



MONTHLY DIGEST
MAY, 2013



Dear friend,

Greetings from EAI, and a pleasure to be writing to you.

The EAI Monthly Digest, of which this is the first issue, was definitely not my, or even my team's idea. This was suggested about 10 days back by Sikkander Amin of Vigor Solar, a solar systems integrator based out of Chennai, while we were waiting for a meeting with a client.

Sikkander pointed out that most of the subscribers to EAI Daily (about 35000 of them) would be industry professionals with not much time to read every issue of EAI (almost) Daily. A digest of all the key highlights every month would be of great use, he felt.

I did not have to be a genius to figure out that here was a useful idea.

Subsequently, my colleague Krishna kripa, who is indeed the backbone of EAI Daily, has put together the first issue of the EAI Monthly Digest – this is for the month of May, 2013. We have tried to put ourselves in your shoes and come up with what we feel could be a valuable product.

Do review EAI Monthly Digest, and let us know how else we could improve this product. You can send your feedback to me or to Krishna (krishna@eai.in)

I am positive that EAI Monthly Digest will quickly evolve over the next few months to provide exceptional value to you.

Thank you once again for being a member of EAI.

All the best

Narasimhan Santhanam
Cofounder & Director – EAI
narsi@eai.in, www.eai.in

Top Stories

Solar

MNRE to grade solar rooftop equipment

The Ministry of New and Renewable Energy is working on an exercise to grade solar rooftop equipment. The grading would be similar to the 'star rating' given by the Bureau of Energy Efficiency on electrical appliances.

More: <http://bit.ly/11klbtF>

Companies vie for Punjab solar energy project

A large number of companies have bid for the proposed 300 MW solar PV power projects by PEDA. More than 30 companies participated in the bidding process and total bids for 270 MW were received. More: <http://bit.ly/10uAvIG>

UP government's solar power plan finds few takers

The UP govt. has attracted bids for only 140 MW almost after a month after inviting private investments in solar power generation of 200 MW.

More: <http://bit.ly/19BHqjL>

AP govt to offer 20% extra subsidy for solar units

Andhra Pradesh Government is planning to offer 20 per cent subsidy in addition to the 30 per cent subsidy offered by the Union Government for solar units. More: <http://bit.ly/190k2yQ>

Fraunhofer and India sign MoU to develop solar pilot projects

MNRE and the Fraunhofer Institute for Solar Energy Systems ISE have signed a memorandum of understanding (MoU) to develop pilot projects in PV, solar thermal and hydrogen.

More: <http://bit.ly/15J8stg>

Coal India to set up solar power projects across india

In a surprising diversification move, Coal India has decided to set up solar power projects across the country, the first of which would come up at Sambalpur in Odisha.

More: <http://bit.ly/10AsgHw>

Lanco scouting for investors for new solar projects

Lanco Group is looking to rope in investors to push up its solar portfolio. "We are looking for investors in various value chain. We want to set up 300 MW of solar power capacity every year," said a senior official at Lanco Solar Private Limited.

More: <http://bit.ly/15d60aL>

Punjab announces 40% subsidy on solar pumps

The Punjab government announced 40 per cent subsidy on purchase of solar pumps to incentivise farmers for using these pumps for irrigation. Chief Minister Parkash Singh Badal has sanctioned Rs 5 crore for providing this subsidy to farmers.

More: <http://bit.ly/12QIJZl>

Mumbai duo's solar dryer for farmers wins Dell award

A Mumbai-based duo has bagged the top prize at an innovation convention in the US for inventing a solar conduction dryer which will help farmers save upto half of their produce from going to waste by converting it to its dried form.

More: <http://bit.ly/15ehvhs>

Chinese solar PV module producers seeking partners in India

Chinese solar photovoltaic module producers are scouting for partners in India to use the local manufacturing capability to serve the global markets, Chairman of Titan Energy System, Rao S.Y.S. Chodagam, said.

