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Policy Initiatives

North America

[ASABE announces international standards project for biomass fuels](#)

The American Society of Agricultural and Biological Engineers has announced that the international community has approved a new International Organization to develop a standard for thermally treated and densified biomass fuels.

The document, designated ISO 17225-8 will define the fuel quality classes and specifications of graded, densified, solid biofuels produced from thermally treated biomass. It will cover pellets and briquettes from various raw materials and will apply to fuels intended for either industrial or non-industrial use. This project is currently at the Working Draft stage.

www.biomassmagazine.com/articles/10102/asabe-announces-international-standards-project-for-biomass-fuels

[Investors say shelving low-carbon policies would be 'reckless'](#)

The trade body for the sustainable investment industry has asked to deliver a budget statement that supports long-term investment and keeps in place economic measures to boost the low-carbon economy.

www.blueandgreentomorrow.com/2014/03/18/budget-2014-investors-say-shelving-low-carbon-policies-would-be-reckless/

Europe

[Europe needs a better biofuels policy](#)

Private sector biofuels investment has been dropped down by the Renewable Energy Directive, and only a clear, stable policy offering certainty up until 2030 will revive it.

Biofuels investments are capital intensive and require long-term stability. Even before 2012, the Commission's zeal to change rules and formulas several times a year reduced biofuels investment activity from tens of billions to around €100 million annually.

Indeed, a total of two large biofuel investments were entirely launched and completed post-RED. All others were launched prior to RED passage. Those two projects, one cellulosic and one conventional ethanol, produce 0.02% of EU's transport sector energy. At this pace, the RED will inspire 0.05% of EU transport sector investments by 2020, not the 5% planned. Only a policy

with stability and clarity from 2014/5 all the way through to 2030 will result in investments.
www.euractiv.com/energy/better-biofuels-policy-analysis-533863

Africa

Indonesia's government proposes new biofuel pricing

The Indonesian government is planning to propose a new provision that will fix biofuel prices for an imperative biofuel blending programme.

The programme is expected to come into effect in 2015 and is being established in a bid to entice more producers to provide biofuel for the domestic marketplace.

Indonesia is hoping to save \$3.9 million (€2.8 million) from the mandatory programme. Currently, Indonesia has a total of 4.5 million kilolitres of biofuel all set for production, and has a potential biofuel production capacity of 5.6 million kilolitres per year.

www.blackseagrain.net/novosti/indonesia2019s-government-proposes-new-biofuel-pricing

Argentina takes EU biodiesel antidumping measures to WTO

Argentina formally requested the World Trade Organization's (WTO) Dispute Settlement Body (DSB) for the establishment of a panel to address the European Union's antidumping measures against Argentine bio-diesel. The initiative was rejected by the EU in March.

The EU decision to impose definitive antidumping rights at the end of November 2013 closed the European market to Argentine exports of biodiesel.

The release recalls that since 2009 Argentina became the main provider of biodiesel to the EU, with sales of 1.847bn dollars in 2011, which represented 13% of all Argentine exports to the EU.

www.en.mercopress.com/2014/03/29/argentina-takes-eu-biodiesel-antidumping-measures-to-wto

Business & Market

India

Erode farmers promote use of biogas

A farmers' organisation in Erode held a demonstration using a tractor and a motor cycle powered by biogas at a city college. The purpose of the demo is to encourage the use of biogas. A tractor and a two-wheeler powered through methane were exhibited at the college grounds. Their tanks were removed and modified for the purpose. Methane gas used was extracted from vegetable and animal wastes. To pump the gas requires expensive equipment costing Rs20 lacs.

www.timesofindia.indiatimes.com/city/coimbatore/Erode-farmers-promote-use-of-biogas/articleshow/32595285.cms

India, Australia to begin joint research in biotechnology under IABF programme

India and Australia will soon begin joint research in priority areas of biotechnology to increase the uptake of leading edge Science and Technology (S&T) by supporting collaboration between Indian and Australian researchers in strategically focussed, scientific research and technology projects.

