SEPTEMBER 2012



HIGHLIGHTS

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Dear Readers.

While the developed world vouches on the concept of "Zero Emissions", an equally important aspect, especially in the context of developing country such as India, is how to optimally consolidate the available resources and generate energy in a sustainable manner. With the development and launch of National Bioenergy Mission in the near future, the Ministry of New and Renewable Energy is looking to provide a conducive policy environment and promote development of innovative new technologies which in turn can help empower rural areas.

The growing buzz around bioenergy was visible at the recent "Bio-Energy Summit 2012 - Enabling Sustainable Energy Access for India" organized by the Confederation of Indian Industry (CII), where the who's who of the Indian bioenergy industry gave their sound bytes on energy access as an important catalyst for economic and social development in India and how bioenergy would play an instrumental role towards achievement of this goal...

- "...Globally, 2.7 billion people rely on the traditional use of biomass for cooking and 1.3 billion people lack access to energy. In India as well, 400 million people, primarily in rural areas, lack energy access. Biomass based decentralized generation has the largest potential for rural energy access. In fact, biomass power in India has become an industry with a cumulative generation capacity of over 3600 MW and there are facilities for equipment manufacturing and capacity to build and operate power plants. The Ministry of New and Renewable Energy is also supporting the deployment of renewable energy systems including biogas plants and biomass gasifiers...." Dr Farooq Abdullah, Union Minister for New & Renewable Energy.
- "...Biomass is critical for expansion of energy access and the National BioEnergy Mission that is under development will cover all key areas for bioenergy development..." Mr B K Chaturvedi, Member (Energy), Planning Commission
- "...Bioenergy, the oldest energy resource, currently meets 60% of the domestic energy needs of the country and with the gradual increase of renewable energy sources in India's fuel mix, this sector is poised for rapid growth in India as bioenergy is a critical renewable resource. As a welcome step in this direction, the Government is framing the National Bio Energy Mission...." Mr Pramod Chaudhari, Co-Chairman, CII National Committee on Renewable Energy & Executive Chairman, Praj Industries Ltd

At BECI, we are watching and listening with great hope and delight, as we see bioenergy finally coming into its own, and fulfilling the promise and potential it carries to helping our country achieve its economic, environmental and social development objectives.

Thank You.

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Policy Initiatives

INDIA

VAT reduction on biofuel: Karnataka State Biofuel Development Board

The state Government has reduced the VAT rate on biodiesel from the existing 14% to 5%. The VAT rate for bio ethanol is already at 5%. The Board will also seek reduction of VAT rates for other products used in biofuel production such as seeds, cakes.

www.deccanherald.com/content/270735/biodiesel-producers-receive-vat-boost.html

West Bengal Pollution Control Board organizes workshop for proper disposal of electronic waste

 $www.articles.times of india.indiatimes.com/2012-08-07/developmental-issues/33082567_1_e-waste-collection-electronic-waste-collection-centers \text{ } and the collection of the collection of$

Pakistan seeks India's expertise in RE

www.ibnlive.in.com/news/pak-seeks-indias-expertise-in-renewable-energy/286373-3.html

Swiss Government to help make Indian buildings more energy efficient

Switzerland has signed an MoU with the Power Ministry that is aimed at reducing energy consumption in new buildings in India. Switzerland is preparing a feasibility report on improving energy efficiency in the buildings coming up in India as they are likely to be major contributors to carbon emissions.

Apart from this, Switzerland is also focusing on the Indian RE sector and has a MoU with state-run power producer NTPC.

www.zeenews.india.com/business/realestate/property-frills/swiss-govt-to-help-make-indian-buildings-more-energy-efficient_57964.html

NORTH AMERICA

The US Senate Committee on Finance approves the Business Tax Cut Certainty Act of 2012

Key features of act:

- A wide variety of tax incentives that would benefit the biorefining and biopower sectors, including those related to cellulosic biofuel, algae, renewable diesel, biogas and biopower.
- · Extension of the production tax credit for cellulosic biofuels for one year, through the end of 2013
- Extension of the R&D tax credit for two years, through 2013.
- It would also extend the 10 cent per gallon small agri-biodiesel producer credit

www.biomassmagazine.com/articles/7925/senate-bill-could-extend-biorefining-biopower-tax-incentives

EUROPE

EU aims to boost waste management performance

The study prepared for the European Commission estimates that full implementation of EU waste legislation would save €72bn/year; increase the annual turnover of the EU waste management and recycling sector by €42bn; and create more than 400 000 jobs by 2020.

www.recyclinginternational.com/recycling-news/6456/other-news/eu/eu-aiming-boost-waste-management-performance

Policy Initiatives

UK Government urged to tap China's \$680bn low carbon market

www.platts.com/RSSFeedDetailedNews/RSSFeed/ElectricPower/8674778

AFRICA

Nigeria Government launches RE initiative

www.channelstv.com/home/2012/08/24/fg-launches-renewable-energy-initiative/

LATIN AMERICA

Argentina hikes biodiesel tax

Argentina has increased tax on biodiesel exports from 20% to 32% to make domestic fuel prices more affordable. The Government has also reduced the price of domestic biodiesel by 15% to 4,405 pesos (\$0.96) per tonne from 5,195.8 pesos.

