The Bioeconomy Consultants

NNFCC

Feedstocks

News Review

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Each month we review the latest news and select key announcements and commentary on feedstocks used in the bioeconomy.

Contents

Foreword

Hello and welcome to March's Feedstocks News Review.

We'll start with an exciting breakthrough in the processing of biomass. One of the primary hurdles to maximising useful biomass yield of plants is the lignin found in plant cell walls. Lignin is very hard to break down, making cellulose extraction difficult. Many approaches have been employed to tackle this problem, including chemical or biological breakdown of the lignin, hemicellulose and cellulose complex itself, or genetically engineering plants to produce less lignin. Both of these have their downsides: The complex with lignin is very difficult to breakdown chemically, and no organisms have been found capable of doing it on a commercial scale; growing plants that produce less lignin also has potential negative impacts, for example on disease resistance and reduced biomass yield in some cases. However, there has been a very promising recent breakthrough by scientists from Ghent University. By restricting the genetic suppression of lignin away from Xylem cells, they were able to mitigate the stunted growth that occurs from lignin suppression across the whole plant. This had the surprising additional upside of causing the plants to grow better than their non-modified counterparts – thus resulting in an overall increase in biomass harvested, but also in the ease of processing the resulting biomass. Currently, this has only been observed to work in Arabidopsis, but the scientists are next going to try the technique on poplar, which is earmarked as an important biorefinery plant for the future.

There is less good news on the crop markets front: the recent spate of cold weather across Europe came unseasonably late, leading to fears of lower yields due to winter kill, as the otherwise mild winter hasn't allowed the winter wheat to acclimatise to extreme cold. It is unknown yet how this will affect yields, but the futures price has sharply risen. UK prices haven't risen alongside these, but that is due to a strengthening in the Euro relative to the Pound.

General wheat milling in the UK has also been hit by the shutdown of the Vivergo biofuels plant. The plant is currently shutdown for maintenance, but it is unclear when the plant will reopen. The total amount of wheat milled in the UK dropped by 4% in December of 2017, with main category hit being "other flour" – which includes bioethanol feedstock.

Read on for the latest news.

Policy

EU to mandate separate collection of bio-waste

The REA reports that separate collection of bio-waste will become mandatory across the EU. A provisional agreement reached on 18 December means that EU member states will be required to put in place measures to collect bio-waste separately by 2023.

Other agreed proposals include a new municipal waste recycling rate of 65% by 2035 as well as a maximum of 10% of landfilling of municipal waste by 2035.

The UK is set to leave the EU in March 2019, and it is unclear if it will adopt the new provisions in the Waste Framework Directive. It is known, however, that the UK has been opposing the binding recycling target. The REA has been advocating the introduction of separate collections of unavoidable food wastes for a number of years.

Currently most EU nations do not separately collect their food waste. This leads to emissions of GHG such as methane, as well as a substantial loss of potential renewable energy, nutrients for soil and organic matter. The new Directive goes a long way to changing these scenarios.

Click here for more information.

Service launched to track American timber sustainability certification

Geograph

With encouragement from federal trade agencies and support from the USDA Forest Service, the National Association of State Foresters has created an open-access clearinghouse for national and state regulations that affect the management of U.S. forests and help to demonstrate the sustainable and legal nature in which U.S. timber is harvested.

Since the 1992 Rio Earth Summit, non-governmental organizations and their governmental counterparts around the world have been working to provide assurances to consumers that their wood products originate from sustainable and legal sources. In the U.S., providing these assurances can be time-consuming and expensive because many of the regulations and programs which support legal and sustainability determinations are state-specific. To remedy this problem, NASF has launched a legal and sustainable timber assurance online resource.

Click here for more information.

US EPA seeks environmental agreement with Forestry Industry

Biomass magazine reports that U.S. Environmental Protection Agency (EPA) Administrator Scott Pruitt met with members of the forest products industry in February to discuss a range of environmental issues. Pruitt reiterated the EPA's efforts to work towards a carbon-neutral policy for biomass and clarify federal procurement recommendations for responsibly managed forests.