More: <http://bit.ly/10AFy71>

MNRE approves Rs 1,000 Cr to make Guwahati a solar city

MNRE has approved a Rs 1028.47-crore masterplan submitted to it by the Guwahati Municipal Corporation (GMC) to make Guwahati a solar city. More: <http://bit.ly/13kWLge>

Tata Power generates 50 MU of solar, 800 MU of wind energy in FY13

Tata Power generated 49.83 million units of solar power and 796 MU of wind power from its various projects in India, until March 31, 2013. More: <http://bit.ly/15eOIJG>

Wind

NLC forays into renewable energy sector

Public sector Neyveli Lignite Corporation Ltd (NLC) will take its plunge into renewable energy in the current year. The company expects to add 50 MW of wind power and 30 MW of solar before March 2014. More: <http://bit.ly/19rWmna>

Suzlon Energy loses top spot in India wind market installations

Suzlon Energy Ltd. ceded its position as India's top wind-turbine supplier in the year ended March 31 for the first time in at least a decade. Enercon took the top spot. More: <http://buswk.co/12osT9Y>

MNRE unveils draft offshore wind policy

MNRE unveiled a draft policy for offshore wind energy sector in India. The government will establish a nodal agency called National Offshore Wind Energy Authority (Nowa) for carrying out resource assessment and surveys as well as entering into contract with the developers.

More: <http://bit.ly/13UFzqC>

Wind energy dropped 1,500 MW due to withdrawal of incentives

Wind power generation in India dropped 1,500 MW last fiscal due to the removal of incentives given by the government. IWPA has asked the government to restore the GBI and accelerated depreciation for the industry.

More: <http://bit.ly/11kltR2>

Wind power producers oppose competitive bidding for projects

The newly-formed Wind Independent Power Producers Association (WIPPA) has started off with two major campaign themes — opposing price discovery of wind power tariff through a competitive bidding route and moving the judiciary to enforce renewable purchase obligation.

More: <http://bit.ly/16jTaeM>

Dutch govt offers to collaborate with Kerala for developing offshore wind farms

The Agency for Non-conventional Energy and Rural Technology (ANERT) is preparing to take up a wind monitoring study to identify potential offshore sites. The project will be launched with the assistance of the Dutch government. The Netherlands has set a target to build 6,000 MW of offshore wind power by 2020.

More: <http://bit.ly/18lQcWS>

Inox Wind to put up 500 MW of wind power plants this year

Inox Wind is planning to do 500 MW of wind power plants this year with 300 MW orders, worth roughly Rs 1,800 crore, already on its books. It is the fourth largest wind equipment manufacturer in India. More: <http://bit.ly/18lBMWz>

Gamesa agrees supply of 230 MW in India

Gamesa has reinforced its presence in India, having signed two agreements for the supply of a total of 230 MW: 130 MW to China Light & Power India (CLP India) and 100 MW to Greenko Wind Project. More: <http://bit.ly/ZgepZt>

Hydro

Tata Power to develop hydro projects in Georgia

Tata Power International has signed an agreement with Clean Energy Invest and IFC InfraVentures to develop hydro projects worth \$700 million in Georgia. The electricity generated is primarily for sale to Turkey. More: <http://bit.ly/Z9wg47>

Yamuna hydel projects face hurdles

A couple of key hydel projects in Uttarakhand on Yamuna and tributaries are facing hurdles. Ministry of Environment and Forest has raised fresh queries on the second stage of clearances on two hydel projects.

More: <http://bit.ly/1aprtxr>

Biomass, Biofuels & Waste to Energy

Biomass power industry seeks generation-based incentive

The Indian Biomass Power Association has written to the MNRE to consider extending the incentive which is now available to wind energy sector. The wind power will get Rs 0.50 a unit of electricity as incentive up to a ceiling of Rs 1 crore a MW.

More: <http://bit.ly/12I8pHV>

IOC develops biodiesel coprocessing method

IOC has developed and commercialized a technology for coprocessing nonedible vegetable oil in a refinery diesel hydrotreating unit to make biodiesel. IOC demonstrated the technology at the 190,000-b/d Chennai Petroleum Corp. Ltd. Refinery at Manali. More: <http://bit.ly/17ViB5G>

MMRDA's 'waste to energy' project to generate 30 MW of power

MMRDA plans to generate 30 MW of power from its Rs 300-crore worth 'waste to energy' project. The project will be awarded to a consortium of Ramky Enviro Engineers and Chinese firm Chongqing Sanfeng Environmental Industry Group.

More: <http://bit.ly/18IQOM7>

Plastic waste burns to give cooking gas

A team of researchers from the NIT-C has developed a technology that converts plastic waste into cooking gas, without pollution. This was achieved through a thermochemical decomposition of the shredded waste plastic at an elevated temperature in the absence of oxygen.

