



## Agroforestry Project Crosses 100000 Plantation Mark... ➔

*If it exists, it's possible !*

Dear Readers,

*Only those who have witnessed the scorching heat of an Indian summer can understand why Indians await the monsoons with bated breath. Just when the unyielding heat sucks the earth bone dry, down come the rains, washing away the heat and dust, filling the rivers, soaking the ground, and renewing the hopes of a nation where 60% of farmland depends on rains, and where farms provide livelihood to more than 60% of the population.*

*For India, monsoon is the time to sow and plant, and at Abellon, we did just that - with a vengeance – crossing the plantation mark of 1,00,000 at our agro-forestry project in Gujarat.*

*Going ahead, the season was filled with a number of other exciting developments for the company, starting with the Bhumi Pujan (Foundation ceremony) of our first international pellets manufacturing project in Ghana. Other key accomplishments during the quarter were the foundation ceremonies for our fly ash bricks manufacturing, as well as pilot torrefaction facilities.*

*On the policy front in India, it was gratifying to see Bioenergy receiving its due, with the Ministry of New & Renewable Energy mooted the National Bioenergy Mission, and giving industry a platform to participate in the process by inviting recommendations, as well as through an extensive itinerary of visits and interaction.*

*As a company committed to Bioenergy, we believe wholeheartedly in its potential to meet the country's economic, environmental and social development goals, and contribute to bringing about a transformation in the lives of the poorest of the poor.*

Thank You  
Editorial Team - AQ

### HIGHLIGHTS

Bhumi Pujan of First International Project in Ghana

Inauguration of IPR Driven Torrefaction Unit

Bhumi Pujan at Eco Bricks Manufacturing Site

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## Solid Waste Management market growth ramping up in India

According to a new report by RNCOS, "India Solid Waste Management Analysis" evaluates the growth potential of Indian solid waste management market...

- The solid waste management industry will grow at a CAGR of 7% during 2011-2015, thus positioning India as one of the most preferred destination for industry investments.
- The Government is closely supervising the market situation and supporting the industry players by relaxing investment norms and providing monetary incentives. Consequently, the number of public and private entities forayed into collection, disposal and treatment of large amount of untreated waste in the country and huge investment is expected to be channelized in the market in the coming years.
- Western India including Mumbai, Pune, Ahmedabad, Vadodra, etc. generates maximum quantum of municipal solid waste due to industrial growth and improved lifestyle. Following western region is the Northern region where Delhi and Kanpur are the major contributors, with probability of further increase in per capita waste generation.

## National Bioenergy Mission to be launched by MNRE

The Government of India is preparing a national bio-energy mission to boost biomass power to offer a policy and regulatory environment to facilitate large-scale capital investments in biomass-fired power stations to encourage development of rural enterprises.

The national mission will aim @

- Improving energy efficiency in traditional biomass consuming industries
- Developing a bio-energy city project
- Providing logistics support to biomass processing units
- Proposing a GIS-based National Biomass Resource Atlas to map potential biomass regions in India.

Each MW generated from biomass plants would be able to cover about 6,000 rural households. The ministry has earmarked 3,400 crore for the various incentive schemes under the biomass mission. The mission will adopt a II-phase approach, spanning the 12th Plan in Phase 1, and the 13th Plan in Phase 2.

According to Sanjay Chakrabarti, Partner and National cleantech leader at E&Y, **"..Availability of feedstock is a problem, but I feel biomass will be having much more potential for non-grid based power generation and ensuring rural electrification.."**

### Source:

<http://www.sbwire.com/press-releases/sbwire-102675.htm>

<http://www.mnre.gov.in/>

[http://rtn.asia/901\\_indias-renewable-power-generation-capacity-increases-22-over-last-five-quarters](http://rtn.asia/901_indias-renewable-power-generation-capacity-increases-22-over-last-five-quarters)



## Bhumi Pujan of First International Project in Ghana



Team members at Bhumi Pujan of Ghana Project site

On 2nd September, Abellon crossed one more significant milestone in its journey, with the foundation ceremony of our first International Project - a solid biofuels manufacturing facility in Kumasi region, Ghana.

Ghana, the gateway to West Africa, has around 39% forest cover and a further 37% of wood land. The timber industry generates large quantities of wood & forest residue. Kumasi region in Ghana, where our plant is located, has a large timber industry. Abellon plans to utilize the waste generated from this industry to produce wood pellets.