The engagement follows on from Executive Order 13777, "Enforcing the Regulatory Reform Agenda," signed by President Donald Trump in February 2017. In April 2017, in accordance with the requirements of that executive order, the EPA sought comment on regulatory barriers that should be targeted for repeal, replacement or modification. The agency received more than 60,000 comments, including many from the forest and forest products community that highlighted concerns over the EPA's past regulatory treatment of the industry. Top concerns included whether EPA had failed to take proper account of the reality that energy derived from biomass may, in appropriate circumstances, be recognized as carbon neutral, and the EPA's own procurement recommendations for wood and lumber products. For years, by recognising only one forest certification standard, the federal government has rendered most U.S. forestry producers ineligible for federal procurement projects and created confusion around biomass carbon neutrality.

In relation to carbon accounting, a press release issued by the EPA explains that the agency submitted its Draft Accounting Framework for Biogenic CO2 Emissions from Stationary Sources to the Scientific Advisory Board back in 2011. The accounting framework aims to identify and outline the scientific and technical considerations that come into play in ascertaining the extent to which the production, processing and use of biomass materials at stationary sources is carbon neutral. The accounting framework was updated in 2014. However, after seven years of ongoing review and analysis, the SAB has yet to reach a consensus. The SAB most recently addressed the framework during its August 2017 meeting. The SAB review process is "continuing".

Pruitt has stated that the EPA aims to incorporate domestic biomass into meeting US energy needs.

Click here for more information.

Markets

Vivergo shutdown hits UK wheat milling

AHDB reports wheat used by the UK milling industry (including starch and bioethanol) over the first half of the season (Jul-Dec), totalled 3.51Mt, according to latest data published by Defra. This is 4% lower than the same period last season.

The main driver behind the total fall in wheat used by the UK milling industry appears to be a fall in the amount of 'other flour', which includes starch and bioethanol demand, produced from July to December. At 885Kt, 'other flour' (non-breadmaking flour) production during the first half of 2017/18 is 7% lower than the same period in 2016/17. At the end of November, Vivergo Fuels shut down its Northeast bioethanol plant for maintenance, both earlier and for longer than initially planned. This is likely to have contributed to the drop in other flour production, amongst other factors.

Click here for more information.

UK rapeseed prices influenced by strengthening euro

Pexels

AHDB reports that the price of UK delivered rapeseed (Erith, spot) has declined by £18.50/t since the start of the year (week ending 5 January), falling to the lowest price since July 2016 in the week ending 2 February, at £295/t.

The euro has been strengthening somewhat against the dollar in recent months (making $ purchase of soybean oil and meal more attractive), increasing from €1=$1.161 in the week beginning 6 November 2017, to €1=$1.244 in the week beginning 29 January 2018. The strengthening of the euro has added some pressure to Paris rapeseed futures, with the May-18 contract declining from a weekly average of £319.19/t in the week beginning 1 January, to £306.18/t in the week beginning 29 January. The continued pressure on Paris rapeseed has fed through to the domestic market, resulting in UK delivered rapeseed prices following a similar trend.

Click here for more information.

Pellet shortage in Scotland

Pellet shortages in Scotland have been reported in the local media.

Wood pellet boilers were encouraged by the UK-Government through the RHI subsidy scheme designed to promote the use of renewable fuels. But a combination of factors has left suppliers with serious shortages this winter and some systems have had to be shut down.

Dumfries Wood Fuel co-operative is one supplier who has had to stop taking on new customers and limit deliveries for existing customers.

A growth in demand for the waste wood used to manufacture pellets, including the addition of several large pellet-burning power stations in the UK and Europe, is cited as a factor. Adverse damp weather conditions in Eastern Europe have also hampered the thinning of forests, reducing the raw material available.

Concerns have also been expressed that commercial users, such as farms, which receive subsidy payments based on actual heat output of installations, are using large volumes of the diminishing pellet stock.

Click here for more information.

Croda acquires Plant Impact

The Business desk reports that Goole-based Croda Europe is to acquire research and development firm Plant Impact in a £10m deal.

