A Review on Solar Calculator

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Abstract— The greater of the consumption energy, The use of diverse energy sources cannot be avoided. Therefore, assessment of the various sources of energy. Technologies continue to be developed. Photovoltaic technologies that convert solar energy directly into electrical energy using semiconductor devices is called solar cells. Solar energy apart easily obtained from natural, environmentally friendly too which does not produce carbon dioxide emmisions to Become a mainstay in the world of technology. The problem is to know how much you have saved using solar panel installation(to track your savings by using solar panels "solar calculator" is purposed. This will calculate your monthly savings, usage of SNDL, usage of solar panel).

Keywords— Photovoltaic technologies, sources of energy, electrical energy ,solar panel, unbiased snapshot

I. INTRODUCTION

The **Solar Calculator** is an online advanced tool developed to help you quickly determine the potential savings that you can make when you go solar. Using this online solar calculator is extremely simple. All you need to do is to input three basic details –your monthly unit on bill (SNDL), your cost per unit of SNDL and energy generated by solar panel. And the calculator will provide you with an unbiased snapshot of your savings. Since each house is different, it can be difficult to know precisely how much you stand to save by switching to solar energy.

The amount of electricity your home will be able to produce depends on a variety of factors, including the shape of your roof, the amount of sunshine that falls on it, and the presence of trees or other obstructions that can cast shadows. The more direct sunlight that your panels receive, the more energy your system will be able to produce, and the more money you'll save each month.

The amount of money you'll be able to save depends not only on your energy generation capabilities, but also on the amount you're currently paying for electricity and the availability of government incentives for your particular solar project.

More incentives and higher local electricity rates will generally translate to more savings when you make the switch to solar. Around the globe, more homeowners are electing to install solar power systems. Their motivation is to reduce long-term energy costs while minimizing their carbon footprint. Clean, renewable, and affordable, solar energy is clearly the energy of the future as witnessed by the rapid growth throughout North America, Europe, China, and even India.

II. RELATED WORK

The solar calculator is an online application that will take Unit on bill, Cost per unit of SNDL and Energy generated by solar panels as input from the user and will estimate your monthly savings, usage of SNDL, usage of solar panel as the output .It also show you the Month-wise graph and a pie-chart of comparison between SNDL unit and solar unit consume edIt is theoretically possible for a set of tasks to require just 70% CPU utilization in sum and still not meet all their deadlines. For example, consider the case shown in Figure 2. The only change is that both the period and execution time of Task 2 have been lowered. Based on RMA, Task 1 is assigned higher priority. Despite only 90% utilization, Task 2 misses its first deadline. Reversing priorities would not have improved the situation.

III. METHODOLOGY

Below are the main objectives of "Solar Calculator" project.

1. To design a project that can detect the cost which is saved by using solar panel and
2. To design a project that able to compare the difference between the energy before used i.e. electric energy and the energy which is used now i.e. solar energy.

HOW IT WORKS
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by solar panels as input from the user and will estimate your monthly savings, usage of SNDL, usage of solar panel as the output .It also show you the Month-wise graph and a pie-chart of comparison between SNDL unit and solar unit consumed.

Input from the user:-

1. Unit on bill (SNDL)
It is the amount of energy that you consume in your household per month (in watt). It also plays a role in what your electricity bill will look like after going solar.

2. Cost per unit of SNDL
This is the charges imposed on per unit of energy that is consumed by your home by the SNDL (Spanco Nagpur Discom Limited). This charge varies accordingly on the basis of type of consumer you are.
The charges imposed according to the standard rate schedule that includes the fixed/demand charge (per month) and energy charge (in Rs/KWh) according to the type of consumer.

3. Energy generated by solar panels
It is the amount of energy that the solar panels generate monthly (in watt).

IV.   RESULTS AND DISCUSSION

By using the solar calculator one can view the financial benefits that he/she is receiving per month. It provides the estimates based on the information you provided to indicate what scale of financial benefits you are receiving. The calculator will display the following outputs to the user:

- Monthly savings (in Rs).
- Usage of SNDL (per month).
- Usage Solar panel (per month).

Monthly savings (in Rs):
It shows the amount of money you saved in the particular month in rupees.

Usage of SNDL (per month):
It depicts the watt per month your household utilized by using SNDL.

Usage of Solar panel (per month):
It depicts the watt per month your household utilized by using Solar Panels.

Moreover the solar calculator also shows a comparison pie chart and graph between the solar panel and SNDL utilization month wise that will let you know how much you have saved by adopting solar energy as a means for your electricity requirements.

V.   CONCLUSION AND FUTURE SCOPE

1.   Conclusion
Thus we have successfully implemented the solar calculator with the proposed methodology and it fruitfully gives the desired results.

2.   Future Scope
The future of Solar energy considers only the two widely recognized classes of technologies for converting solar energy into electricity — photovoltaics (PV) and concentrated solar power (CSP), sometimes called solar thermal) — in their current and plausible future forms. Because energy supply facilities typically last several decades, technologies in these classes will dominate solar-powered generation between now and 2050, and we do not attempt to look beyond that date. In contrast to some earlier Future of studies, we also present no forecasts — for two reasons. First, expanding the solar industry dramatically from its relatively tiny current scale may produce changes we do not pretend to be able to foresee today. Second, we recognize that future solar deployment will depend heavily on uncertain future market conditions and public policies — including but not limited to policies aimed at mitigating global climate change.

VI.   PREPARE YOUR PAPER BEFORE STYLING

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