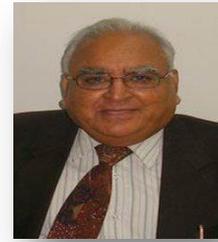


## BENEFITS OF USING SOLAR ENERGY ( A useful reading)



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We believe that the readers shall get a lot of benefit by going through this article, and enjoy reading, I thought of sharing a subject which is known for long time , but, is getting accepted only now with a thrust. Perhaps this simple narration shall raise the awareness about USE OF SOLAR ENERGY for every one's good.

1. Sun is an unlimited source of Power. It has sustained the life on our planet for millions of years, and will continue to do so---Free of Cost , except that of initial installation



That is why we call it “SURYA DEVATA” and worship not only in India but also in many other countries.

1. Earth is rightly called MOTHER EARTH and it cares for us unconditionally. Are we loyal children of the planet?



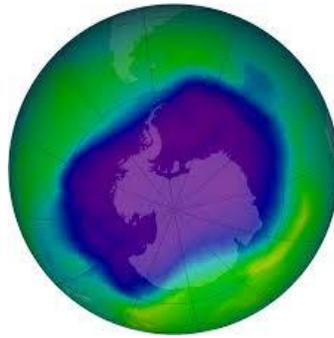
2. Think!!
3. Energy in any form and any source is the life line for Sustaining economy and development. .Most Energy sources in use today are NON RENEWABLE (Coal, Petroleum, Gas etc.) and shall gradually exhaust by onset of early next century.. ... we shall not be there but our great and great grandchildren will suffer and curse us due to shortage of energy consumed by us in our life time.

WE MUST ACT TODAY.

4. Though Energy and Environment are two sides of the coin , they can be Friends or Foes depending on how we as humans understand and use them
5. Unseasonal weather changes –hotter days. Floods, tsunamis, severe cold, landslides, droughts resulting in loss of property and life are mainly result of Human activity, heat generation and emissions etc.



Studies suggest that our atmospheric protecting the OZONE layer has been breached by emissions resulting in Ultraviolet radiations,



which are very harmful.

6. THEREFORE, THERE IS AN URGENCY TO SWITCHOVER TO ALTERNATE SOURCES OF ENERGY, WHICH ARE EVERLASTING, EFFICIENT, COST EFFECTIVE, AND CLEAN (Environment Friendly)

Some examples which are becoming and, in fact have already become acceptable are 1.Solar Energy 2.Wind Energy 3.Hydro (Including small hydro), Tidal, Ocean, Geothermal etc., (The last three depend on local conditions).

Without going into details, we have also to remember that Non-Renewables are gift of Nature to the earth, but Renewables from atmosphere are free for harnessing. Fossil Fuel production cost at source of utilization is ever increasing.

**Solar energy, for example can be used for:-**

1 .Cooking at domestic level by solar Cookers, Roof top water heaters, torches, lamps and lanterns and other appliances Battery chargers of various sizes and capacities etc.



2. Housing, Schools, Industries sector, Roof top solar panels which generate electricity at the site, connected to grid or stand alone. This can be of various big or small sizes.

	<p><b><i>Un-interrupted power for Schools in Alwar District :</i></b>          Solar System Powers the younger generation to use Computer and other technology equipment harnessing Solar Power during the day and storing power bank for cloudy days</p>	
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*Courtesy : Winnerspitch Energy Pvt. Ltd.*

3. Townships, Roads and large plants where outage can cause accidents and financial losses.

4. Solar cars, busses, e-carts, and several material handling vehicles of appropriate size (non-pollutant)

5. In individual dwelling sites the advantage of solar energy gives immense comfort of round the clock availability for all appliances at a cheaper cost, (It works out Rs.5-6 per unit against the grid power tariff of Rs.7-8 Plus).

### ***Gurgaon : 6KWp PV system***

A residence in Gurgaon in Sec-31 uses Solar to harness sunlight during the day reduces its bills to more than half



*Courtesy : Winnerspitch Energy Pvt. Ltd.*

6. It is to be noted that the DG power costs around Rs.15 per unit depending on the variable diesel price. Reducing the use of DG will help clean environment alongside operation and maintenance cost benefit.

7. Government at various levels is also trying to help promoting, reaching out to citizens by implementing at individual residents and industry for captive /self-consumption – One such process is “Net metering” which after implementation measures excess power exported to grid and gives a rebate on the main bill for such export, hence bringing the regular bills to a lower payout.



### ***Net- Metered 5Kwp Customer in DELHI :***

First of the Net- metering residential users in New Delhi gives a fairly decent drop in regular bills along with rebate for exporting excess power to Grid.

*Courtesy : Winnerspitch Energy Pvt. Ltd.*

Use of Solar Energy in European Countries and Japan, China etc. is already very popular, and they are ahead of us.

In India, our government is now working on several large projects and coming up with Solar Farms as a part of National Solar Mission.

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We have kept the technical details out of the scope of this write up for easy reading and comprehension and have included/inserted a few visuals as illustration.

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