Gracing the occasion were our MD and CEO, Mr. Aditya Handa, President, Mr. Pankaj Patel and other key team

members, as well as dignitaries including Nana Kwabena Opong, TasheenHene, Chief of Asaago, Mr. Tony Nyame, Hon. DCE, Atwima Kwauhuma District, Mr. Stephen Djaba, our Business Associate and other Government officials.

The project is likely to be commissioned by Mar 2012. Also on the anvil is a large-scale agro forestry project focusing on plantation of Bamboo and other crops.

## Bhumi Pujan of manufacturing plant for Eco Bricks

One more green initiative taken up by Abellon was the inauguration of our eco-friendly fly ash brick manufacturing facility in Gujarat, India. The Bhumi Pujan for the site was once again attended by Abellon team members who offered prayers for the auspicious start of the project.

This is an automatic fly ash brick manufacturing plant. Fly ash bricks are an environmentally responsible solution as they allow for productive utilization of fly ash generated from large thermal power stations. With their superior quality, light weight and environment friendly stamp, fly ash bricks are achieving increasing popularity within the building and construction community.



Team members at Bhumi Pujan

The brand name for fly ash bricks manufactured by Abellon is "E-Brix". The company intends to utilize these bricks both for captive consumption within its upcoming projects, as well as supply the same to industry.

## Inauguration of Torrefaction Unit

Abellon inaugurated its Torrefaction unit on 12th August 2011. The unit is a part of the company's R&D facility in Gujarat, India. It was launched in the presence of key team members of the company.

Torrefaction is the next generation of biomass conversion technology. This unit will help us to study and understand the behavior, characteristics and properties of various varieties of globally available biomass sources w.r.t Drying & Torrefaction. This is the first step in the direction of commercializing the process by setting up a dedicated Torrefaction Plant.

## Agroforestry Project crosses 100000 plantation mark



Team members celebrating the achievement

9th August '11 was a significant day for Abellon as our agroforestry project in Gujarat successfully marked a plantation milestone of 1,00,000 plants. The plantation covers a land area of 20 acres and includes various species such as Bamboo, Arduso, Thornless prosopis, Casuarina, Neelgiri and Sandalwood.

A ceremony was held on the site to recognize the vital contribution of agroforestry team members towards this achievement. The members were felicitated with recognition certificates and mementos, in the presence of the senior team. They were also invited to share their learnings/experiences of facing various challenges and successfully overcoming the same to achieve this remarkable feat.

## Series of Banana farmers meetings

In the months of July – August, Abellon conducted a series of meetings for banana farmers across different regions of Gujarat. The meetings were graced by agricultural experts from leading universities of the state, who interacted with farmers and answered their questions of scientific methodologies of Banana farming, for increased yield.

These meetings provided an excellent platform for us to showcase our organic nutrition management range including Banana Gold and Swarnim, as well as our specially tissue-cultured banana plantlets.

Farmers showed a keen interest in our organic offerings, which are beneficial to plant and soil health and also provide a solution for organic nutrition management.

# BANANA GOLD



Banana Gold - Organic manure for large-scele banana plantation

## Poornakumbha Initiatives

Team Poornakumbha initiated two important projects during the quarter, focusing on employment generation and making organic fertilizers available to farmers at their doorstep.

The **Green Employment Program** covering 100 villages of Ahmedabad and Surendranagar districts, seeks to rope in local people for prosopis cutting, with the objective of providing biomass for Abellon's projects in the vicinity. This program will provide long term employment to local village communities.

Another significant benefit of this program would be clearing up of Gauchar (grazing) land, making it available for production of fodder for animals.

Each Poornakumbha Hub is also setting up infrastructure for vermi-composting, in order to provide villagers access to local organic fertilizer for their farming activity. This project has been set up with a view to helping villagers derive value out of the waste generated, as well as making organic fertilizer available to them in the vicinity of their villages.

## Abellon @ Biomass Energy Conclave: 2011 India

Renewable Markets India organized the "Biomass Energy Conclave: 2011 India," the country's largest annual gathering of biomass project promoters, on 25th August at Hyderabad. The conference focused on issues, challenges and opportunities for the growth of the biomass energy sector in India, with more than 150 delegates participating consisting of project promoters, IPPs, banking and financial institutions, advisors, PE funds and key government officials.