Chemicals firm Croda Europe announced it had made a cash offer for the entire issue of Harpenden based Plant Impact.

Croda Europe is a wholly-owned subsidiary of Croda, a £5.7bn market capitalised FTSE100 company incorporated in 1925 which is a global producer and marketer of high performance ingredients and technologies in some of the world's biggest and most successful consumer brands.

The announcement brings Croda's number of acquisitions and co-investments completed in the last 12 months to five. In January, Croda swooped for Nautilus Biosciences Canada and IonPhasE.

Croda Group has a global network of over 4,200 employees across 36 countries. The firm said the acquisition of Plant Impact would extend its existing life sciences capabilities, adding an experienced commercial team and scientists and augmenting its range of intellectual property and products to its existing customer base.

AIM-listed Plant Impact researches and develops crop enhancement chemistry to improve crop yield and quality. The Plant Impact Group's head office and research facility are at the Rothamsted Centre for Research and Enterprise in Harpenden, UK. It also has important regional commercial operations in Brazil, the USA, Argentina and West Africa. There are approximately 60 full time staff in the Plant Impact Group, with commercial sales in more than 14 countries.

Click here for more information.

Research & Development

Scientists increase sugar yield and reduce lignin content of plants

Flickr

To ease the industrial processing of plant biomass into energy, plants are engineered to contain less lignin. This intervention typically leads to reduced yield. Researchers at the VIB-UGent Center for Plant Systems Biology have now discovered a way to overcome this problem.

The used strategy does not just restore the biomass yield. It increases the yield beyond that of wildtype plants. The findings of their study are an important step in the development of feedstock for biofuels and other bio-based materials. The results are published in the leading scientific journal Plant Physiology.

Lignocellulosic biomass is very rich in sugar, which can be used to produce e.g. bio-ethanol. However, lignin also strengthens the plant cell walls, making it difficult to get this sugar out for industrial processing of biomass.

To tackle this problem, plants are engineered to contain less lignin. These plants show large

improvements in processing efficiency for downstream applications – meaning it is easier to get the sugar out of them. But at the same time, a new problem arises: they have a yield penalty.

The yield is lowered because the lack of lignin makes the water-conducting cells of the mutant plants collapse, negatively affecting growth. In their most recent study, scientists looked for a solution to this problem, focusing on a dwarfed, mutant Arabidopsis.

They allowed the biosynthesis of lignin to take place specifically in these water-conducting cells. Surprisingly, this didn't just restore growth, but also increased the biomass of the plants by up to 60%. The combination of a low lignin amount and increased biomass in the engineered plants led to a four-fold increase in sugar release compared to wild plants.

To take their findings to the next level, the scientists are currently investigating whether this strategy also works in poplar. Because of its fast growth, poplar is a promising feedstock for future biorefineries.

Click here for more information.

Project aims to produce biomethane from solid biomass

Biomethane has the same properties as natural gas, but it is a 100% renewable clean energy. To develop the sustainable production of this green gas at a local level, ENGIE has been developing the Gaya project for several years – a platform for producing biomethane from dry biomass (wood, straw, agricultural and food waste, etc.). Inaugurated in October 2017 at Saint-Fons in Chemical Valley, south of Lyon, Gaya is a key milestone in the development of so-called 2G (2nd Generation) biomethane.

Jointly financed by ENGIE and Ademe (the French agency for the environment and energy management), the Gaya project aims to help meet France's dual objective of cutting greenhouse gas emissions (40% reduction by 2030) and raising the share of renewable gas in overall gas consumption to 10% by 2030.

Gaya is a cutting-edge technological platform that produces biomethane in four stages from the dry biomass that is delivered there.

The biomass is first introduced into a gasifier, in which it is converted to syngas by a thermo-chemical conversion process.

This gas contains impurities; it is purified to remove tars and inorganic compounds. The clean gas thus obtained is fed into a methanation reactor, to increase its methane content. The biomethane is then made compliant with the standard specifications for network natural gas. Covering the whole second generation biomethane production chain, the Gaya platform is designed to trial the efficiency of the complete process.