The country has plans to reach 4.5mn tonnes of annual production by 2013.

www.in.reuters.com/article/2012/08/10/argentina-biodiesel-idINL2E8JA5GO20120810

Business & Markets

INDIA

Indian Railways to set up biodiesel plants at Tamil Nadu and Chhattisgarh having capacity of 30 tonnes/day

www.post.jagran.com/railways-plans-to-set-up-four-biodiesel-plants-1344597910

Nalco to set up biodiesel plant

The plant will use algae as a fuel.

www.orissadiary.com/ShowBussinessNews.asp?id=35778

Bruhat Bangalore Mahanagara Palike to build biogas plant at Krishna Rajendra Market

The plant will generate 500 units of power per day using high-rate biomethanation technique. It will be sufficient to light around 250 street lamps around the market.

http://www.dnaindia.com/bangalore/report_bbmp-to-build-biogas-plant-at-kr-market_1728659

Tihar Prisons-Bhabha Atomic Research Centre to set up a biogas plant

www.articles.timesofindia.indiatimes.com/2012-08-18/delhi/33261438_1_biogas-plant-bio-gas-plant-tihar-prisons

Installation of 13,000 biogas plants by the Pragati Biogas Service Center

www.thehimalayantimes.com/fullNews.php?headline=Pragati+biogas+centre+installs+13%26sbquo%3B000+plants+&NewsID=345389

Pune to get eco-friendly biomass crematorium

www.articles.timesofindia.indiatimes.com/2012-08-06/pune/33064716_1_wood-chips-electric-crematoriums-gasifier

Kerala Tourism Department formulates plan to make Kovalam garbagefree

As part of its 'Kerala Waste Free Destination' campaign, the Kerala Tourism Department, along with Suchitwa Mission, is looking to undertake a project to make Kovalam a garbage-free destination. Under the project, residential areas will be offered 25% subsidy on biogas plants and various composting technologies.

www.travelbizmonitor.com/kerala-tourism-department-formulates-plan-to-make-kovalam-garbagefree-17220

Bruhat Bengaluru Mahanagara Palike collects 10,000 tonnes of garbage from bangalore

www.asianage.com/india/bengaluru-free-10000-tonnes-garbage-189

First sustainable PUMA Store opens in Bangalore, India

Key features:

- Recycled steel from old DVD players, bicycles and tiffin boxes has been used to construct the building
 of the PUMA Store.
- The surface layout of the building has been designed in a way that more than 90% of the interior spaces in this store have direct access to natural daylight so that less artificial light is needed.

Business & Markets

- The artificial lighting used in this store is energy efficient with fewer watts being consumed for the same lumen output.
- The recessed first and second floor volume generates a stack-effect for natural cooling.
- · The highly insulated building shell allows for cooling without air conditioning.
- By maintaining the temperature at a comfortable 24°C, PUMA leaves it warmer than in usual retail stores and thus, conserves energy.
- The sustainable PUMA Store is 100% solar-powered as solar photovoltaic cells provide 10,384 kWh units of energy a year

http://www.fibre2fashion.com/news/apparel-news/newsdetails.aspx?news_id=114877

Indian cement majors signs a pact to support low-carbon investments in India: Business Line India

www.cemnet.com/News/story/150360/indian-producers-sign-pact-signed-to-support-low-carbon-cement-investments.html

NORTH AMERICA

BP Biofuels-Texas AgriLife Research sign agreement to advance biofuel feedstock development

www.ntxe-news.com/artman/publish/article_78157.shtml

Sapphire Energy starts up biofuel plant in NM

The company has constructed a \$135mn demonstration plant in Columbus and harvested a total of 81 tons of algae biomass. The plant will be capable of producing 100 barrels of crude algal oil per day by the end of 2014.

www.businessweek.com/ap/2012-08-28/sapphire-energy-starts-up-algae-plant-in-nm

Coca-Cola Co. the 3rd largest generator of on-site green power in the US: Environmental Protection Agency

www.plasticsnews.com/headlines2.html?id=26149

Waste Management opens landfill 3.2MW gas-to-energy plant in Indiana

The plant will generate enough electricity to power about 14,000 homes.