The conference addressed key issues including policy and regulatory framework and challenges, biomass demand-supply trends, energy plantation, supply chain management, project financing, project evaluations and acquisitions, power sale management, tariff trends, fossil fuel impact & price trends, REC and CDM benefits, import-export of biomass and many more.

A senior team member of Abellon was invited as a key speaker and an industry panelist for a panel discussion on "Biomass Supply Chain," where he shared his views on export and import of Biomass and its future in India.

## Green India, Clean India

Considering the significance of clean energy initiatives in helping India meet its growing energy needs, The New Indian Express organized the 'Green India, Clean India' conference on 4th August '11, in collaboration with Columbia University. The conference was intended to bring together renowned national and global experts in the areas of conventional and non-conventional energy to build opinion leadership.

Key dignitaries who addressed the conference were Union Ministers Shri Sushil Kumar Shinde, Dr Farooq Abdullah, Ms. Jayanthi Natarajan, Shri. Montek Singh Ahluwalia, as well as several Chief Ministers. The conference was graced by expert economist and Director of the Earth Institute, Dr. Jeffrey Sachs.



Abellon @ "Green India, Clean India"

Our MD & CEO, Mr. Aditya Handa, was invited to speak on the subject of "Clean players: How do we scale up?" He shared his views on the potential of bio-energy in meeting the growing energy needs of India through a Triple-Bottom-Line approach. He discussed on how we can overcome the challenges of India, while embracing an inclusive growth model, by effectively putting waste resources towards creating value.

## Abellon @ Workshop on "Biomass Power - Potential, Issues & Challenges" by MNRE

Under the aegis of "Biomass Mission of India" launched by the Ministry of New & Renewable Energy, a one-day workshop on "Biomass Power - Potential, Issues & Challenges" was conducted in New Delhi on 27th September '11. The workshop addressed various issues and strategies regarding technology, market forces, regulatory environment, risk mitigation as well as financing for the fast growing biomass power industry in India. The workshop was graced by prominent government officials and industry leaders who shared their valuable opinions on the subject based on their experience and knowledge.

Abellon was one of the industry representatives invited to share its views on the subject. Our President, Mr. Pankaj Patel, presented on the subject "Dedicated Energy Plantation and Intercropping of Cash Crops," sharing our experience of setting up a first of its kind model agroforestry project in Gujarat, with a view to achieving sustainable biomass sourcing, and optimizing utilization of land for better productivity and yields.

## Participation in National Seminar on Recent Advances in Fungal Biotechnology

Our R&D Head participated in a national seminar on recent advances in fungal biotechnology at Forest Research Institute (FRI), Dehradun, on September 22-23, 2011.

The seminar was initiated as a part of the Calendar of Events proposed by the National Afforestation and Eco-development Board, Ministry of Environment and Forests, Government of India, to celebrate the International Year of Forests, 2011, with a view to gathering support and understanding regarding forests and wild life conservation. The objective of the Seminar was to compile and synthesize the information submitted by researchers in the field of fungal biotechnology with special reference to their genomics, biodiversity and potential in bioremediation, disease management, and bio-fertilizer application.



Abellon @ "National Seminar on Recent Advances in Fungal Biotechnology"

The seminar focused on research currently being conducted throughout the country for meaningful and prospective use of different fungal species in addressing environmental amelioration. The seminar laid the foundation for the development of a platform for interaction and creation of an interface that would facilitate scientifically sound decision making to promote the orderly, integrated and comprehensive protection, use and conservation of fungi. Abellon's presentation on "Organic bio-fertilizers: A solution for land reclamation and climate change," was appreciated by FRI scientists, as our featured products Earth Essentials and Banana Gold are unique with respect to properties such as organic content, minerals, use of fungi as bio-pesticide and bacteria as mineralization enhancer.

## Plantation at Gandhidham



Abellon's plantation movement at Gandhidham

To mark the importance of green cover, a plantation activity was organized by Poornakumbha at the office of the Superintendent of Police (B-Division), Gandhidham, Shri Chirag Koradia. The activity was carried out in association with the Forest Department, and was graced by Shri Koradia as well as other dignitaries from the Police department.

800 saplings of various species including Bamboo, Casuarina, Gulmohur, Neem and Arduso, were planted by people present at the venue. Through plantation activities such as this, Abellon seeks to spread the message of saving the environment in an effective manner, while strengthening our relationship with local communities.