The priority areas under this Indo-Australian Biotechnology Fund (IABF) programme include bio-medical devices and implants; stem cells; vaccines; medical diagnostics; transgenic crops and marker-assisted breeding; nutraceuticals and functional foods; bioremediation; and bioenergy and biofuels.

www.pharmabiz.com/NewsDetails.aspx?aid=80986&sid=1

DSI unit wins India contract

Passavant-Roediger GmbH, a wholly owned German subsidiary of Drake & Scull International (DSI) PJSC, announced that it has been awarded two major contracts for a combined value of Dh50 million for Water and Wastewater Treatment Plants (WWTP) in India.

The new projects will help the company to consolidate its position in the growing water and waste water treatment sector in the country.

www.emirates247.com/business/economy-finance/dsi-unit-wins-india-contract-2014-03-05-1.540557

Construction starts on US landfill biogas plant

A new biogas plant is being built at the Crapo Hill landfill site in Dartmouth in Massachusetts, the US. Commonwealth Resource Management (CRM) is developing the facility, in cooperation with the landfill owner, Greater New Bedford Regional Refuse Management District.

The pilot phase of the project will be used to test the feasibility of making beneficial use of some portion of the residuals from the anaerobic digestion process within existing operations at the landfill. This new plant is the first of its kind to be sited at an operating landfill in the state, and the first to produce biogas for use in an existing landfill gas-to-energy facility.

www.bioenergy-news.com/index.php?/Industry-News?item_id=7488

Cool Planet to start building renewables plant

Energy Systems, a technology company producing green fuels and biochar products, has started building its first commercial facility in the US state of Louisiana. Project Genesis, the new facility is designed to produce 10 million gallons a year of high octane renewable petrol blendstocks, as well as biochar, all made from sustainable wood residues.

The company's strategic investors include BP, Google Ventures, Energy Technology Ventures (GE, ConocoPhillips, NRG Energy), and the Constellation division of Exelon.

www.bioenergy-news.com/index.php?/Industry-News?item_id=7486

Ensyn and Memorial Hospital sign biofuel supply agreement

Ensyn Fuels, a wholly-owned subsidiary of Ensyn Corporation, has signed a contract with Memorial Hospital of North Conway, New Hampshire for the supply of biofuel, Ensyn's advanced cellulosic biofuel. Under the contract signed with Memorial, Ensyn Fuels will provide Memorial with approximately 300,000 gallons/year of biofuel for a renewable term of five years, commencing deliveries as early as April, 2014.

www.marketwired.com/press-release/ensyn-and-memorial-hospital-sign-rfo-biofuel-supply-agreement-1886341.htm

MagneGas unveils mobile liquid biomass technology

US-based MagneGas has unveiled its mobile liquid biomass solution technology, which turns liquid waste such as sewage, sludge, agricultural manures and bio-diesel products into sterilized water. The new MagneGas technology is said to use the company's Plasma Arc Flow process that gasifies the liquid wastes.

According to the company, the MagneGas created can be used for metal working, cooking, heating, powering bi-fuel automobiles and more. MagneGas CEO Ermanno Santilli said the company is preparing to solicit the Environmental Protection Agency (EPA) for approval of the technology.

www.biofuelsandbiomass.energy-business-review.com/news/magnegas-unveils-mobile-liquid-biomass-technology-250314-4203049

Pittsburgh startup introduces biofuel conversion system

www.bizjournals.com/pittsburgh/blog/energy/2014/03/pittsburgh-startup-introduces-biofuel-conversion.html

2G CENERGY lands 9.4MW bioenergy deal

Multimillion dollar order signed for a biogas CHP cogeneration plant to be installed in Grove City, Ohio. According to 2G CENERGY Power Systems Technologies Inc., the \$8 million (USD) biogas project will be the world's largest waste-to-energy recycling facility when completed.

Beyond the modular energy conversion system, 2G CENERGY is also supplying the gas treatment technology package, as well as an advanced combustion management system. The automation and control technology enables the operator to monitor their energy efficiency and lower the environmental impact, reducing CO₂ and NO_x emissions to low, insignificant levels.

www.renewableenergyfocus.com/view/37710/2g-cenergy-lands-9-4mw-bioenergy-deal/

Europe

Midland Bio Energy to expand following move to new site

Pellet fuel supplier Midland Bio Energy has announced ambitious plans for its business this year. The company recently moved into a new, larger premises around 10 miles from its previous site. Its 6000 ft is located in Nuneaton, Warwickshire.

www.bioenergy-news.com/index.php?/Industry-News?item_id=7490

French biomass group has grand plans for biogas plants

Albioma, a French biomass group specialising in generating electricity from sugarcane waste in France's overseas territories, has launched its first two biogas plants to capitalise on new regulations in the country.

