

AUGUST 2013



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BIO ENERGY COUNCIL OF INDIA

Tel: +91 79 66309332 Fax: +91 79 66309334

W: www.bioenergyindia.org

E: info@bioenergyindia.org

Supported By

Abellon CleanEnergy

W: www.abelloncleanenergy.com

E: abellon@abelloncleanenergy.com



Policy Initiatives

India

Punjab has potential to generate 600MW power from biomass

According to the Punjab Non-Conventional Energy Minister Bikram Singh Majithia, Punjab has availability of 15mn tonne paddy straw and 5mn tonne other agro residue like cotton and mustard stalk, which has potential to generate 600MW power through biomass.

www.punjabnewslines.com/punjab/punjab-has-600-mw-potential-to-generate-power-from-biomass/82489

Punjab Government creates 'crop biomass cell'

Punjab Government has created a "Crop Biomass Cell" in the Agriculture department for estimation of crop size and biomass of major and minor crops. According to the spokesman of Punjab Agriculture Department the cell will initially comprise of a five-member committee under convenor ship of Dr Anjum Ali, Director General Agriculture (Ext. & A.R) Punjab.

The cell will conduct survey and support agencies working on exploration of crop biomass potential, research and development on reduction in crop residue wastages, collection, transport, efficient use and related issues through Agriculture Mechanisation Research Institute, Multan, University of Agriculture, Faisalabad and other national and provincial institutes dealing with research on energy systems or RE sources at provincial or federal level.

www.brecorder.com/agriculture-a-allied/183/1212171/

Sheila Dikshit asks CPWD to promote green buildings

Delhi CM Sheila Dikshit urged the Central Public Works Department (CPWD) to promote green buildings. "Green buildings alone will be an answer to the kind of power consumption we are witnessing currently" she says.

www.articles.timesofindia.indiatimes.com/2013-07-12/the-good-earth/40535732_1_sheila-dikshit-green-buildings-central-public-works-department

Rs 10,000 crore for sanitation, waste management in villages

The Centre has approved the Maharashtra State Government's Rs 10,392-crore plan for implementation of sanitation and waste management projects in rural areas. The plan will be implemented in 27,902 villages across 33 districts over the next 10 years till 2022.

www.articles.timesofindia.indiatimes.com/2013-07-04/pune/40370246_1_waste-management-sanitation-household-latrines

[World's first standard for waste management sets a precedent](#)

The first international standard for waste management has been developed by the Carbon Trust, which aims to set a global benchmark for good practice. The new waste standard, to be launched later this year, will require organisations to measure, manage and reduce their solid and hazardous waste.

To achieve the standard, businesses and public sector bodies will need to demonstrate that waste streams are being reduced every year, or disposed of more effectively, for example through increased reuse, recycling or energy recovery. The standard will also include a qualitative assessment to show that waste is being managed responsibly or prevented.

[www.edie.net/news/5/World-s-first-standard-for-waste-management-sets-a-precedent-/](http://www.edie.net/news/5/World-s-first-standard-for-waste-management-sets-a-precedent/)

[Germany-styled waste treatment plant in South Goa](#)

The plant has capacity to process 100 tonnes of garbage per shift.

www.articles.timesofindia.indiatimes.com/2013-07-10/goa/40491530_1_garbage-treatment-plant-go-plant-south-go

[The Planning Commission approves Rs 300-crore scheme to strengthen research for climate change](#)

www.hindustantimes.com/India-news/NewDelhi/Rs-300-crore-scheme-to-strengthen-research-for-climate-change-cleared/Article1-108822.aspx

North America

[EPA finalizes napier grass, giant reed RFS pathways](#)

The US EPA has issued a supplemental final rule under the Renewable Fuel Standard (RFS) pertaining to biofuels made from giant reed and napier grass feedstock, effective June. 28. The rule contains a lifecycle GHG analysis of biofuels made from these feedstocks, along with a final regulatory determination that such fuels qualify as cellulosic under the RFS. The rule also addresses concerns over the invasive potential of the feedstocks through a system of registration, recordkeeping and reporting requirements.

www.biomassmagazine.com/articles/9164/epa-finalizes-napier-grass-giant-reed-rfs-pathways

[HDI supports new biogas investment tax credit legislation](#)

H.R. 860: Biogas Investment Tax Credit Act of 2013 would make qualified biogas property eligible for energy tax credit and to permit new clean renewable energy bonds to finance qualified biogas property.