More: <http://bit.ly/136GyDJ>

BBMP to complete setting up of dry waste collection centres in all wards

The Bruhat Bangalore Mahanagar Palike will complete setting up of the dry waste collection centres in all wards of Bangalore. This will help in collection and segregation of dry waste and the garbage need not be sent to the dumping yard.

More: <http://bit.ly/1204IJJ>

980 MW plants may be installed with available biomass in Punjab

The net available biomass from the major crops in eight districts of Punjab is estimated at 10.34 million tonnes per year. Approximately 980MW rated capacity power plants can be installed with this available biomass resource in eight districts.

More: <http://bit.ly/16qX45z>

Others

USD 4mn project launched to promote clean energy among SMEs

The MSME Ministry launched a USD 4-million project in association with Global Environment Facility to promote energy efficiency and renewable energy among SMEs.

More: <http://bit.ly/13XJL7e>

Tamil Nadu to unveil organic agriculture policy soon

Tamil Nadu govt. will soon come out with a comprehensive organic agriculture policy. The various components of the policy are under preparation.

More: <http://bit.ly/14ZBcwZ>

Electric vehicles makers hit subsidy hurdle

The Government's delay in announcing subsidy schemes for electric vehicles has led many companies to either close shop or cut back operations. More: <http://bit.ly/18RpgO>

SmartCity to have green buildings

The buildings of the SmartCity project will be constructed in tune with the internationally approved eco-friendly standards. The structure would comply with the LEED platinum certification from USGBC. More: <http://bit.ly/13I3zkn>

Brazil Prepares for the 2014 World Cup With 7 Solar Stadiums

As Brazil preps for hosting FIFA's World Cup in 2014, at least seven of its stadiums are incorporating solar arrays to provide on-site power generation for one of the world's largest sporting events. More: <http://bit.ly/11licRv>

ABB to start Production of central inverters in South Africa

ABB plans to start production of central inverters in South Africa to support the rapidly growing local photovoltaic (PV) market and local content requirements.

More: <http://bit.ly/14VsAUw>

First wind-current power system to be installed off Japan's coast

The world's first hybrid wind-current power generation system will be installed off the coast of Japan later this year. The SKWID power generation system being developed by Modec is a floating system that shares a vertical floating axis.

More: <http://cnet.co/13vMrKA>

New MIT Floating Energy Storage looks promising for Offshore Wind

Researchers have conceptualized a new approach that could mitigate the intermittency problems of offshore wind by rendering floating wind energy storage technology. This would basically enable electricity generation by floating wind farms to be utilized thoroughly. More: <http://bit.ly/18xUaeU>

Underwater batteries are making a splash for energy storage

Now, efforts are underway to harness a differential of another sort for both energy storage and generation: the pressure under the sea. A Norwegian company is making forays into underwater hydroelectrical power plants,

More: <http://bit.ly/18R4Nlq>

Potential of US algae biofuel revealed

According to a new analysis, there could be enough algae to produce up to 25 billion gallons of algae-based biofuel a year in the USA alone: that's one twelfth of its annual needs. The report comes from the US Department of Energy's Pacific Northwest National Laboratory (PNNL).

More: <http://bit.ly/10C0cad>

Read More Stories on Renewable Energy:

<http://www.eai.in/360/news/>

Innovations



A paint that can generate solar power

British scientists found that combining graphene with other stunning one-atom thick materials could create the next generation of solar cells. The breakthrough, could lead to electric energy that runs entire buildings by sunlight absorbed by its exposed walls. More: <http://bit.ly/16Zjudi>



This solar umbrella could charge your cellphone

KS Narayan, professor and dean (R&D) at the Jawaharlal Nehru Centre for Advanced Scientific Research has developed a solar umbrella. It's a solar concentrator, which coupled with a motor, can charge a cellphone and run a tiny fan.

More: <http://bit.ly/16ZjvOx>



Sansaluter Solar Panel, harnessing the power of the sun

Sansaluter solar panels are constructed entirely from locally sourced and recyclable materials. These low-cost panels rotate to follow the sun throughout the day, sans electricity. SunSaluter panels can be installed underneath any existing solar panel with just a few minor adjustments. Its inventor was honored with Thiel Foundation Fellowship. More: <http://bit.ly/1134UKF>



Microwave oven cooks up solar cell material

University of Utah metallurgists used an old microwave oven to produce a nanocrystal semiconductor rapidly using cheap, abundant and less toxic metals than other semiconductors. They hope it will be used for more efficient photovoltaic solar cells and LED lights, and systems to convert waste heat to electricity.