The group opened two biogas plants in the region – with capacities of 2 and 0.5MW respectively – around Poitiers in 2013 and has plans to open three or four more this year.

In the pipeline are 22 methanisation plants, in which it will invest about €200 million. These will use manure, agriculture waste and slaughterhouse waste and will be built in agricultural regions in the west and northwest of France. Albioma has installed power capacity of 700MW, consisting of 627MW biomass, 70MW solar and 3MW biogas. More than half of this capacity is based in French overseas territories like the islands of Martinique and Guadeloupe. The group recently bought a 60MW sugarcane-based biomass plant in Brazil for €43 million and has another 195MW in Mauritius.

www.bioenergy-news.com/index.php?/Industry-News?item_id=7512

React Energy buys GG eco solutions to expand in U.K. biomass

React Energy Plc, a developer of clean-energy facilities in the U.K. and Ireland, bought GG Eco Solutions Ltd. to expand in Britain's bioenergy industry.

React paid about 2.3 million pounds (\$3.8 million) for GG Eco, which develops wood-powered biomass heat plants in the UK.

The Department of Energy and Climate Change estimates that bioenergy plants may meet 8 percent to 11 percent of the U.K.'s primary energy demand by 2020.

www.bloomberg.com/news/2014-03-06/react-energy-buys-gg-eco-solutions-to-expand-in-u-k-biomass.html

Kronospan gets permit for biomass plant in Chirk

The particleboard and MDF/HDF manufacturer Kronospan Ltd. received a permit to build a new biomass power plant at a site around 40 ha in size at its Chirk headquarters in Wales on 3 February.

www.euwid-wood-products.com/news/wood-based-panels/single/Artikel/kronospan-gets-permit-for-biomass-plant-in-chirk.html

TEG group's london biomass plant acquired by new JV

A biomass plant in Dagenham, UK, previously owned by green power firm TEG Group has been handed over to new owners TEG Biogas.

The group will provide ongoing operating and maintenance services to TEG Biogas under a 15-year contract, with annual revenues of approximately £1.3 million.

Generating approximately 1.4MW of electricity, the plant - Central London's first - will produce enough energy to power approximately 2,000 homes and each year produce over 36,000 tonnes in AD digestate and 14,000 tonnes of compost for agricultural use.

www.bioenergy-news.com/index.php?/Industry-News?item_id=7513

Neste's aviation biofuel wins Sustainability award

Dutch refiner Neste Oil has won an award for its sustainable aviation biofuel. The Sustainable Bio Award competition recognizes innovations that promote the development of sustainably produced biofuels and bio-products. The joint initiative received the top award in the Collaboration of the Year category.

Neste's NEXBTL renewable aviation fuel, made from vegetable oil and waste oil feedstocks, enables airlines to reduce their greenhouse gas emissions and has been tested successfully on commercial flights.

www.domesticfuel.com/2014/03/07/nestes-aviation-biofuel-wins-sustainability-award/

Anaergia commissions new biogas facility in UK

UK-based Anaergia's subsidiary UTS Biogas has commissioned a new 1.5MW biogas facility at Dagenham, London for TEG Environmental.

Located on a newly developed site in the London Sustainable Industries Park, the Dagenham facility is a combination of in-vessel composting and anaerobic digestion technology. It has a processing capacity of about 50,000 tonnes of organic waste per year.

About 1.5MW of electricity produced at the facility would suffice to power about 2,000 homes.

www.biofuelsandbiomass.energy-business-review.com/news/anaergia-commissions-new-biogas-facility-in-uk-260314-4203847

Enel Green, SECI Energia to build biomass project in Italy

Enel Green Power in association with SECI Energia has launched a new project for building the Powercrop biomass plant in the town of Russi, near Ravenna in Italy.

The plant, which will replace the Eridania sugar refinery, will require an investment of €126m.

Powercrop biomass plant is estimated to have a total annual output of 222GWh, which would be enough to address the needs of 84 thousand households, while reducing the atmospheric emissions of 117 thousand tonnes of CO2 per annum.

