

Limited resources and unlimited usage.
How can we save it?

Newsletter



**Conserve the energy,
Save our climate!**

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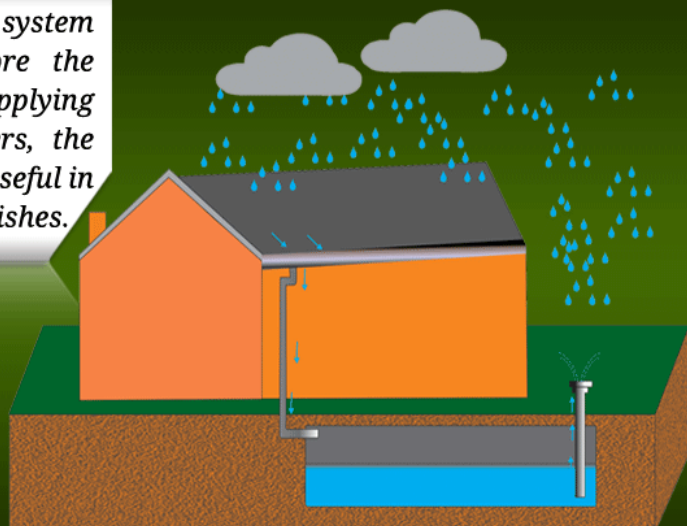
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Why ???

We the people on the earth are gifted with wonderful energy sources by the nature, which has made our routine much more smother & easier... However, this gift of the nature is ' limited '. What we have done is, with the growth of science & technology, we have started using it extremely, because of which the energy resources are going to finish in near future. Hence, let us take the pledge to conserve the energy - save the energy!!!

Tips of the Month

Water harvesting system installation will store the rain water. By applying adequate water filters, the stored water can be useful in washing cloths and dishes.



Article - 1 : DELHI METRO GOES FOR SOLAR POWER

Delhi seems to be utilizing the solar resource it has all the year round. The Delhi Metro Rail Corporation (DMRC) is going to install three more roof top solar power plants in its premises, as a continuation of its policy to encourage eco friendly work practices and technologies.

The first solar plant of Delhi metro was of "Roof Top Solar Power Plant" located at Dwarka Sector 21 Metro station with the production capacity of 500 kwp. Now DMRC is installing three more solar plants to fulfill their requirement to some extent of same technology. The power generated by these plants will be used for DMRC's operational requirements, which include station lighting and other loads.

These three plants will come up at the Anand Vihar ISBT



(115 kwp) and Pragati Maidan Metro stations (85 kwp) along with DMRC's residential complex at Pushp Vihar (50 kwp). These plants will have a joint power

generation capacity of 250 kwp.

In 2011, DMRC was certified as the first Metro Rail and Rail based system in the world to get Carbon Credits for reducing Green House Gas Emissions by the United Nations (UN), as it has helped to reduce pollution levels in the city by 6.3 lakh tons every year thus helping in reducing global warming.

The Railways is also planning to generate 1 MW solar power at the New Delhi railway station by installing solar panels on the platform roofs. The power project that will be implemented on a public private partnership model is a part of the Railways initiative to convert some of its stations into 'green buildings'.

According to railway officials, the New Delhi railway station is spread over an area of the 6,38,467 sq m, including the yard area. Around 4,21,388 sq m of the total is built-up area. The station has 16 platforms. Officials said with no major high rises located in the vicinity of the station premise, generating 1 MW solar power is achievable.

"Installation of solar panels on train coaches is possible. It can meet the general requirements like lighting bulbs and running fans in the trains. An experiment is also being done with a toy train running on the Shimla-Kalka route," an official said.

**Source: DMRC*

Article - 2 : GREEN REVOLUTION IN GERMANY

Combined power plants in Germany have made the provision of power secure and constant anywhere and anytime by renewable energies. The Combined Power Plant links and controls 36 wind, solar, biomass and hydropower installations spread throughout Germany. It is just as reliable and powerful as a conventional large-scale power station.

The Combined Renewable Energy Power Plant shows how, through joint control of small and decentralised plants, it is possible to provide reliable electricity in accordance with needs. The Combined Power Plant optimally combines the advantages of various renewable energy sources. Wind turbines and solar modules help generate electricity in accordance with how much wind and sun is available. Biogas and hydropower are used to make up the difference: they are converted into electricity as needed in order to balance out short-term fluctuations, or are temporarily stored.

The biogas sector is booming in Germany and has become the continent's fastest renewable energy sector. Explanation of increase in interest for biofuels can be easily given: it can be produced in a decentralised manner, it is highly efficient and yields more than twice as much energy per hectare of energy crops than ethanol from similar crops and it can be obtained in a straightforward way from a large variety of biomass



resources (organic waste, manure, dedicated energy crops). More importantly, the fuel has two highly efficient uses as a gas for CNG capable vehicles (taking you twice around the world on a hectare's worth of biogas) as well as a fuel that can be used for the cogeneration of power and heat. Meanwhile, advances in biogas technology, microbiology and crop engineering have made production even more efficient.