More: <http://bit.ly/16Zjz0Q>



'Power Plants': How to Harvest Electricity Directly from Plants

The University of Georgia is developing a new technology to use plants to generate electricity. They have developed a way to interrupt photosynthesis so that we can capture the electrons before the plant uses them to make these sugars. More: <http://bit.ly/12p82TS>



New small vertical-axis wind turbine uses sailing technology

An Exeter firm has designed a new small vertical-axis wind turbine (VAWT) that uses sailing technology to overcome the performance and structural limitations of conventional VAWT designs.

More: <http://bit.ly/1apsWnr>



UOW invention set to transform wind power

Professor Farzad Safaei from the Faculty of Informatics in The University of Wollongong has developed a device called PowerWINDows that could transform the way we collect and harness wind energy. This design of the device is reducing turbulence and structural stress on neighbouring units. More: <http://bit.ly/16ZjBWt>



Scientists develop 'green' pretreatment of miscanthus for biofuel

Two University of Illinois scientists have developed an environmentally friendly and more economical way of pretreating miscanthus in the biofuel production process. The scientists pretreat the biomass with switchable butadiene sulfone in the presence of water to break down the plant cell. More: <http://bit.ly/10AHpIQ>



How to clean seaweed from beaches: Dry it and use the biomass for energy

A research group at the University of Alicante (Spain) has invented an algae removal and treatment system that turns underused residue into biomass. The process involves several stages of washing, drying and compacting without leaving the beach. The system is cheaper, more efficient and more environmentally friendly.

More: <http://bit.ly/112PRqc>



New ionic liquid biomass pretreatment method eliminates need for enzymes, reduces water use

Researchers at DOE's Joint BioEnergy Institute (JBEI) have developed a new technique for pre-treating cellulosic biomass with ionic liquids that could reduce the cost of producing advanced biofuels from plant sugars. This new technique requires none of the expensive enzymes used in previous ionic liquid pretreatments.

More: <http://bit.ly/1135c4f>



New technique to produce 'green' steel

MIT researchers have found a new method to make steel-making 'green' and carbon-free. Donald Sadoway, Professor of Materials Chemistry at MIT, found that a process called molten oxide electrolysis could use iron oxide from the lunar soil to make oxygen in abundance, with no special chemistry. More: <http://bit.ly/10X8d4Z>



PowerCell unveils cleanest and most energy efficient fuel cell system yet to convert road diesel to electricity

PowerCell unveiled a functioning full-scale prototype of its PowerPac fuel cell system. PowerPac is the first functioning full-scale prototype fuel cell system for production of electricity from road diesel in a clean, silent and cost efficient manner. More: <http://bit.ly/16ZjWs1>

Read More Renewable Energy Innovations:
<http://www.eai.in/360/news/category/innovations>

Renewable Energy Opinion of the Month

Bank funding and problems in acquiring land, the major challenges for investing in solar

Participating in a panel discussion on policies at Renergy 2013, industry experts shared their view on investing in solar energy.

Main opinions shared by the industry experts are given below:

Vivek Chaturvedi, Chief Marketing Officer, Moser Baer Solar – “Over 26 approvals were needed for a company to set up a solar farm. Land issues, right-of-way for setting up transmission lines to evacuate power need to be simplified to speed up completion of projects and to bring down costs”.

Pashupathy Gopalan, Managing Director, SunEdison – “The overall policy is in place in India and revenue streams were stable but the land issue, particularly getting the usage changed from agriculture to industry can be time-consuming. Asset management and services need to be upgraded”.

Vineet Mittal, Managing Director, Welspun Energy – “Globally countries have simple land usage laws to encourage renewable energy. India should emulate this example and simplify procedures to permit land to be used for solar power projects”. More: <http://bit.ly/10vV2bV>

Green Community Stories

Small – scale solar helps Laxmikantapur village survive

Laxmikantapur village in West Bengal relies heavily on agriculture for income and sustenance. In a country where more than 60% of its population lives in rural areas, Laxmikantapur is exemplary of poverty, lack of basic infrastructure like electricity as well as vulnerability to perils of climate change. People depend on Kerosene for nighttime lighting.