The facility is estimated to use about 270 thousand tonnes local chipped virgin wood to run the installed power generation capacity of 30MW.

The biogas plant has a power generation capacity of 1MW and will use 18 thousand tonnes of corn silage and 26 thousand tonnes of pig manure per annum from local producers.

www.biofuelsandbiomass.energy-business-review.com/news/enel-green-seci-energia-launch-new-biomass-project-in-italy-240314-4202082

Ackerly, Abengoa recognized for contributions to biomass industry

Leaders in the biomass industry were recognized on the first day of the 2014 International Biomass Conference and Expo, March 25, in Orlando.

John Ackerly, president of the Alliance for Green Heat, received the 2014 Excellence in Bioenergy award for advancing the biomass-to-energy industry through education and advocacy.

Abengoa Bioenergy received the 2014 Groundbreaker of the Year award for its work in developing its cellulosic ethanol project, soon undergoing commissioning at Hugoton, Kan.

www.ethanolproducer.com/articles/10875/ackerly-abengoa-recognized-for-contributions-to-biomass-industry

Italian companies to build 30MW biomass plant

Two Italy-based companies are to develop a 30MW biomass plant in the country's Ravenna region. The Powercorp project, a joint venture between Enel Green Power and Seci Energia, will be built on an industrial site previously occupied the Eridania sugar refinery.

Fuelled by locally-sourced woodchips, the plant will have an estimated total annual output of 222GWh. The €126 million facility will also feature a 1MW biogas plant that will use silage and pig manure from local producers. Enel and Seci bought Italian developer Powercrop last year after the deal was cleared by the European Commission.

www.bioenergy-news.com/index.php?/Industry-News?item_id=7562

Gruppo AB plans new biogas cogen installations in Bulgaria

Italy's Gruppo AB, which is among the leading European providers of cogeneration solutions for the industry, agriculture and municipalities, announced it will be present for the first time at the SE European Exhibition on Energy Efficiency and Renewable Energy in Sofia, 5-7 March, at Inter Expo Center.

After this first successful case study in Bulgaria, AB Energy is currently working on another two plants with capacity of 0,5 MWe and 0,888 MW, respectively, with more installations to follow by end-2014.

www.publics.bg/en/news/10918/

Africa

Boeing and SAA collaborating on biofuel

Boeing is collaborating with South African Airways (SAA) and the Roundtable on Sustainable

Biomaterials (RSB) to expand opportunities for smallholder farmers in Southern Africa to grow crops for the sustainable production of biofuels.

The programme is part of a global effort by Boeing, RSB and other partners to help farmers with small plots of land gain access to markets for sustainable biofuels and biomaterials. In the coming months, Boeing and RSB will work with Southern African stakeholders to create pilot programmes to build knowledge and skills among groups of farmers who want to certify their crops as sustainable.

www.defenceweb.co.za/index.php?option=com_content&view=article&id=33865:boeing-and-saa-collaborating-on-biofuel&catid=114:civil-aviation&Itemid=24

Asia

GE, GNS to develop biogas-to-power solution for Malaysia

General Electric (GE) and Green & Smart (GNS) are set to jointly develop a Palm Oil Mill Effluent (POME) biogas-to-power solution for Malaysian power market, as part of an agreement. The agreement sets up the general framework for the companies to cooperate with each other in information exchange.

Under the agreement, GE will support a joint development program on POME biogas-to-power potential within the Malaysian palm industry by providing expertise in gas engines technology and resources.

The alliance will use GNS' technology to provide a solution for waste-to-power, whereas GE will provide its engines featuring long service intervals, an engine design and low fuel consumption.

www.biofuelsandbiomass.energy-business-review.com/news/ge-gns-to-develop-biogas-to-power-solution-for-malaysia-240314-4202414

Greenergy to sell stake in Philippines biomass project

Greenergy Holdings is reported to be selling its 60% stake in a company building an 18MW biomass power plant in Negros Occidental, a Philippines province, to a German hedge fund.

www.bioenergy-news.com/index.php?/Industry-News?item_id=7565

Aboitiz pioneers biogas-for-transport venture in PH

Aseagas Corp of the Aboitiz Group is investing \$50 million in a biogas plant targeting the emerging gas-run transport sector that is centered on large fleets of heavy vehicles.