Click here for more information.

WRAP releases guidance on digestate spreading

WRAP has published a number of useful good practice documents that should be followed to minimise emissions and avoid pollution incidents when spreading digestate and composts to land.

There are two versions of the guidance, one for farmers, growers and advisers and one for agricultural contractors.

These cover the rules and regulations covering sale and use, storage, advice on use, verifying quality.

Click here for more information.

Early results of report into European biomass

Geograph

This report illustrates part of the results from the first two years of JRC biomass study, carried out in the context of the mandate on the provision to EC services of data and analysis on biomass flow, supply and demand on a long-term basis. The JRC biomass study has a wide scope and is a long-term endeavour, not having a predefined duration. The results after the first two years are presented, with a focus on the assessments of the biomass produced in the EU, how much is being used and for what uses, and how to assess the related environmental impacts. It reports quantitative estimates on current EU biomass production, uses and flows for the sectors agriculture, forestry, fisheries and aquaculture, and algae. The document contains the best estimates the authors had been able to attain from available data and current knowledge, yet highlighting the remaining gaps and underlying uncertainties. In addition, results for all sectors examined are presented with an integrated perspective and using cross-sectorial biomass flows diagrams. The methodological framework to assess the environmental impacts of biomass supply chains is also introduced. The total agricultural biomass produced annually in the EU was estimated at 956 Mt of dry matter per year (excluding pastures) of which 54% represents economic production, that is grains, fruits, roots, tubers, i.e. the reason why the crop is cultivated. The remaining 46% is above ground biomass from by-products and residues such as leaves and stems, which may also have an economic value (for instance when used for animal bedding or for bioenergy production), and are also important for ecosystem services such as maintaining organic carbon levels in soil or preventing soil erosion.

Click here for more information.

France to get lignocellulose conversion demo plant

Plans are underway for a demonstration-scale facility in France that will convert non-food lignocellulosic biomass into raw materials for bio-based chemicals and animal feed products, such as feed for fish farming. The process, developed by Arbiom, is currently operated at pilot scale at a facility in Norton, Va. The Arbiom process efficiently separates agricultural and forestry waste biomass into its constituent components: C5 sugars, C6 sugars and lignin. The products will be used for making bio-based chemicals, feed and other products.

Construction of the 5,000-ton/yr demonstration-scale plant is being supported by grants from the European Union Bio-Based Industries Joint Undertaking (BBI-JU) and from the French government. The plant will be co-located with a pulp-and-paper production facility in eastern France to take advantage of material transport logistics. Arbiom is working with partners to use the sugars generated in its process for biologically derived products, and is investigating several applications for the lignin from the fractionation process.

Click here for more information.

Good Free Photos

Wood & Crop

Mild winter and sudden freeze could hurt wheat yield

AHDB comments that winter wheat across large swathes of western and southern Europe could be at risk of winter kill if a severe frost strikes according to the latest EU MARS crop bulletin. The first six weeks of 2018 have been predominantly milder than usual across most of Europe, with daily mean temperatures in central, eastern and north-eastern regions 2-7°C above the long-term average. The milder weather has restricted the acclimatisation of winter cereals to low temperatures. The process of acclimatisation to cold temperatures is important for crops such as winter wheat. Essentially, this raises the freezing tolerance of the plant, enabling it to withstand cold conditions and lower any associated detrimental effects.

The unhardened nature of winter wheat across parts of UK, France, Spain and Italy means that crops in these countries are more exposed if a severe frost event occurs (<-12°C). This risk is likely to be elevated for Bulgaria and Romania which are more likely to experience colder temperatures. In eastern European regions such as the Baltic countries, Russia and Ukraine, full hardening has already been achieved with only slight localised winter kill damage reported so far.

In response, Paris wheat futures (May-18) rose to a six week-high on 23 February. Meanwhile, UK futures were relatively unchanged, tracking sideways on currency.

Click here for more information.

Working to reduce waste wood contamination

Pixabay

Biomass magazine report on French work to reduce contaminant levels in waste wood.