Sponsored by Representative Ron Kind of Wisconsin and Representative John Lewis of Georgia, the legislation seeks to give biogas similar treatment to other alternative fuels in the US.

www.prweb.com/releases/2013/7/prweb10905744.htm

USDA floats rule to sell excess sugar for bioenergy

The USDA announced its final Feedstock Flexibility Program rule to allow sugar processors to sell excess sugar to biofuel makers in order to prevent them from defaulting on loans from the Commodity Credit Corp., the USDA's financing arm.

www.law360.com/energy/articles/460357/usda-floats-rule-to-sell-excess-sugar-for-bioenergy

Europe

EU debates U-turn on biofuels policy

The European Union (EU) has spent the past 10 years nurturing a €15-billion (US\$20-billion) industry that makes transport fuel from food crops such as soya beans and sugar cane to cut GHG emissions. Yet for more than half a decade, scientists have warned that many food-based fuels might actually be boosting emissions relative to fossil fuels.

To limit the same, the EU could change course by setting a cap on the use of food-based biofuel.

www.nature.com/news/eu-debates-u-turn-on-biofuels-policy-1.13313

Other Countries

KfW and Government prepare protocol on waste management in Baku - Azerbaijan's 2nd large city

www.abc.az/eng/news/main/74842.html

Business & Market

India

New environment ministry HQ to generate its own power

The country's first "net zero" conventional energy consumption multi-storey building - the new headquarters of the environment ministry. The building will meet its annual requirement of 14 lakh units of electricity by generating solar power on the site.

www.articles.timesofindia.indiatimes.com/2013-07-13/the-good-earth/40553238_1_cpwd-central-public-works-department-environment-ministry

India adds 566MW of green power in Q1

www.mydigitalfc.com/news/india-adds-566-mw-green-power-q1-287

Amma canteen kitchen to run on biogas

A bio-methanisation unit will soon be set up in Amma Unaivagam at Saravanampatti, which will source all the vegetable waste and food leftover from the canteen (unaivagam) besides organic waste from hotels in the city and turn them into fuel to run the unaivagam kitchen.

The natural gas produced will be utilised at the canteen and if there is surplus it will be used for other purposes.

www.articles.timesofindia.indiatimes.com/2013-07-19/coimbatore/40678065_1_biogas-plant-coimbatore-municipal-corporation-biogas-unit

Punjab Government, Canadian firm ink MoU for biogas project

A MoU was signed between Punjab government and a renowned Canadian Company High Mark Bio-Gas to set up a bio-gas project. According to the agreement, High Mark Bio-Gas Company will set up a pilot project of 22MW of biomass gas in Punjab

www.dailytimes.com.pk/default.asp?page=2013\07\20\story_20-7-2013_pg13_1

IOC-DBT and LanzaTech sign agreement for development of micro-algae technology

www.4-traders.com/INDIAN-OIL-CORPORATION-LI-9743425/news/Indian-Oil-Corporation-Limited--IOC-DBT-and-LanzaTech-sign-agreement-for-development-of-micro-algae-17113218/

Sapphire Energy expands algae biofuel partnership

Sapphire Energy, Inc., and The Linde Group are expanding their partnership to commercialize a new industrial scale conversion technology needed to upgrade algae biomass into crude oil.

