+Add Rate**.
The **Add Energy Rates** pop-up is displayed.



The screenshot shows a modal window titled "Add Energy Rates" with a close button (X) in the top right corner. Inside the window, there is a "Valid From" section with a "Select Date" button and a calendar icon. Below this, there are two input fields: "Peak" and "Off Peak", each with an "Add Rate" button and a "\$/kWh" unit indicator. At the bottom of the window, there are "Cancel" and "Create" buttons.

7. From the **Valid From** dropdown list, select the date the rates are valid from.
8. In all **Rates** fields, enter the rates.
9. To add rates to the table, click **Create**
A new entry is added to the rates table.
10. Click **Save**.
Your **Energy Rates** are saved. Revenue will be calculated according to the new rates, during the effective period.
If rates change, repeat the above steps to add new rates.

Transition from flat rate to time of use rate

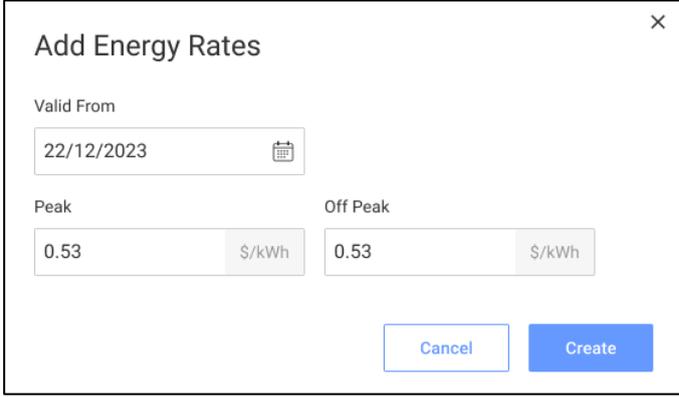
If the site pricing model has changed from flat rates to time of use rates, follow the steps below. You must enter the flat rate values that are used until the entered Time of Use transition day. This ensures that the revenue is calculated according to **Flat Rates** until the model transitions to the **Time of Use** plan.

To configure the transition from flat rates to time of use rates:

1. Before changing the revenue calculation to **Time of Use**, record a list of the site's flat rates.
2. Follow steps 1-5 in [Time of Use Rates](#) to set up the **Time of Use** revenue calculation.

To enter the new rates for each recorded flat rate:

1. Under **Revenue**, click **Add Rate**.
The **Add Energy Rates** pop-up is displayed.



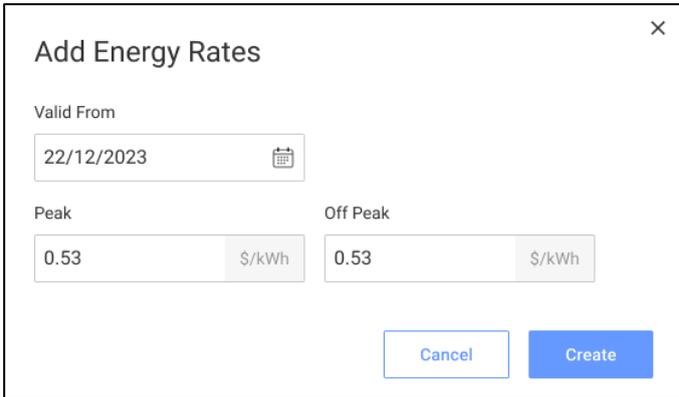
The screenshot shows a modal window titled "Add Energy Rates" with a close button (X) in the top right corner. It contains the following fields and controls:

- Valid From:** A date input field containing "22/12/2023" and a calendar icon.
- Peak:** An input field containing "0.53" and a "\$/kWh" unit label.
- Off Peak:** An input field containing "0.53" and a "\$/kWh" unit label.
- Buttons:** "Cancel" and "Create" buttons at the bottom.

2. From the **Valid From** dropdown list, select the date the rate is valid from.
3. In all Rates fields, enter the same recorded flat rate.
4. Click **Create**. The flat rates are created.
Under **Revenue** a table is displayed with the flat rates.
5. Click **Save**.
Your new flat rates are saved.
6. Repeat Step 1 to create the next recorded flat rate.

To enter the time of use rate calculations:

1. Under **Revenue**, click **Add Rate**.
The **Add Energy Rates** pop-up is displayed.



This screenshot is identical to the one above, showing the "Add Energy Rates" modal window with the same fields and controls.

2. From the **Valid From** dropdown list, select the date the rate is valid from.
3. In all **Rates** fields, enter the time of use rate calculation.
4. Click **Create**.
The Time of use rates are created.
5. Click **Save**.
Your new time of use rates are saved. Under **Revenue** a table is displayed with the time of use rates.
6. Repeat step 1 to create the next time of use rate.



NOTE

When it's time for the transition to the Time of Use plan, the revenue calculation changes automatically.