

# connect

**The Biomass Connect Newsletter** 

Issue 4 December 2023

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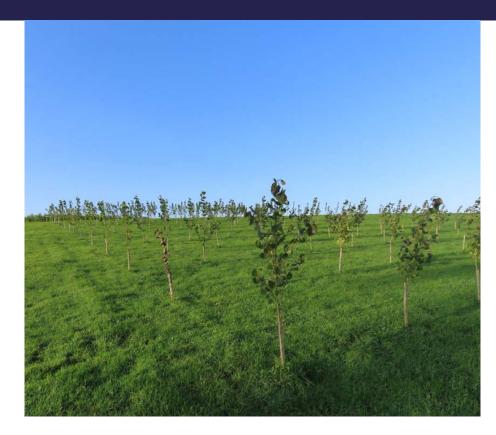
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# **WELCOME**

Welcome to the fourth edition of the Biomass Connect newsletter. There is so much going on in the Biomass World and reading this newsletter is the best way to stay Connected!

Read on to find out the latest policy news, an update on the hub site plantings, information about our insightful winter webinar programme, forthcoming events, the latest growers' story and a sneak preview of our final showcase.



## **BIOMASS CONNECT SHOWCASE - SAVE THE DATE**

Biomass Connect Showcase Event / Trade Mission 7-8 November 2024 - Warwick Conference Centre

Warwick Conference Centre will become the epicentre of the biomass world next November when we present the Biomass Connect Showcase. This will enable all of projects funded by the Biomass Feedstocks Innovation Programme to showcase their technological developments. The conference will take place on the 7-8 November.

There will also be a chance to partake in trade mission visits to see innovations in action and visit a Biomass Connect hub site. It's all very early stages in planning at the moment, but make sure you keep this week free. It would be a crime to miss it!



# **FOCUS ON INNOVATION**

The majority of projects supported by the Biomass Feedstocks Innovation Programme involve biomass crops that are grown on farmland. However, there is one project that offers a very different solution to biomass production. The SeaGrown project involves farming seaweed, off shore in the North Sea.

Seaweed stores 2-3 times more carbon from the atmosphere than woodland, providing potential for it to contribute towards the UK's net zero targets. SeaGrown is currently the only UK company engaged in offshore (as opposed to sheltered water) seaweed farming, holding the lease of a 25-hectare offshore cultivation site in the North Sea. SeaGrown has developed a pilot-scale seaweed farm, delivering the first offshore cultivated seaweed in the Summer of 2021. Simultaneously, SeaGrown has built an operational seaweed hatchery, which has capacity to produce substantial volumes of seed. The project intends to overcome four fundamental bottlenecks so it can catapult marine biomass production to a



commercial scale by: (a) enabling a streamlined and consistent production of seaweed seeds, (b) reducing the capital costs for in-water rigging, (c) increasing the efficiency of seeding and the deployment of growing lines, and (d) improving harvesting logistics. By removing these barriers, the project hopes to create an integrated, mechanised system for rapid, consistent cultivation of bulk marine biomass.

For more information on SeaGrown and to find out more about the products made from seaweed visit: <a href="https://www.seagrown.co.uk">www.seagrown.co.uk</a>



# **WEBINARS**

Interested in knowing all there is to know about biomass? Then tune in to the Biomass Connect webinar series this winter!

As always, we will be dealing with some very interesting topics and hearing from key industry players and farmer practitioners with Kevin Lindegaard of Crops for Energy as Chair asking all the tricky questions.

Add these dates to your calendar:

#### Webinar 6

19th Dec 2023 at 4pm

Biomass Crops - some interesting alternatives #2 Black Locust and Energy Canes

Speakers:

Márton Németh (Silvanus Forestry)

Paul Carver (New Energy Farms)

#### Webinar 7

18th Jan 2024 at 4pm

Maximising Biodiversity in your Biomass Crop
Plantation

Speakers:

Rebecca Rowe (UKCEH)

Ed Drewitt
(Freelance Naturalist,
broadcaster and wildlife
detective)

#### Webinar 8

15th Feb 2024 at 4pm

Managing fuel storage and drying best practice quality standards

Speakers:

Will Richardson (RDI Associates)

David Christopher (Langaller Farm)

Jonathan Andrew (Umberleigh Barton Farm)

And don't worry, if you missed previous webinars, all are available on demand from the <u>Biomass Connect</u> webinar library.

# **GROWERS' STORIES**

#### **Umberleigh Barton Farm**



If you can't wait until the February webinar to find out how to grow and use willow in a biomass boiler, then don't worry. We have put together a <u>case study</u> and <u>video</u>. These tell the story of how Jonathan Andrew and his family used a 4-hectare plot of marginal land to try and become self-sustainable in woodfuel production.

Umberleigh Barton Farm is near Barnstaple in North Devon, so the Andrew's are right at the end of the woodfuel supply chain. No project is without challenges but so far, so good! Mr Andrew has taken a considered and pragmatic approach, that has enabled him to keep his fuel costs low for his family and his tenants. Like all our case studies, there is plenty of economic information to chew on.



# **NEWS**

# Views on the Biomass Strategy and Policy Latest

The long-awaited Biomass Strategy was released in August. You can find the official document <u>here</u> and read our summary <u>here</u>.

We thought it would be a good idea to assemble some views of leading lights in the biomass sector. Below are links to press releases and online articles featuring Patricia Thornley (Supergen), Nina Skorupska (REA), Jonathan Scurlock (NFU) and Kevin Lindegaard (Crops for Energy).