Together, the companies will refine the hydrothermal treatment process developed and operated by Sapphire Energy at pilot scale. In addition, they will jointly license and market the technology into an expanded list of industries, including algae, municipal solid waste and farm waste in order to upgrade other biomass sources into energy.

www.renewableenergymagazine.com/article/sapphire-energy-expands-algae-biofuel-partnership-20130719

Leading Indian companies join voluntary GHG emissions

www.cleantechnica.com/2013/07/26/leading-indian-companies-join-voluntary-ghg-emissions-reporting-program/

Leading Indian companies have taken the first major step towards a possible emissions trading scheme, with more than 20 of India's leading companies joining an initiative to voluntarily report their GHG emissions.

Corporation turns waste into gold

In an effort to reduce thin plastic waste in the city, the Corporation of Chennai has announced a new initiative, in which the public and conservancy workers will be given prizes for segregating thin plastic wastes in their day to day garbage cleansing.

www.newindianexpress.com/cities/chennai/Corporation-turns-waste-into-gold/2013/07/31/article1709854.ece

KAU comes out with new method of waste disposal

The microbiology department of the Kerala Agricultural University (KAU) has come up with a simple process of waste treatment that can be used on even very low quantity of waste.

www.newindianexpress.com/cities/thiruvananthapuram/KAU-comes-out-with-new-method-of-waste-disposal/2013/07/26/article1702765.ece

Attero and Shri Ram School join hands to educate children about e-waste hazards

www.indiaprwire.com/pressrelease/environmental-services/20130716212451.htm

North America

Hawaii BioEnergy biofuel to power Alaska Airlines flights

Alaska Airlines and Hawaii BioEnergy LLC have signed an agreement for the Seattle-based air carrier to buy biofuel for its planes.

www.bizjournals.com/pacific/news/2013/07/24/hawaii-bioenergy-biofuel-to-power.html

EIA data shows biopower production up in May

In May, wood and wood-derived fuels were used to generate 3,013 GWh of power, up from 2,594

GWh the month prior. During the first five months of 2013, woody biomass was used to produce 15,132 GWh of power. During the same period of 2012 and 2011, wood and wood-derived fuels were used to generate a relative 15,093 GWh and 14,900 GWh of electricity.

www.biomassmagazine.com/articles/9260/eia-data-shows-biomass-power-production-up-in-may

Scotia Atlantic biomass partners with Ekman

Viridis Scotia Atlantic Biomass Company, Ltd., a wholly owned subsidiary of Viridis Energy Inc., has entered into an agreement with Ekman & Co AB., a wholesaler of forest products. Ekman will serve as Scotia's exclusive worldwide agent to market its entire wood pellet production. The agreement covers an initial period of 24 months and an aggregate projected wood pellet production of up to 240,000 metric tons.

www.woodworkingnetwork.com/wood-market-trends/woodworking-industry-news/production-woodworking-news/Scotia-Atlantic-Biomass-Partners-with-Ekman--217392271.html#sthash.P2wPNeZ4.EjnYtPbT.dpbs

IEA: US bioenergy capacity to reach 14.4GW by 2018

www.biomassmagazine.com/articles/9159/iea-us-bioenergy-capacity-to-reach-14-4-gw-by-2018

Chemtex International and Murphy Brown (MB) sign a long term biomass supply agreement in North Carolina

The agreement covers a number of feedstocks to be grown on approximately 6,000 acres of land owned or controlled by MB. The production of these feedstocks will be a natural complement to livestock production in the state and will bring new opportunities for all farmers.

www.bioenergy-news.com/index.php?/Industry-News?item_id=6522

Waste Management builds a compressed natural gas fueling facility at its Fairborn location

www.wdtn.com/news/local/greene-county/waste-management-going-green-with-fuel

American producer DuPont seeks partner for biofuel project

DuPont, an American chemical company, is seeking potential partners for bio-fuel project to produce cellulosic ethanol. The company is currently engaged in talks with interested parties including fuel companies and agribusinesses in the US, Southeast Asia, China, Brazil and Europe.