www.waste360.com/landfill-gas-energy-lfgte/waste-management-opens-landfill-gas-energy-plant-indiana

Portland plant to convert food waste to RE

Under the agreement, Columbia Biogas will convert commercial food waste to renewable power at its local Portland plant and deliver the electricity to the PacifiCorp system.

www.renewgridmag.com/e107_plugins/content/content.php?content.8856

Business & Markets

EUROPE

Construction of 20MW biopower plant in Spain

www.biomassmagazine.com/articles/7946/ence-signs-finance-epc-contracts-for-new-biomass-plant-in-spain

Croatia's Agrokor powers up €7.4mn, 1MW biogas CHP plant

The CHP plant will have an annual output of 8,000MWh of power and 9,000MWh of heat.

www.cospp.com/news/2012/08/23/croatia-s-agrokor-powers-up-55-mln-kuna-7-4-mln-euro-biogas-chp-plant.html

Weltec Power to construct 2.4MW biogas plant in Poland

www.cospp.com/articles/2012/08/weltec-constructing-polands-first-biogas-plant.html

Nexterra - Stopford partner for bioenergy projects in the UK

www.biomassmagazine.com/articles/8028/nexterra-stopford-partner-for-bioenergy-projects-in-the-u-k

Remondis to open UK's largest indoor waste management facility

www.ecofriendnews.com/environmental_article11246.html

KfW plans to invest €100bn in RE sector

www.businessgreen.com/bg/news/2198109/german-infrastructure-bank-talks-up-eur100bn-green-investment-plantification and the second control of the control o

Scottish renewables investment tops £2.8bn

www.businessgreen.com/bg/news/2198185/scottish-renewables-investment-tops-gbp28bn

Africa

A biopower plant lights up rural Senegal

The plant uses groundnut shells and dried millet stalks for fuel

www.allafrica.com/stories/201208310561.html

Androscoggin Valley Hospital to set up \$2.8mn biomass boiler

www.berlindailysun.com/index.php?option=com_content&view=article&id=42612:avh-plans-2-8-million-biomass-boiler&catid=103:local-news<emid=442

Bamboo Bikes Initiative trains young Ghanaians to build, fix, and market bamboo-framed bicycles

www.allafrica.com/stories/201208240475.html

Jaguar Land Rover supports 50 global projects for CO2 reduction

The latest contribution of Jaguar Land Rover's is a LifeStraw project which provides safe and clean drinking water to Kenya. Other projects include distribution of over 180,000 fuel efficient stoves to people in countries like Uganda, Ghana and Cambodia.

Through these efforts Jaguar Land Rover expects to reduce about 10mn tonnes of CO₂ by 2014.

www.rushlane.com/jaguar-land-rover-supports-50-global-projects-for-carbon-doixide-reduction-1243442.html

OTHER COUNTRIES

Tokoyo-based energy company acquires shares in 5 biopower facilities in California

www.biomassmagazine.com/articles/7965/japanese-energy-giant-buys-into-u-s-biomass-power-industry

Global ethanol, biodiesel consumption 135bn gallons by 2018: Global Industry Analysts Inc.

www.biodieselmagazine.com/articles/8641/global-ethanol-biodiesel-consumption-135-billion-gallons-by-2018

Farmers urged to become part of new biomass supply alliance

www.abc.net.au/rural/news/content/201208/s3569252.htm

TMO Renewables secures biomass feedstock supply for bioethanol plant in China

www.europe.chinadaily.com.cn/business/2012-08/24/content_15703898.htm

Rawalpindi city district government - NGOs to set up recycling plant in Garrison city

The project will recycle 800 to 850 tons of waste produced on a daily basis.

www.tribune.com.pk/story/418410/waste-management-project-to-generate-energy-from-garbage-under-consideration/

Finance & Investments

INDIA

US-India collaboration awarded \$125mn funding for energy crop work

The grant will enable University of Missouri agroforestry researchers to put potential marginal land energy crops through a rigorous 5 year testing program. The university will be allotted \$4.5mn to study varieties of switchgrass, sorghum and various tree species.

www.biomassmagazine.com/articles/7945/u-s-india-collaboration-awarded-funding-for-energy-crop-work

NORTH AMERICA

CEC awards \$1.8mn to Northern California biodiesel firm

The fund will enable Ukiah-based Yokayo Biofuels Inc. to increase its biodiesel production capacity from 1,400 gallons a day to 2,000 gallons.