Every year, several thousand tons of treated wood waste is buried, incinerated, or mixed with untreated wood waste. The management of this waste is problematic because treated wood contains preservatives such as arsenic, chromium, and copper to slow its deterioration. To remedy this, INRS researchers in France have developed a process that successfully removed more than 90 percent of the contaminants present in treated wood waste in experiments conducted on a small scale in the laboratory. Thanks to an Innovation Grant from the National Science and Engineering Research Council, professors Jean-François Blais and Guy Mercier and their team will be able to assess the performance of this process on a larger scale in order to determine its technical and economic feasibility.

Once decontaminated, the wood waste can be reused as a raw material for the manufacture of value-added products such as particleboard or heating pellets. In addition, recovered metals could potentially be used to manufacture by-products, such as chromium oxide and copper sulphate.

The hydrometallurgical process outperforms the biological and thermal processes currently used to decontaminate treated wood waste. It is low cost and offers several advantages: it improves the management of treated waste wood by diverting it from landfill or incineration; it allows the wood fibre to be recycled; it reduces contamination in the recycled wood industry; it ensures a regular and constant supply of quality wood fibre.

Click here for more information.

Bridgestone partnership aims to commercialise guayule rubber

Biomass magazine reports Bridgestone Americas and Versalis, a major producer in the polymers and elastomers industry, are forming a strategic partnership to develop and deploy a comprehensive technology package to commercialize guayule in the agricultural, sustainable-rubber and renewable-chemical sectors.

The partnership combines Bridgestone's leadership position in guayule agriculture and production technologies with Versalis' core strengths in commercial-scale process engineering and market development for renewables. This partnership brings together the two largest global guayule research efforts under common project management, working toward a common goal of deploying a commercially attractive technology package. The two companies will also make the new joint technology available to industrial partners willing to cooperate in maximizing the value of these innovative products.

The agreement will enable Bridgestone and Versalis to focus on developing proprietary, highly productive varieties of guayule using the latest genetic technologies. The associated growing protocols developed in line with this agreement

may position guayule as an attractive and profitable crop for independent growers in appropriate regions.

Through the collaboration, guayule process technologies will be optimized at the Bridgestone Biorubber Process Research Center in Mesa, Arizona.

Versalis will lead the product development activities to monetize the guayule rubber production, also for non-rubber components. As for resins, market applications will include adhesives and wood protection while bagasse has shown promising performance as a feedstock for the production of industrial sugars suitable for biofuels or chemical precursors.

Bridgestone recognizes that realizing a sustainable natural rubber supply chain is a business imperative. Bridgestone takes a broad view of sustainable natural rubber, which includes addressing not only deforestation, but also labour rights, land use, water use and quality, and many other critical elements. The industry has acknowledged managing the procurement process as critical, but it is equally important to focus on realizing a sustainable and stable supply of natural rubber or alternative materials.

Click here for more information.

Enviva acquires Carolina pellet plant

Enviva

Enviva Holdings LP, the world's largest producer of industrial wood pellets, announced that it, through its previously announced joint venture, Enviva JV Development Co. LLC, has completed the acquisition of a wood pellet production plant in Greenwood, South Carolina, and related assets from The Navigator Co. S.A., a Portuguese paper and pulp company. This acquisition is the first investment by the new joint venture, which was recently created by Enviva to acquire, develop and construct wood pellet production plants and deep-water marine terminals in the South-eastern United States.

The Greenwood plant, which is strategically located in a deep natural resource basin, employs nearly 80 full-time employees. Enviva intends to make investments in the Greenwood plant to improve its operational efficiency and add additional emissions control equipment that the company expects will increase its production capacity to 600,000 metric tons of wood pellets per year by 2019.

Enviva's combined plant operations now include seven manufacturing sites in Virginia, North Carolina, South Carolina, Mississippi, and Florida, with an eighth under construction in Richmond County, North Carolina. In total, these facilities will represent more than 4 million metric tons of wood pellet production capacity on an annual basis.

Click here for more information.