DuPont, meanwhile, is set to invest more than \$200m to develop a cellulosic ethanol plant in Nevada, Iowa, due to open in 2014. The plant is estimated to have an annual production rate of 30 million gallons of ethanol from corn-plant residue left in fields after farmers harvest their grain.

www.biofuelsandbiomass.energy-business-review.com/news/american-producer-dupont-seeks-partner-for-biofuel-project-220713

DoE to invest \$13mn in drop-in biofuels

www.biomassmagazine.com/articles/9246/doe-to-invest-13m-in-drop-in-biofuels/

Sundrop Fuels awards \$500mn Louisiana biofuel plant contract to IHI E&C

Located one mile west of Alexandria, the facility is estimated to produce 60mn gallons of finished gasoline from natural gas per annum.

www.biofuelsandbiomass.energy-business-review.com/news/sundrop-fuels-awards-500m-louisiana-biofuel-plant-contract-to-ihl-ec-170713

Innoventé to build \$20mn biofuel plant in Quebec, Canada

The plant has a production capacity of 7.2MW.

www.biofuelsandbiomass.energy-business-review.com/news/innovent-to-build-20m-biofuel-plant-in-quebec-canada-100713

Biodiesel of Las Vegas receives BQ-9000 producer certification

Biodiesel of Las Vegas has received its BQ-9000 certification from the National Biodiesel Board, making it the first and only biodiesel producer in Nevada to receive this certification. The Las Vegas facility is among a select group of 46 other biodiesel producers in the US.

The certification showed their continued commitment to fuel quality and will help ensure that they are delivering the highest quality fuel to their customers.

www.biodieselmagazine.com/articles/9196/biodiesel-of-las-vegas-receives-bq-9000-producer-certification

Blue Sphere to receive \$18mn for a project in US

The project, in collaboration with Germany-based Biogas Nord, will see a 5.2MW AD located in North Carolina which Blue Sphere hopes to complete by the third quarter of 2014.

www.bioenergy-news.com/index.php?/Industry-News?item_id=6527

A waste-water plant in Chiclana de la Frontera, Cádiz

The plant will be first in the world to convert sewage into clean fuel to be used in vehicles. Under the project, dubbed All-gas, the plant is using sunlight to create algae, which in turn is converted to gas.

By 2015, All-gas plans to be producing €100,000 of bio-fuel annually, on 10 hectares of land, which would be enough to power 200 cars or 10 trucks for the year.

www.digitaljournal.com/article/353875

Texas-based waste management may invest Rs 208 crore in electronic waste recycling company Attero Recycling

www.articles.economicstimes.indiatimes.com/2013-07-04/news/40371872_1_attero-recycling-waste-management-electronic-waste

Europe

Stobart Biomass secures £75mn fuel supply contract for Evermore Renewable Energy

As per the contract, Stobart will supply over 115,000 tons of recycled wood every year for nearly 15 years to fuel the CHP station, which has an estimated power generation capacity of 5.8MWe.

www.biofuelsandbiomass.energy-business-review.com/news/stobart-biomass-

[secures-75m-fuel-supply-contract-for-evermore-renewable-energy-310713](#)

UK-based Renewable Energy Systems Ltd. approves 100MW biopower plant in Northumberland

www.biomassmagazine.com/articles/9262/uk-approves-100-mw-biomass-plant-in-northumberland

UK GIB, Foresight invest £20mn for biomass project in Northern Ireland

GIB's first investment in Northern Ireland is part of a £81mn plan to develop the biomass plant with an estimated capacity of 15.8MWe. The CHP station will provide clean electricity for more than 25,000 homes a year over its 20-year lifetime.

www.biofuelsandbiomass.energy-business-review.com/news/uk-gib-foresight-invest-20m-for-biomass-project-in-northern-ireland-300713