This is the first biogas-for-transport venture for the Aboitiz group and is a pioneering business model in the Philippines. Aseagas can also build biogas plants in other parts of the Philippines and even in other countries in Asia using the same technology.

Aseagas is a joint venture formed in 2012 between Aboitiz Equity Ventures and Gazasia Ltd., a UK-based alternative fuel company, providing waste-to-fuel solutions.

www.eco-business.com/news/abotiz-pioneers-biogas-transport-venture-ph/

Finance & Investment

North America

[Indiana companies receive biofuel funding](#)

Several Indiana companies are involved in a United States Department of Agriculture program providing nearly \$60 million to advanced biofuel producers. Among the recipients is the Louis Dreyfus Soybean Processing and Biofuel Plant in Claypool, which is being awarded more than \$3.7 million.

www.insideindianabusiness.com/newsitem.asp?ID=64045#middle

[CEC approves funding for new Pixley Biogas facility](#)

US-based Pixley Biogas has secured approval of the California Energy Commission (CEC) for a funding of \$4.68m.

The company plans to build a new \$10m anaerobic digester, which will use dairy farm manure to produce 266 MMBtu of biogas per day.

The gas produced at the facility will be used to power an adjacent ethanol plant, the Calgren Renewable Fuels Biorefinery having capacity to produce 58 million gallons per year (MMgy).

CEC has also granted approval for a \$4.9m grant to Encinitas, Community Fuels to expand biodiesel production capacity at its Port of Stockton facility from the current 10MMgy to about 15MMgy.

www.biofuelsandbiomass.energy-business-review.com/news/cec-approves-funding-for-new-pixley-biogas-facility-180314-4198692

[Forth Energy shelves plan for £1.1bn biomass investment](#)

www.businessgreen.com/bg/news/2336747/forth-energy-shelves-plan-for-gbp11bn-biomass-investment

Europe

[Green Investment Bank funds bioenergy projects](#)

The U.K. Green Investment Bank has announced its support for several bioenergy projects in recent weeks, including investments in a waste-fueled power plant and a project to install biomass-fired boilers.

www.biomassmagazine.com/articles/10187/green-investment-bank-funds-bioenergy-projects

€250m for energy from biomass in France

The European Investment Bank (EIB) and several French commercial banks will provide credit totalling €250m for the development of biomass-to-energy and municipal waste-to-energy projects. The funds are to finance biomass co-generation and heat-only plants as well as treatment plants for municipal and similar wastes that produce biogas and electricity.

www.euwid-recycling.com/news/business/single/Artikel/EUR250m-for-energy-from-biomass-in-france.html

Government announces boost in funding for scottish biofuel programme

The Scottish Minister for Energy announced a funding boost for the Scottish Biofuel programme at Edinburgh Napier University's Sighthill campus. Along with funding from the EU, Scottish Enterprise and partner institutions will grant additional funding to the tune of £475,000 over the next 2 years to the programme that is committed to developing fuel sources outside fossil fuels.

www.theedinburghreporter.co.uk/2014/03/government-announces-boost-in-funding-for-scottish-biofuel-programme/

Africa

Ottawa lends biofuel firm \$500,000

The CelluFuel Inc. demonstration biofuel project in Brooklyn, Queens County, received a \$500,000 loan from the federal government. The federal loan comes on top of a \$1.5-million contribution previously announced by the Nova Scotia government for the estimated \$4-million project. CelluFuel's goal is to commercialize its licensed technology by launching 10 plants in the next five or six years, each with an annual production capacity of about 20 million litres of fuel.

The fuel will mostly be sold to oil companies in Nova Scotia and New Brunswick.

www.thechronicleherald.ca/business/1194569-ottawa-lends-biofuel-firm-500000

Research & Development

North America

[Synthetic Chromosome could help biodiesel, ethanol](#)

Researchers have put together man-made DNA into the synthetic version of a chromosome, a development expected to have implications for the green fuels. The world's first yeast synthetic chromosome, the discovery could help the biodiesel and ethanol industries.