Other Feedstocks

Sappi completes paper business acquisition

Sappi

Sappi Limited, a leading global producer of dissolving wood pulp, specialities and packaging papers, printing and writing papers and biomaterials, today announced that all conditions precedent relating to the acquisition of the speciality paper business of Cham Paper Group Holding AG (CPG) have been fulfilled and closing has been completed.

The transaction includes the acquisition of CPG's Carmignano and Condino Mills in Italy, its digital imaging business located in Cham, Switzerland as well as all brands and know-how.

The main benefits of the acquisition include: support of Sappi's diversification strategy and 2020vision to grow in higher margin growth segments; strengthening of Sappi Europe's specialities and packaging papers footprint and skills; adds 160,000 tons of speciality paper to Sappi's capacity; increasing Sappi's relevance in specialities and packaging papers, opening up new customers and markets to Sappi's existing products and generating economies of scale and synergies; gaining greater share-of-wallet with valued brand owners; accelerating innovation and new product development; improved near-term profitability and will serve as a platform for organic growth and further acquisitions; will add €183 million of sales and approximately €20 million of EBITDA before taking into account synergies; building on the investments currently underway to increase specialities and packaging papers capacity at existing plants in Somerset, Maastricht, and Alfeld Mills; and unlocking the growth potential of the CPG speciality paper business.

Click here for more information.

Events

World Bio Markets
Amsterdam, 20th-22nd March 2018

With governments committed to reducing emissions and consumers becoming more educated about where their products come from, there are opportunities for the bio-based sector to become a true contender to fossil oil. Yet long development times, lack of investment, and challenges in attaining a secure and sustainable supply chain have made it difficult for the bio-economy to achieve commercial success.

This event provides a platform for the entire global value chain, from feedstock producers to consumer brands, to work together to overcome these challenges.

Click here for more information.

Gasification 2018
Frankfurt, 28th-29th March 2018

ACI's 7th Annual Gasification Summit, taking place on first quarter of 2018 in Frankfurt, Germany, will comprise two days of formal presentations, interactive roundtable discussions and excellent networking opportunities, providing an ideal setting to convene with your peers to discuss both current operational & future planned gasification plants, end product markets, potential barriers & support policies as well as project economics & finance.

Click here for more information.

Global Bioeconomy Summit
Berlin, 19th-20th April 2018

The first Global Bioeconomy Summit was held in 2015 and brought together more than 700 bioeconomy stakeholders from over 80 countries. Since then, Bioeconomy has taken a steep and exciting way forward. Many notable initiatives and collaborative efforts have been initiated by the bioeconomy community in order to drive the development of sustainable bioeconomies in their countries and regions.

The 2nd GBS will focus on emerging concepts and future trends in bioeconomy, the latest on challenges and opportunities related to ecosystems, climate action and sustainable development along with the bioeconomy innovation agendas and global governance initiatives to manage them.

Click here for more information.

All-Energy
Glasgow, 2nd-3rd May 2018

All-Energy, the UK's largest renewable energy event, will take place in Glasgow on 2nd & 3rd May 2018. Join us to hear from 400+ experts from across all sectors of the renewable industry in 50+ FREE conference sessions. Network with 7,500+ renewable energy professionals at one of the many networking events happening over the two days.

Click here for more information.

International Conference on Bio-based Materials
Köln, 15th-16th May 2018

The 11th International Conference on Bio-based Materials is aimed at providing international major players from the bio-based building blocks, polymers and industrial biotechnology industries with an opportunity to present and discuss their latest developments and strategies.

Click here for more information.

EUBCE 2018
Copenhagen, 14th-18th May 2018

We look forward to the 26th EUBCE in 2018 in Denmark and to the many vibrant topics that will be included in the agenda. The core of the traditional EUBCE conference will be held over 4 days.

There will however be an extension to the core conference and exhibition in order to showcase the many achievements in the field of full scale biomass utilisation in Denmark that are an integral and major part of the country becoming fossil-free by 2050. Members of the national organising committee will organise special technical visits to sites in the centre of the country where biomass is the key renewable feedstock into processes producing renewable energy, biofuels, biochemicals and biomaterials as well as integrating bioproducts into traditional established fossil-based systems.