DECC approves construction of £250m North Blyth biomass project in UK

The 99.9MW North Blyth plant, is estimated to supply clean energy sufficient to power 170,000 UK households per annum using sustainably sourced wood-based fuel.

www.biofuelsandbiomass.energy-business-review.com/news/decc-approves-construction-of-250m-north-blyth-biomass-project-260713

Helius CoRDe Limited biopower starts commercial operation

The plant uses by-products from nearby malt whisky distilleries to produce renewable energy enough to power 9000 homes and a liquid animal feed product (pot ale syrup), and will be accredited as a CHP plant under Renewables Obligation Legislation.

www.renewableenergyfocus.com/view/33445/biomass-energy-plant-starts-commercial-operation/

Genesis Biopartner opens €5mn biogas co-generation plant in Romania

The biogas plant has a capacity of 1MW and will initially use corn silage for feed-stock. but in the future, Genesis Biopartner will use the organic waste from the CrisTim meat factory, or collected from the county, and use it to produce energy.

www.romania-insider.com/genesis-biopartner-opens-eur-5-mln-biogas-co-generation-plant-in-romania-wants-10-more-similar-units/103529/

Liverpool University awarded GBP1.8mn for biomass-to-chemicals project

www.agra-net.com/portal2/renchem/home.jsp?template=newsarticle&artid=20018056746&pubid=ag134

The University of Liverpool has been awarded funding to develop so-called 2nd generation renewable chemicals for use in the manufacture of materials, plastics, solvents and pharmaceuticals.

Clarke Energy wins CHP biogas orders in the UK

www.cospp.com/articles/2013/07/clarke-energy-wins-chp-biogas-orders-in-the-uk.html

Sapphire Energy and Linde Group expand partnership

Algae-based oil production company Sapphire Energy (SE) is to commercialise a new industrial scale conversion technology needed to upgrade algae biomass into crude oil with partner Linde Group. The pair will refine the hydrothermal treatment process developed and operated by SE at pilot-scale.

www.bioenergy-news.com/index.php?/Industry-News?item_id=6520

Fife Council is building an AD facility at Lochhead landfill site in Dunfermline

The AD plant will convert methane extracted from up to 40,000 tonnes of local food and garden waste into up to 1.4MW of renewable electricity and heat. The heat will supply the council's existing district heating system and has the potential to meet all of the heating needs at the nearby Queen Margaret Hospital.

The facility will reduce CO₂ emissions by more than 7,200 tonnes per year, the equivalent of taking 2,400 cars off the roads annually.

www.bioenergy-news.com/index.php?/Industry-News?item_id=6552

Energos to build UK AD plant

Based at AmeyCepsa's Milton Keynes Waste Recovery Park in the UK, the facility will convert 90,000 tonnes of non-recyclable household waste into 7MW of electricity – sufficient to power approximately 11,000 homes.

www.bioenergy-news.com/index.php?/Industry-News?item_id=6564

CH4 Biogas to open energy conversion plant in Batavia

www.bizjournals.com/buffalo/news/2013/07/05/ch4-biogas-targets-batavia-for-new.html

Covanta secures 40,000 TPA solid waste disposal deal in Connecticut

New Jersey based waste to energy firm, Covanta Energy (NYSE:CVA), has reached a new agreement with the City of Waterbury, Connecticut to dispose of the City's 40,000 tons (36,300 tonnes) of municipal solid waste each year.

Under the new agreement, the city's waste will be treated at its 16.3MW WTE plant in Bristol, Connecticut, and will also be responsible for handling 5000 tons (4500 tonnes) of recyclables.

www.waste-management-world.com/articles/2013/07/covanta-secures-40-000-tpa-solid-waste-disposal-deal-in-connecticut.html

Africa

Bamboo charcoal technologies introduced in Ghana

The International Network for Bamboo and Rattan (INBAR), is promoting bamboo charcoal technologies in Ghana, which have the potential to jump-start the country's bio-energy sector and generate and sustain the charcoal business. It will also help to slow down deforestation and fight climate change.

www.gbcghana.com/index.php?id=1.1462453

Other Countries

Australian abattoir to construct a biogas system

Based in New South Wales, the AU\$43mn system will reduce its carbon emission by 95% while cutting utility cost of processing each head of cattle.

www.bioenergy-news.com/index.php?/Industry-News?item_id=6471

New partnership for Middle East biogas project signed

A biogas project in Lebanon operated by environmental solutions provider Averda International has attached a technology provider to get it moving forward.