[Onergy](#), a for-profit enterprise based in Laxmikantapur has disseminated small-scale energy solutions like solar powered LED lamps and cell phone chargers. It has collaborated with local organizations like [VSSU](#) and [Milaap](#), in order to provide villagers low cost loans to buy solar devices. Onergy has 3 energy centres to coordinate the assembling, distribution and service of small scale solar devices.

More from [here](#). Video: <http://bit.ly/19YOKpR>

Upcoming Events

Date	Sector	Name of the Event	Venue	Link
08.06.2013	Solar	Two Days Technician Training Program on Solar Photovoltaic	Thiruvananthapuram	http://bit.ly/137xDB7
10.06.2013	Smart Grid	TERI MDPS on Smart Electric Grid Powering India	Gurgaon	http://bit.ly/17eSVlp
12.06.2013	Biodiesel	European Biodiesel 2013	Portugal	http://bit.ly/ZKHiNR
15.06.2013	Green Building	Conference on Green Homes	Bengaluru	http://bit.ly/12TmeTU
17.06.2013	Energy Efficiency	Advanced Course on Sustainable Lighting Practices	Bengaluru	http://bit.ly/Z9BhK4
17.06.2013	Solar	Intersolar Europe	Germany	http://bit.ly/A8Dz06
17.06.2013	Bio Energy	AEBIOM Bioenergy Conference	Denmark	http://bit.ly/11bGBdF
18.06.2013	Hydro	Training – Small Hydro Power Development	Roorkee	http://bit.ly/16jZ1AH
18.06.2013	E-waste Management	International Conference & Expo on E-waste & Used Battery Management	Hyderabad	http://bit.ly/12IEBWF
19.06.2013	Renewable Energy	MDPS on Sustainability – Energy Towards Cleaner and Greener Tomorrow	Gurgaon	http://bit.ly/16ZoU8e
19.06.2013	Renewable Energy	Renewable Energy Integration Symposium	Mainz, Germany	http://bit.ly/11bETcc
20.06.2013	Green Building	Advance Training Programme on Green Buildings Rating System	Hyderabad	http://bit.ly/16jZlzf
24.06.2013	Hydro	Training - O&M of SHP Stations	Roorkee	http://bit.ly/114HCqU
26.06.2013	Water	Conference on Water & Waste Water Management	New Delhi	http://bit.ly/19hX0kt
26.06.2013	Solar CSP	CSP Today USA 2013	USA	http://bit.ly/hgTMIG

Technical Papers

Sector	Title	Link
Solar	Performance Evaluation of Solar Water Heater Using Nanofluid	http://bit.ly/10uKRbB
Solar	Carbon payback period for solar and wind energy project installed in India	http://bit.ly/18m65wx
Solar	Experimental and theoretical energy and exergy analysis for a solar desalination system	http://bit.ly/18m69fl
Solar	Performance analysis of a 190 kWp grid interactive solar photovoltaic power plant in India	http://bit.ly/11Gtbfl
Solar	Assessing the impact of the transition to Light Emitting Diodes based solar lighting systems in India	http://bit.ly/Zo2gEb
Solar	Techno-economic analysis of solar photovoltaic based submersible water pumping system for rural areas of a Rajasthan state	http://bit.ly/Zo2on3
Solar	Reliability assessment of photovoltaic power systems: Review of current status and future perspectives	http://bit.ly/19gsOJ7
Solar	Thermal energy storage technologies and systems for concentrating solar power plants	http://bit.ly/13UMiAM
Solar	Development of Solar Electricity Supply System in India: An Overview	http://bit.ly/14W0PeW
Biomass, Biofuels & Waste to Energy	Use of chemical and physical characteristics to investigate trends in biochar feedstocks	http://bit.ly/1aplill
Biomass, Biofuels & Waste to Energy	Quantifying capital goods for waste incineration	http://bit.ly/Z9DYLP
Biomass, Biofuels & Waste to Energy	Clean energy generation using plasma process	http://bit.ly/18Lkcvo

About EAI (almost) Daily:

EAI (almost) Daily is India's largest and most popular renewable energy newsletter, delivered to over 35,000 industry professionals' mailbox, three days a week - Monday, Wednesday & Friday. EAI (almost) Daily comprises of news from various sectors of renewable energy, innovations, technical papers, videos, upcoming renewable energy events and jobs, interviews and green community stories.

Send your feedback about the monthly digest to krishna@eai.in

Not yet a subscriber? [Subscribe Now.](#)