- Thoughts from Hub Director Patricia Thornley on the publication of the UKs Biomass Strategy.
- REA welcomes Government support for sustainable biomass and recognition of its importance in getting to net zero.
- Farmers Weekly article: What opportunities does new biomass strategy offer farmers?
- Energy Now interview with <u>Kevin Lindegaard of</u> <u>Crops for Energy.</u>

Although, the Biomass Strategy was written by DESNZ much of the delivery of schemes will be decided by DEFRA (in England) and devolved Governments in Scotland and Wales. Here's some update on progress:

#### **England**

The ongoing brief on biomass crops has been split into Energy Forestry (covering SRC and SRF) and Energy Agriculture (covering Miscanthus and perennial grasses). These will be led by DEFRA in conjunction with subject experts and delivery partners in Natural England and the Forestry Commission. A series of workshops with stakeholders is planned for early 2024.

Energy Systems Catapult, an independent research and technology organisation looking to accelerate Net Zero energy innovation has published a report called The Potential of Agroforestry for Bioenergy in the UK. This concludes that including fast growing options such as SRC and SRF in Agroforestry schemes would have a positive benefit of meeting Net Zero targets. DEFRA is planning to release the agroforestry rules for Sustainable Farming Initiative in early January 2024 at the Oxford Farming Conference. Although

the final list of trees has not been finalised, there is some doubt amongst biomass industry participants that biomass crops will be included in this.

#### Scotland

In 2020, Scottish
Government's centre of
expertise on climate change
called ClimateXChange
(CXC) did an evidence



review and found that over 1.1 million hectares of Scottish farmland would be suitable for biomass crops. Based on the Climate Change Committee's UK recommendation for 700,000 hectares it was assumed that Scotland's contribution would be 70,000 hectares.

Earlier in 2023 CXC commissioned consultants Ricardo to conduct an evidence-based assessment of the potential opportunities for farmers and land managers from the expansion of biomass crop cultivation in Scotland. This involved several consultation events and interviews with experts. The report is expected to be published shortly.

#### Wales

The Welsh Government has accepted <u>Climate</u> <u>Change Committee's 2020 recommendation</u> to plant 43,000 hectares of trees as a way of meeting the nations Net Zero targets. An announcement was made in July 2023 as part of the outline proposals for the <u>Sustainable Farming Scheme (SFS)</u>, which will require all farms to plant 10% of their farmed area with trees from 2025. The scheme has had a great deal of opposition from NFU leaders. There is little detail on the rules of the scheme and eligible species.

The CCC 2020 report also recommended the planting of 56,000 hectares of biomass crops. However, SRC and SRF options have been conspicuous by their absence in more recent reports such as:

- Trees and Timber Deep Dive from 2021 which includes 39 recommendations.
- Our Net Zero Wales plan which sets out 123 policies and proposals to deliver the second carbon budget up to 2025.





# **HUB SITES ROUND UP**

One of the most challenging parts of the Biomass Connect project is the planting of 8 hub sites in all four corners of the UK. During the spring and summer of 2023, we planted a grand total of 263,768 plants covering 12 different types of biomass crops! In the vast majority of cases the establishment has been a total success. There have been one or two failures due to late planting or import customs issues but all in all, it's been a stellar effort by the team. Well done one and all! An especially big shout out though to Will Macalpine of Rothamsted Research who co-ordinated the effort.

You can read up about what's planted at your local site <u>here</u> and see videos <u>here</u>.

# DATES FOR YOUR DIARY

6 March 2023 – Low Carbon Agriculture Show NAEC, Stoneleigh Warwickshire

Biomass Connect and a number of the Innovation Projects will be presenting at the Low Carbon Agriculture Show in 2024. We'll have a busy Biomass Connect stand at the show and will also be hosting the Innovation Projects as part of a Biomass Feedstocks Innovation gathering.

We'd love to meet you there. Find out more and sign up <u>here</u>.



**Biomass Connect Events Calendar** 



# **TECHNICAL ARTICLES**

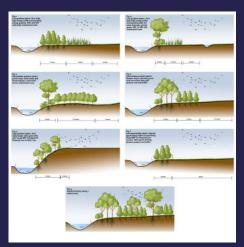
A quick round-up of some of the latest technical articles published on the Biomass Connect website.

#### Why integrate crops into agroforestry systems?



When incorporated into agroforestry systems, biomass crops contribute in various ways, including, support for pollinator populations, biodiversity enhancement, flood risk reduction, minimized runoff and soil erosion, improved water quality, increased soil carbon sequestration, improved soil health and contribute to climate change mitigation.

#### **Read Article**



# Biomass Buffer Strips - using biomass crops in multipurpose land management

A buffer strip is an area of land which is either left uncultivated or planted with perennial grasses, shrubs and trees. Planting strips or alleys of perennial biomass crops on existing agricultural land can provide a number of important benefits in terms of flood management, soil recovery and improvements in biodiversity, in addition to providing a harvestable resource. Wider adoption could help landowners to better manage landscapes so they are more resilient to the effects of climate change, able to mitigate flood risk, and reduce the environmental impacts of intensive agriculture.

#### **Read Article**



#### What effect does planting biomass crops have on soil carbon?

Soil Organic Carbon (SOC) is formed from the interaction of ecosystem processes such as photosynthesis, respiration and decomposition of Soil Organic Matter (SOM. Soil carbon provides the benefit of enhancing soil quality which is essential to sustain and improve food production, increase supply and quality of water, enhance biodiversity, and reduce atmospheric CO2. For these reasons, planting biomass crops help to improve soil quality, provide resilience to physical soil degradation and help mitigate climate change.

**Read Article** 

**Read More Technical Articles**