An on-site power facility at a landfill site in Naameh will transform waste into energy via a GE Jenbacher J312 landfill gas engine. It has the potential to generate 637kW of renewable electricity and go towards eliminating the equivalent of 12,400 tonnes of CO₂.

The project will be at pilot stage to begin with and expand to utilise the whole Naameh site capacity if successful.

www.bioenergy-news.com/index.php?/Industry-News?item_id=6532

Coal emissions to produce biofuel in Australian plant

Algae.Tec has signed a deal with power company Macquarie Generation to set up a carbon capture and biofuels production plant next to Macquarie's Bayswater power station, in North of Sydney.

www.upi.com/Business_News/Energy-Resources/2013/07/03/Coal-emissions-to-produce-biofuel-in-Australian-plant/UPI-63831372865750/

Phl launch coco-biofuel to cut emissions

www.phlstar.com/headlines/2013/07/30/1033931/phl-launch-coco-biofuel-cut-emissions

Chemrez Tech backs bid for higher biodiesel blend

Chemrez Technologies expressed support for the recommendation of the National Biofuels Board (NBB) to increase the mandated biodiesel blend from 2% to 5% under the Biofuels Act of 2006.

Under the said law, the blend may be increased taking into account considerations such as domestic supply and availability of locally sourced biodiesel.

www.businessmirror.com.ph/index.php/en/business/companies/16530-chemrez-tech-backs-bid-for-higher-biodiesel-blend

Biodiesel from McDonald's used cooking oil in Dubai

www.ens-newswire.com/2013/07/01/mcdonalds-uae-gives-cooking-oil-2nd-life-as-biodiesel/

Del Monte in UAE to use biodiesel in trucks

www.domesticfuel.com/2013/07/05/del-monte-in-uae-to-use-biodiesel-in-delivery-trucks/

Native algae biofuel could make Australia oil rich

According to the research done by University of Queensland experts, Australia could become a major oil exporter like the Middle East if it starts farming native algae.

www.smh.com.au/national/native-algae-biofuel-could-make-australia-oil-rich-20130724-2qibs.html

Prawn company and BASF sign deal to work in algae technology together

www.fis.com/fis/worldnews/worldnews.asp?monthyear=&day=12&id=62148&l=e&special=0&ndb=0

Klean Industries nominated for best Waste Management Technology Company Award

Klean Industries is an industry leading waste to energy solutions provider that develops, builds, owns and operates tire pyrolysis, plastics to oil, and municipal solid waste recycling plants, which has been nominated for the Global Cleantech Cluster Association Awards of 2013.

www.prweb.com/releases/klean/industries/prweb10901750.htm

The Civic body launches waste management system in Dubai

www.zawya.com/story/New_waste_management_system_launched_in_Dubai-GN_09072013_100725/

Finance & Market

North America

[DoE announces \\$13mn investment in 4 advanced biofuel projects](#)

The US DoE has announced four R&D projects to bring next generation biofuels on line faster and drive down the cost of producing gasoline, diesel and jet fuels from biomass. The projects – located in Oklahoma, Tennessee, Utah and Wisconsin – represent a \$13mn Energy Department investment.

