SOLAR POWER

U.S.M. Priyadarshanee

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Introduction

When we peeping to our past, there are some major revolutions the world has experience up to now. After the fire was invented, the life style of the people was changed rapidly. They were invented some tool which are made by using stones. With the help of those tools people were became familiar to invent new techniques, tools, machines, equipment, etc. According to those circumstances we can recognize these major revolutions,

- Agriculture Revolution
- Printing Revolution
- Industrial Revolution
- Communication Revolution

As future aspects of revolutions, we can expect many changes in.

- Transportation Revolution
- Energy Revolution

Every industry on earth will change with industrial revolution, and eventually every person on earth will be affected. People invented many technologies with new scientific theories and many industries were started according to the requirements of prosperity. As a result of this revolution machines, electronic equipment, factories, induction electric motor, diesel engine were begun. In the past we used oil, natural gases, coal, and hydro power as energy sources for existence of those technologies.

At the height of the Industrial Revolution, during times when the supply of fossil fuels (i.e. oil and coal) were seemingly endless, there were a few people who were concerned about the future of the nation once these non-renewable sources have finally been exhausted.

As a solution for these situations people are inventing many energy sources. The introduction and implementation of new, revolutionary energy sources will change the course of man everywhere on the planet.

Followings will be parts of the upcoming energy revolution.

- Wind power
- Solar power
- Geothermal power
- Biomass power
- Ocean wave energy
- Hydrogen power

Solar power

Solar energy history all began…
Edmund Becquerel observed and published findings about the nature of materials to turn light into energy. They were considered interesting, but were not pursued.

Auguste Mouchout was the first man to patent a design for a motor running on solar energy. He designed a device that turned solar energy into mechanical steam power and soon operated the first steam engine. He later connected the steam engine to a refrigeration device, illustrating that the sun's rays can be utilized to make ice! He was awarded a medal for this.

His groundbreaking research was cut short though. The French renegotiated a cheaper deal with England for the supply of coal and improved their transportation system for the delivery thereof. Mouchout's work towards finding an alternative was no longer considered a priority and he no longer received any funding from the monarch.

Willoughby Smith, a Brit, experimented with the use of selenium solar cells after discovering its sensitivity to light while testing material for underwater telegraph cables.

William Adams wrote the first book about Solar Energy called: A Substitute for Fuel in Tropical Countries. Him and his student Richard Day experimented with the use of mirrors and were able to power a 2.5 horsepower steam engine. Much bigger than the Mouchout's 0.5 horsepower steam engine. His design, known as the Power Tower concept, is still in use today.

Charles Fritz turned the sun's rays into electricity. This was another big milestone for solar energy history.

Charles Tellier, a Frenchman who is seen as the father of refrigeration, experimented with a non-concentrating/ non-reflecting solar motor. He installed the first solar energy system for heating household water on top of his very own roof. However, his desire to pursue his refrigeration interests led to his abandonment of solar energy experiments.

John Ericsson, an American immigrant from Sweden wrote these powerful words: "A couple of thousand years dropped in the ocean of time will completely exhaust the coal fields of Europe, unless, in the meantime, the heat of the sun be employed." He dismissed Mouchout's work and also developed a solar powered steam engine, very similar in design to Mouchout's.

Aubrey Eneas formed the first Solar Energy. They sold the first Solar Energy system. It was destroyed less than a week later by a windstorm. They sold a second one but that one too, was destroyed by a hailstorm shortly afterwards. This lead to the company's down fall.

Henry Willsie recognized the need to store generated power and built 2 huge plants in California. He was the first to successfully use power at night after generating it during the day. Even so, he was not able to make a sale and his company too folded.

Frank Shuman's company, Sun Power Co, built the largest and most cost-effective solar energy system covering 10,000 square feet plus. Although it produced a lot of steam it did not produce enough pressure. They built an irrigation plant just outside of Cairo, but unfortunately it was destroyed during the Great War.

Calvin Fuller, Gerald Pearson and Daryl Chaplin of Bell Laboratories accidentally discovered the use of silicon as a semi-conductor, which led to the construction of a solar panel.

The first commercial solar cell was made available to the public at a very expensive. It was now being used in radios and toys. Space programs employed solar technologies. The first satellite was used solar energy to generate electricity.

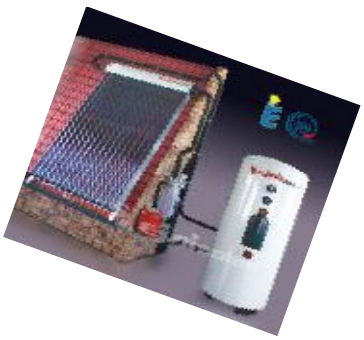
The Energy Crisis (OPEC oil embargo). A bit of solar energy history we are all familiar with. Suddenly it became important to find an alternative form of energy as we realized just how reliant we really are on non-renewable, finite resources like coal, oil and gas for our existence.

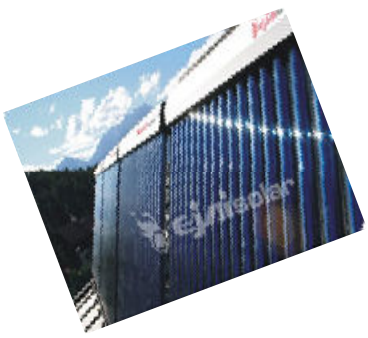
Solar energy history was made as the price of solar cells dropped dramatically.

A Los Angeles based company produced the world's solar-based electricity. They were forced to shut their doors after investors withdrew from the project as the price of non-renewable fossil fuels declined and the future of state and federal incentives were not likely.

Today

There is a renewed focus as more and more people see the advantages of solar energy and as it becomes more and more affordable. Governments across the world offer financial assistance. Solar electric systems are now used to power many homes, businesses, holiday cottages, even villages in Africa. We see solar cells powering anything from household appliances to cars.





Solar Energy in the future

As the number of people longing for a cleaner environment grows, so does the solar industry. Solar cells are becoming increasingly cost-effective as more distributors enter the market and new technologies continue to offer more choice and new products.

We might even see the end of the combustion age in our lifetime.

Cars might soon be powered by new fuel cells that create electricity through chemical reaction.

Screen-printed solar cells are expected to drive prices down even more.

Roofing shingles are capturing the sun's rays and turning them into electricity!

Solar panels are being mounted to the sides of houses when roof space is not an option.

Pools are being heated with solar energy for a fraction of the price of conventional heaters.

Solar powered vehicles