www.sacbee.com/2012/08/13/4721980/energy-commission-awards-18-million.html

USDA to grant \$99mn loan to Chemtex to develop advanced biofuels

Once operational, the Chemtex facility would convert 600,000 tons of energy grasses per year into an estimated 20mn gallons of cellulosic ethanol.

www.renewableenergymagazine.com/article/usda-guarantees-99-million-loan-to-support-20120823

Rollcast Energy project awards \$250,000 woody biomass utilization grant

www.biomassmagazine.com/articles/7938/rollcast-energy-project-awarded-woody-biomass-utilization-grant

The National Science Foundation awards \$5.8mn to improve climatechange education in Maryland and Delaware

www.baltimoresun.com/features/green/blog/bs-gr-climate-change-teaching-20120815, 0,5751051.story, when the state of the

AFRICA

Ghana to receive \$30mn-\$50mn for climate change reduction projects through the Forest Investment Programme of the World Bank

www.ghananewsagency.org/details/Science/Ghana-to-receive-funding-for-climate-change-reduction-projects/?ci=8&ai=48005

African green energy projects receive \$825,000 boost

www.the citizen.co.tz/business/13-local-business/25256-a frican-green-energy-projects-get-825000-boost.html http://blueandgreentomorrow.com/2012/07/18/rea-receives-60000-in-biogas-training-funding/

R & D - Technology

NORTH AMERICA

www.ucrtoday.ucr.edu/8580

UC Riverside develops biofuel formulations for California

TDA Research wins EPA award for biogas purification system

www.biomassmagazine.com/articles/7939/tda-research-wins-epa-award-for-biogas-purification-system

OTHER COUNTRIES

Biogas Research Institute to be established at University of Agriculture Faisalabad

www.pakobserver.net/detailnews.asp?id=169889

Climate Change & Environment

INDIA

Abdul Kalam joins hands with Zee News' green initiative

www.bestmediainfo.com/2012/08/abdul-kalam-joins-hands-with-zee-news-green-initiative/

NORTH AMERICA

Over a million homes without power in storm-hit US states

www.dnaindia.com/world/report_over-a-million-homes-without-power-in-storm-hit-us-states_1734951

OTHER COUNTRIES

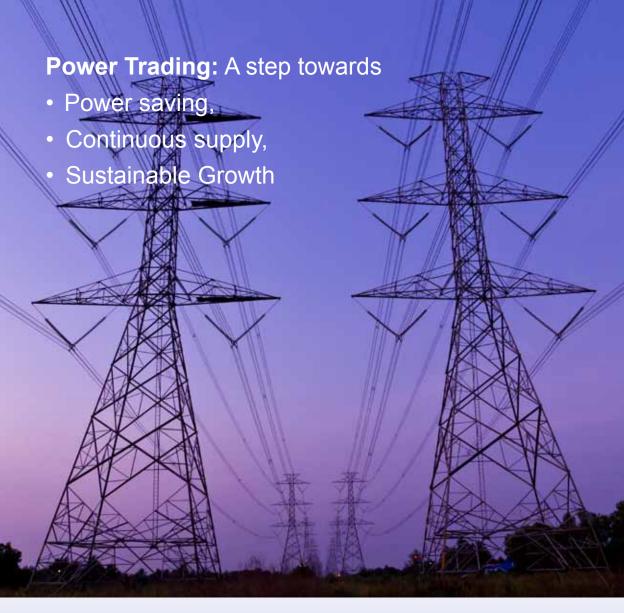
Climate change forces mirgration of Australian tropical fish

www.newstrackindia.com/newsdetails/2012/08/17/160--Climate-change-forces-mirgration-of-Australian-tropical-fish-.html

Some coral reefs could survive environmental changes for a very unexpected reason

www.io9.com/5939049/new-research-suggests-some-coral-reefs-could-survive-for-a-very-unexpected-reason

mn - Million I bn - Billion I RE - Renewable Energy I BTL - Biomass-To-Liquid I CDM - Clean Development Mechanism I CCS - Carbon Capture & Storage I BCAP - Biomass Crop Assistance Program I MSW - Municipal Solid Waste I AD - Anaerobic Digestion I WTE - Waste-to-Energy I SWM - Solid Waste Management





Bilateral Trading



Green Power



Trading Through Exchange



Renewable Energy Certificate (REC)

Abellon is a CERC authorized Power Trader and has been providing services to facilitate open access to large (HT) consumers. Abellon facilitates all types of Power trading including Bilateral & through Exchanges (PXIL & IEX). Abellon maintains a pool of buyers and sellers through which Bilateral transactions (Short term, Medium term & Long Term) are conducted from time to time. Abellon also trades green power to cater to the needs of environment conscious consumers.