The projects selected include:

- ⌚ **Ceramatec (up to \$3.3 million; Salt Lake City, Utah):** Ceramatec will utilize an efficient electrochemical deoxygenation process to develop cost-effective technology to separate oxygen from bio-oil. This project will help produce hydrocarbon products suitable for further processing in conventional petroleum refineries.
- ⌚ **Oak Ridge National Laboratory (up to \$2.1 million; Oak Ridge, Tenn.):** Oak Ridge National Laboratory will use a microbial electrolysis process to efficiently remove the hydrogen from the water found in bio-oil. This technology will help reduce the corrosivity of bio-oil and improve the efficiency of converting hydrogen and biomass to biofuels.
- ⌚ **University of Oklahoma (up to \$4 million; Norman, Okla.):** The University of Oklahoma will investigate two methods – thermal fractionation and supercritical solvent extraction – to maximize the amount of renewable carbon and hydrogen that can be extracted from biomass and converted to a refinery-compatible intermediate suitable for final upgrading to a transportation fuel.
- ⌚ **Virent Inc. (up to \$4 million; Madison, Wis.):** Virent will develop an innovative separation process which uses its BioForming technology to efficiently convert carbon from lignocellulosic biomass into hydrocarbon fuels. Virent will work to improve the overall carbon conversion efficiency of biomass – helping to reduce the cost of producing hydrocarbon biofuels that work with our existing transportation fuel infrastructure and are capable of meeting the Renewable Fuel Standard.

www.biomassmagazine.com/articles/9160/doe-announces-investment-in-4-advanced-biofuel-projects

[USDA announces \\$14mn grant to pellet producers under Bioenergy Program for advanced biofuels](#)

biomassmagazine.com/articles/9142/pellet-producers-receive-payments-under-bioenergy-program-for-advanced-biofuels/

Gerri Greenham acquires common shares of Solarvest BioEnergy Inc. for investment purposes

www.marketwired.com/press-release/gerri-greenham-acquires-common-shares-solarvest-bioenergy-inc-investment-purposes-1809095.htm

C5-6, UW-Stevens Point receives \$225000 grant from National Science Foundation

Researchers at C5-6 Technologies and the University of Wisconsin-Stevens Point will develop next-generation biofuels and help move beyond the food vs. fuel debate that surrounds corn-based ethanol.

www.jsonline.com/business/c5-6-uw-stevens-point-get-grant-for-biofuel-initiative-b9949866z1-214684751.html

Biofuels to attract \$69bn over next decade: Report from Navigant Consulting Inc. (NCI)

www.bloomberg.com/news/2013-07-19/biofuels-to-attract-69-billion-over-next-decade-navigant-says.html

Appalachian professors receive \$45,000 grant to develop economical biomass conversion

www.news.appstate.edu/2013/07/23/economical-biomass-conversion/

Europe

Europe to invest €3.8bn in the biobased economy

The European Commission proposed a €3.8bn Public Private Partnership (PPP) on bio-based industries, in order to accelerate the commercialization of biobased products in Europe. The European Commission will invest €1bn and the industry €2.8bn, from 2014 to 2020, to boost market uptake of new biobased products that are "made in Europe".

The partnership promotes the use of various sources of sustainable biomass and waste to produce everyday products such as food, feed, chemicals and fuels.

www.theenergycollective.com/dgreenblogger/248146/europe-invest-38bn-biobased-economy

UK's Green Investment Bank provides funding for £1.2mn biomass boiler

www.newenergyworldnetwork.com/investor-news/renewable-energy-news/by-technology/biofuel-biomass/uks-green-investment-bank-provides-funding-for-1-2m-biomass-boiler.html

Large-scale UK indie RE investment reaches £768mn

Commercial-scale independent RE projects are becoming a force for change, generating three quarters of a billion pounds worth of energy a year, according to the UK's leading purchaser of energy generated by the indie sector.