Plantation movement created a buzz for "green cover" amongst the participants

## An official Delegation from MNRE visited Abellon

On 24th and 25th of August '11, an official delegation from Ministry of New and Renewable Energy (MNRE) visited Abellon to get an overview of our initiatives in the areas of bio-energy and agrisciences. Members of the delegation visited our R&D laboratory where we have undertaken various research projects in bio-energy, genomics, tissue culture and waste-to-energy, as well as our agro forestry site.

The visit was part of an extensive itinerary and a precursor to preparing the country's "Biomass Mission," and was an effort to gain an on-ground understanding of the Bio-energy sector. Comment from one of the delegates...

*"This is an extremely impressive effort which carries the seeds of potential revolutionary impact on rural India. I wish Abellon, and I hope in partnership with states and farmers, they will be able to plant 1 Bamboo plant for every citizen in this country."*

## Africa Calling: Meetings with High Commissioners of Rwanda, Namibia and Gabon

Our team had the opportunity to meet with the representatives of three African countries during the quarter – H. E. Mr. Williams Nkurunziza, High Commissioner of Rwanda to India, H.E Dr Samuel Kmbambo, High Commissioner of Namibia to India and H.E. Mr Desire Koumba, Ambassador of Gabon in India.

The meetings were held to explore opportunities in all three countries. The discussions were very fruitful, and both sides have expressed their keenness to collaborate in setting up certain initiatives in their respective countries.

Abellon's integrated model framework would enable us to customize solutions addressing issues unique to each country, thereby assisting them in meet their economic, environmental and social development goals.



Poornakumbha team at a training session



Celebration of Independence Day



Sales Training for Agrisciences Team



Knowledge sharing by the team members

## Book Review

### OUT OF POVERTY

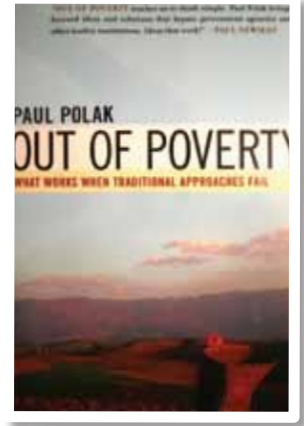
**“Working to alleviate poverty is a lively, exciting field capable of generating new hope and inspiration, not feelings of gloom and doom. Learning the truth about poverty generates disruptive innovations capable of enriching the lives of rich people even more than those of poor people.” - Dr Paul Polak**

Out of Poverty is a book that challenges the classic status quo that nations around the world continue to maintain...of a top down approach to eradicating poverty...pitching instead for a grassroots led approach that would work directly with those affected – the poorest of the poor – in identifying opportunities for their own upliftment, and helping them make the most of these opportunities to emerge out of their poverty.

Two questions that the author has sought answers to for the past 25 years, and that form the basis of the book are: What makes poor people poor? And what can they do about their poverty?

These are the two issues he has tried to address through his organization International Development Enterprises, through which he and others have identified opportunities for ending poverty at the grassroots level, and have developed innovative, low-cost tools that have helped impoverished rural farmers use the market to improve their lives.

Out of Poverty offers a new and promising way to end world poverty, one that honors the entrepreneurial spirit of the poor themselves.



## Movie Review - A Farm for the Future

*Documentary by Rebecca Hosking; Released: 2008*



Originally presented on BBC's Natural World Series, *A Farm for the Future* is a film that raises the issue of how heavily dependent today's farms are on oil and, to a lesser extent, other fossil fuels. However, the film goes beyond the disaster scenario to explore how the fuel/farming/food issue can be solved and how "post-oil farming" can be done.

The most significant factor for achieving success in this transition, is to harness nature as an ally, instead of a pest army that must be dealt with

chemically. Various permaculture techniques, including fully pastured cows and "food forests," shun chemicals and instead use the power of biodiversity to increase yields and reduce labor and fuel use.

*A Farm for the Future* points out how industrial agriculture is a necrotic system—the soil is dead, and without constant inputs of chemical fertilizers, crops would not grow successfully. The only thing that can break this cycle is a move towards sustainable farming techniques, through which soil can be reconditioned and nutrient cycles can be re-established to once again create a living and thriving system.

**Abellon CleanEnergy**

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