The researchers could make millions and millions of different decks of genetic cards, which could give yeast totally new properties.

www.domesticfuel.com/2014/03/28/synthetic-chromosome-could-help-biodiesel-ethanol/

[Next generation super powerful fuel from bacteria](#)

The next generation of super powerful fuel, capable of arming missiles and space rockets may come from an engineered bacterium. Researchers at the Georgia Institute of Technology have engineered a bacterium to synthesize pinene - a hydrocarbon produced by trees that could potentially replace high-energy fuels such as JP-10 in missiles and other aerospace applications.

By inserting enzymes from trees into the bacterium, Georgia Tech scientist Stephen Sarria boosted pinene production six-fold over earlier bioengineering efforts. To be competitive, the researchers will have to boost their production of pinene 26-fold. They say it may be possible to produce pinene at a cost lower than that of petroleum-based sources.

www.timesofindia.indiatimes.com/home/science/Next-generation-super-powerful-fuel-from-bacteria/articleshow/32818017.cms

[Researchers engineer resistance to Ionic liquids in biofuel microbes](#)

Researchers with the U.S. Department of Energy (DOE)'s Joint BioEnergy Institute (JBEI), a multi-institutional partnership led by Berkeley Lab, have identified the genetic origins of a microbial resistance to ionic liquids and successfully introduced this resistance into a strain of E. coli bacteria for the production of advanced biofuels. The ionic liquid resistance is based on a pair of genes discovered in a bacterium native to a tropical rainforest in Puerto Rico.

www.laboratoryequipment.com/news/2014/03/researchers-engineer-resistance-ionic-liquids-biofuel-microbes

New patent issued to develop advanced biofuel production

Dyadic International, Inc. a global biotechnology company focused on the discovery, development, manufacture and sale of enzymes and other proteins for the bioenergy, bio-based chemical, biopharmaceutical and industrial enzyme industries, announced today that it has been issued U.S. Patent No. 8,673,618 entitled, "Construction of highly efficient cellulase compositions for enzymatic hydrolysis of cellulose" by the United States Patent and Trademark Office ("USPTO"). This new patent provides broader intellectual property rights relating to compositions and methods of developing and producing novel enzymes which efficiently convert different sources of plant biomass to fermentable sugars. These sugars can be used in the production of advanced biofuels and bio-based chemicals.

This patent is the fourteenth U.S. patent issued to Dyadic adding to its portfolio of 41 international patents, 23 pending international and 10 pending U.S. patent applications, which cover various features of Dyadic's proprietary technologies.

www.prnewswire.com/news-releases/new-us-patent-issued-to-dyadic-international-252023561.html

CSU researchers bridging gaps in biofuel production

Federal mandates require the US boosts its production of renewable fuel to 36 billion gallons per year by 2022 - more than doubling the roughly 15 billion gallons produced currently. By identifying crops and innovations that work well at the farmer's level, they hope to begin building a foundation for an increase in sustainable fuel production for the future.

www.collegian.com/2014/03/csu-researchers-bridging-gaps-in-biofuel-production/68555/

Vertimass licenses ORNL biofuel-to-hydrocarbon conversion technology

Vertimass LLC, a California-based start-up company, has licensed an Oak Ridge National Laboratory technology that directly converts ethanol into a hydrocarbon blend-stock for use in transportation fuels.

The ORNL technology offers a new pathway to biomass-derived renewable fuels that can lower greenhouse gas emissions and decrease U.S. reliance on foreign sources of oil.

The ORNL research was supported by DOE's Office of Energy Efficiency and Renewable Energy. Initial funds were from the ORNL Laboratory Directed Research and Development and Technology Innovation programs and from the BioEnergy Science Center, which is supported by the U.S. DOE Office of Science.

www.oakridgetoday.com/2014/03/06/vertimass-licenses-ornl-biofuel-hydrocarbon-conversion-technology/

Europe

Scripps, UCSD ranked top biofuel researchers

The Department of Energy has ranked UCSD and Scripps Institution of Oceanography number one for their algae biofuels program.

www.cbs8.com/story/24907964/scripps-ucsd-ranked-top-biofuel-researcher

Africa

Researchers test algae biofuel in Hong Kong

Scientists in Hong Kong are testing the use of micro algae to clean water waste and produce fuel.