SmartestEnergy's Energy Entrepreneur Report 2013, says businesses, communities, farmers and the public sector are now generating £768mn worth of electricity a year, enough to power 3.9mn households.

www.greenwisebusiness.co.uk/news/largescale-uk-indie-renewable-energy-investment-reaches-768m-4019.aspx

Africa

France hands a \$12mn credit for Tanzanian renewables

Tanzania's Bank of Africa received a \$12mn credit facility from the French Agency for Development (AFD) to help propel RE projects in the country. The loan will cover feasibility studies, project document preparation for government approval, and risk assessment.

www.ae-africa.com/read_article.php?NID=4972

Other Countries

Sinopec to invest billions in green development

Sinopec Group, Asia's largest refiner, will invest about \$3.6bn to upgrade its current production equipment and operation for environmental protection in efforts to realize green development and cope with climate change.

www.ecns.cn/business/2013/07-31/75321.shtml

Research & Development

North America

[Iowa State University uses ultrasound to enhance biofuel production](#)

Research by associate professor of agricultural and biosystems engineering, has shown that "pretreating" a wide variety of feedstocks (including switch grass, corn stover, and soft wood) with ultrasound consistently enhances the chemical reactions necessary to convert the biomass into high-value fuels and chemicals.

www.agriview.com/briefs/crop/ultrasound-enhancing-biofuel-production/article_23ff8068-e408-11e2-89c4-001a4bcf887a.html

[Marine microalgae biomass production boosted for aquaculture feed](#)

A team of scientists from University of Almería (UA) developed a process to obtain microalgae that increased biomass production that is rich in polyunsaturated fat for aquaculture species.

www.fis.com/fis/worldnews/worldnews.asp?monthyear=&day=16&id=62232&l=e&special=&ndb=1%20target=

Europe

[Worcester Polytechnic students use Syrris technology to teach biodiesel](#)

www.biodieselmagazine.com/articles/9224/worcester-polytechnic-uses-syrris-technology-to-teach-biodiesel

[Turning forest residues to biofuel](#)

According to the new research results of the VTT Technical Research Centre of Finland, lignocellulosic biomass can be used in the production of high-quality biofuels.

www.tgdaily.com/general-sciences-features/72357-turning-forest-residues-to-biofuel

Climate & Environment Change

India

Climate change being felt by Hyderabad denizens: Survey by TERI

A survey conducted by The Energy and Resources Institute (TERI), revealed that 60% of the total respondents in Hyderabad strongly believed that climate change is happening.

www.articles.timesofindia.indiatimes.com/2013-06-07/hyderabad/39814278_1_climate-change-environmental-issues-air-quality

North America

Climate Change is the next \$10tn opportunity: Mr. Obama

www.finance.yahoo.com/blogs/the-exchange/climate-change-next-10-trillion-opportunity-184439174.html

DoE: Climate change to affect energy

According to the report released by DoE, increasing temperatures, decreasing water availability, more intense storm events, and sea level rise will each independently, and in some cases in combination, affect the ability of the US to produce and transmit electricity from fossil, nuclear, and existing and emerging RE sources. These changes are also projected to affect the nation's demand for energy and its ability to access, produce, and distribute oil and natural gas.

www.upi.com/Business_News/Energy-Resources/2013/07/12/DOE-climate-change-to-affect-energy/UPI-37001373642234/

Government launched \$25mn environmental project in Guatemala

The program, "Climate, Naturaleza y Comunidades en Guatemala" ("Climate, Nature and Communities in Guatemala," or CNCG), will operate in four regions of the country, with the objective of conserving natural resources and supporting efforts to reduce the consequences of extreme global weather changes.

www.ticotimes.net/More-news/News-Briefs/USAID-green-groups-target-climate-change-in-Guatemala_Friday-July-26-2013

Europe

Climate change could mean extinction for Iberian lynx in 50 years: Research

As per the research, Iberian lynx could become the first cat species in at least 2,000 years to become extinct, largely because of the decline of the European rabbit, which makes up 80% of the cat's diet.

www.latimes.com/news/science/sciencenow/la-sci-sn-lynx-extinction-climate-change-20130722,0,7785805.story