Now, producers in Germany want to go a step further. They want to start feeding upgraded biogas into the main natural gas grid and cover the entire Europe. The only problem standing in their way is their purified biogas, also known as biomethane, is too good for the natural gas pipelines. That is, its heating value is too high. As the only country in Europe, Germany imposes an upper quality limit on gas.

Article - 3 : A GREEN INITIATIVE BY MALAYSIA

Malaysia has taken a green initiative by introducing several projects involving biofuels, solar panels, green buildings, water and waste management and cogeneration especially from oil palm plantations.

To facilitate the green initiative, Malaysia enacted the Renewable Energy Act 2011, a legislation that mandated the setting up of the Sustainable Energy Development Authority (SEDA). The Authority implements a feed-in tariff system for the distribution of renewable energy generated in the country.

Malaysia is trying to raise the production of green vehicles by promoting small energy efficient cars. Government of Malaysia is also supporting this green initiative. The government announced financial assistance of \$610 million to the manufacturers of such vehicles. Foreign auto manufactures have also been allowed by the government to make small and energy efficient cars in the country with additional benefits of lower taxes and attractive investment environment. By having this new policy, Malaysia hopes to become a manufacturing hub for energy efficient vehicles and increase their production from the current 570,000 to 1.25 million by 2020. This will lead to increase in job opportunities in the country; the industry is expected to create an additional 150,000 jobs in the country.

(*Source: Asian Legal Business)

For Malaysia, the adaptation to green technology will help in counter acting criticism about poor planning in

previous urbanization projects.

The Council also has several other projects including compulsory green requirements for new building projects like rainwater harvesting system, use of LED lamps and landscaping of 10 to 15 percent of the total developed area. The council also offers incentives to existing households who adopt environment-friendly measures related to the efficient use of energy, water, transport, compost and biodiversity; activities usually carried out through the cultivation of a garden in the house or participation in recycling activities.



Electric Car in Malaysia (*Source: <http://www.theborneopost.com>)

Furthermore, Malaysia's national oil company, Petronas, will be starting several new projects in the near future. The Sabah Ammonia Urea Project in Sipitang, an integrated oil and gas production development project in Kebabangan and a refining and petrochemical integrated development in Pengerang in Johor are major developments.

Article - 4 : GREEN ENERGY TO BOOST AFRICAN DEVELOPMENT

Lack of electricity in many regions of Africa is affecting the development which can be reserved by adapting to renewable energy projects. Energy problem in this region is so severe that this region is the home of 41% of world's energy poor people, with 65% primary school and 30% health centres don't have any access to electricity. This region is facing a very severe energy crisis.

Though economic growth is robust, existing energy infrastructure is a brake on progress. Rapid increase in population will lead to increase in the number of people who don't have any access to electricity.

There is still poverty, disease and conflict in Africa. But the fact is that in the last 15 years, the African continent has been fired by the spirit of progress and it can be seen in the technology hubs of Lagos and Nairobi, the successes in fighting diseases, the number of kids going to school, the burgeoning, emerging middle classes and so on.

Many African countries receive on average a very high amount of days per year with bright sunlight, especially the dry areas, which include the deserts (such as the Sahara) and the steppes (such as the Sahel). This gives solar power the potential to bring energy to virtually any location in Africa without the need for expensive large scale grid level infrastructural developments.

The distribution of solar resources across Africa is fairly uniform, with more than 85% of the continent's landscape receiving at least 2,000 kWh/m²/year. A recent study indicates that a solar generating facility covering just 0.3% of the area comprising North Africa could supply all of the energy required by the European Union.

According to the Green Alliance's study, off-grid solar



photovoltaic has given 2.5m Kenyan households access to energy. Children study for an extra hour on average each day with solar lights, and households save 12.6% of their income and improve their health by switching from kerosene lamps to solar.

If sub-Saharan Africa is to meet the UN's goal of universal energy access by 2030, over half its new capacity will have to be decentralised. Renewable technology has less than half the operating costs of traditional diesel generators and can make a significant contribution to climate change mitigation, at the same time as providing affordable and equitable energy access for millions of people.

Laura Taylor, head of advocacy at Christian Aid, said: "Sub-Saharan Africa suffers from an acute energy crisis, with 70% of the population lacking access to electricity. Low-carbon, off-grid energy can address this faster and cheaper than high-carbon options, alleviating poverty in the process. This approach also provides an important opportunity for British businesses, which are well placed to provide low-carbon solutions and help Africa's emergent green economy to grow."

Conserve the Energy,
Save our Climate!

Conserve™
The Energy



It's
Tomorrow™

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