The technology is still too expensive to be broadly developed, but researchers are asking for the government's support in protecting homegrown biofuel against cheaper, foreign competition.

www.voanews.com/content/researchers-test-algae-biofuel-in-hong-kong-/1864627.html

Climate & Environmental Change

India

[India needs climate-resilient sanitation tech](#)

India needs to integrate climate-resilient sanitation technologies with relevant national policies, says Girija K. Bharat.

The influence of climate change on sanitation, and the need to improve the water and sanitation sector has received limited recognition in India. Climate-resilient sanitation technologies need to be developed and integrated with India's national sanitation policy and programs.

www.asianscientist.com/features/india-climate-resilient-sanitation-2014/

North America

[Leaked IPCC report suggests extracting carbon to fight climate change](#)

A leaked report from the UN Intergovernmental Panel on Climate Change (IPCC) suggests using extraction technology in order to take harmful carbon out of the atmosphere and reduce the effects of global warming.

The report will be the second of three published by the organisation – with the first being published in September 2013 – and will explore issues related to global warming.

The technology enables the power plants to be carbon neutral and actively extract carbon dioxide from the natural cycle of plant growth and decay.

Another section of the upcoming report has also been leaked. The report outlines worrying scenarios of conflicts, food crises and economic losses caused by climate change by the end of the century.

www.blueandgreentomorrow.com/2014/03/28/leaked-ipcc-report-suggests-extracting-carbon-to-fight-climate-change/

[White house launches climate change communication tool](#)

The White House has launched something entirely different and better aimed at communicating the realities of climate change. It is a web portal that serves as a kind of clearinghouse for all manner of information on how sea level rise is remaking our coasts and posing risks to those who live and work along them.

The effort is designed to enable citizens to see how climate change is affecting them where they live and work, and what they might expect in the future, through interactive, graphics-based digital tools.

www.blogs.discovermagazine.com/imageo/2014/03/19/climate-change-communication-tool/#.U2sIS6Ikiho

Investors take charge of climate policy

www.nature.com/nclimate/journal/v4/n4/full/nclimate2175.html

UN: 13 of 14 warmest years on record were in 21st century

The World Meteorological Organisation (WMO) has revealed that 2001-2010 was the warmest decade on record, while 13 of the 14 warmest years in recorded history have occurred in the 21st century.

The WMO previously said that 2013 had been the sixth warmest year on record and stressed the dramatic impact that floods and droughts have had around the world.

The WMO also pointed to the examples of Australia and Argentina, which in 2013 had the hottest and second hottest year on record respectively. Last year also saw global oceans reach new record high levels.

The UN's Intergovernmental Panel on Climate Change (IPCC) will publish its second report of the AR5 review next week. A leaked draft suggested it would reveal the disastrous effects of climate change on the global economy, as well as scenarios of food crisis and social unrest.

www.blueandgreentomorrow.com/2014/03/25/un-13-of-14-warmest-years-on-record-were-in-21st-century/

Africa

New climate innovation centre launched in Ethiopia

A new climate innovation centre which aims to help jump start clean technology and climate-smart ventures has been launched in Ethiopia.

The Ethiopia Climate Innovation Center (ECIC) is expected to help more than 3.1 million people increase resilience to climate change and create more than 12,000 jobs in the next 10 years.

ECIC will provide financing, mentorship and advisory services to local cleantech entrepreneurs working in energy efficiency, renewable energy, agribusiness and biofuels. A total of 28 SMEs and entrepreneurs have currently been selected to receive CIC support services.

The initiative is also expected to improve access to energy for 265,000 Ethiopians and increase agricultural efficiency for 120,000 farmers.

www.energylivenews.com/2014/03/28/new-climate-innovation-centre-launched-in-ethiopia/

Other Countries

Climate change: IPCC eyes new bio-energy fix

The process - called Bio-Energy with Carbon Capture and Storage (BECCS) - would make the power plants not only carbon-neutral but actively a part of extracting carbon dioxide from a natural cycle of plant growth and decay.

The IPCC, grouping leading scientists, is the main guide for almost 200 governments that have promised to work out a deal by the end of 2015 to slow warming to avert more floods, heatwaves, more powerful storms, droughts and rising seas.

www.brisbanetimes.com.au/environment/climate-change/climate-change-ipcc-eyes-new-bioenergy-fix-20140327-35jlf.html