Click here for more information.

World Waste to Energy and Resources Summit
London, 23rd-24th May 2018

The World Waste to Energy and Resources Summit brings together its best ever faculty of international waste management CEOs, developers, bankers, private equity financiers, technology providers and industrial end users for two days of intensive networking.

With a firm focus on advanced conversion technologies, the summit addresses the need for innovation – not just in technology, but in policy, finance and partnership models – in order to accelerate the growth of the industry worldwide.

Click here for more information.

RRB 14
Ghent, 30th May - 1st June 2018

The 14th edition of the International Conference on Renewable Resources & Biorefineries will take place in Ghent, Belgium from Wednesday 30 May until Friday 1 June 2018. Based on the previous RRB conferences, this conference is expected to welcome about 350 international participants from over 30 countries.

The three-day international conference will consist of plenary lectures, oral presentations, poster sessions and an exhibition. Companies and research organizations are offered the opportunity to organize a satellite symposium.

Click here for more information.

International Conference of the European Industrial Hemp Association
Köln, 12th-13th June 2018

Specialists from all over the world will meet in order to exchange information regarding the latest developments in hemp applications for fibres, shivs, seeds and oil as well as cannabinoids. Applications are biocomposites in automotive and construction, textiles, food, food supplements and pharmaceuticals. We are expecting again more than 300 international participants from more than 40 countries – we are looking forward to the biggest event on industrial hemp ever!

Click here for more information.

Feedstock Prices

UK spot prices of bagged wood pellets, and wheat and barley straw. Arrows indicate rise ↑, unchanged – or fall ↓ from previous month.

Date	UK Wood Pellets Delivered (£/tonne, 5% VAT)	UK Ex-Farm Barley Straw (D1000) (£/tonne)	UK Ex-Farm Wheat Straw (D1000) (£/tonne)
10 Feb	297-357 (↑-–)	75-105 (↑-↑)	70-91 (↑-↑)

For wood pellets prices we considered UK pellet traders selling prices.
For details on straw spot prices, see http://www.farming.co.uk

UK (LIFFE), French (MATIF) and US (CBOT) future prices for wheat, rapeseed, maize, and soybean. Arrows indicate rise ↑ or fall ↓ from previous month's predictions.

Date	UK (LIFFE) Feed Wheat (£/tonne)	MATIF Wheat (€/tonne)	MATIF Rapeseed (€/tonne)	CBOT Wheat (cnts/bsh)	CBOT Maize (cnts/bsh)	CBOT Soyabean (cnts/bsh)
Mar-18	143.0 (↑)	163.0 (↑)		494.7 (↑)	385.7 (↑)	1053.7 (↑)
May-18	145.0 (↑)	164.5 (↑)	350.0 (↑)	499.2 (↑)	393.5 (↑)	1064.0 (↑)
Jul-18	143.8 (↑)			515.2 (↑)	400.5 (↑)	1073.0 (↑)
Aug-18			347.5 (↑)			1073.5 (↑)
Sep-18		170.5 (↑)		531.7 (↑)	405.0 (↑)	1057.2 (↑)
Nov-18	146.0 (↑)		351.0 (↑)			1045.0 (↑)
Dec-18		174.0 (↑)		552.0 (↑)	410.2 (↑)	
Jan-19	147.7 (↑)					
Feb-19			354.2 (↑)			
Mar-19	149.8 (↑)	177.0 (↑)		565.7 (↑)	416.7 (↑)	
May-19	151.7 (↑)	178.5 (↑)	355.7 (↑)			
Jul-19	150.8 (↑)					
Aug-19			350.7 (↑)			
Sep-19		175.7 (↑)				
Nov-19	147.2 (↑)					
Dec-19		178.2 (↑)				
Jan-20	148.9 (↑)					

For details on future prices see http://www.hgca.com

Other biomass feedstock prices are available upon request, simply contact enquiries@nnfcc.co.uk

Credits and Disclaimer

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