



& THE “GREENING FINANCE” ROADMAP

by Andrew Wilkinson, Milling and Grain magazine

It's time to start taking sustainability much more seriously

Bringing together 120 world leaders, all with the aim of speeding up progress towards the climate change goals set out in the Paris Agreement back in 2015, November 2021 saw the drama of COP26 unfold in Glasgow, UK. On the final day of COP26, or the 26th UN Climate Change Conference of the Parties to give its full name, climate negotiators concluded two weeks of intense talks that ended with a consensus reached on urgently accelerating climate action.

This agreement, combined with increased ambition and action from countries, means that a 1.5°C reduction in global temperature still remains within our reach, but is only deliverable through “concerted and immediate global efforts.”

With all countries agreeing to revisit and strengthen their current 2030 emissions targets, the main hope is that this pact will speed up the pace of climate action, with further meetings scheduled over the coming years.

What does this mean for our industry?

The quick answer to the question of what this means to our industry is, well, not much.

Other than serving as a timely reminder that we should all be adopting more sustainable working practices, there was very little in this that was specific to our industry.

However, with the UK Government set to phase in the Greening Finance Roadmap, a set of measures set to be replicated by governments throughout the developed world, the pressure is really on us to update our working practices and look for ways of reducing the carbon footprint of our respective organisations.

So as our governments have not acted on our behalf, we are going to have to make the difference under our own volition. But just where do we start?



Five key points from COP26

Appreciation was expressed for informal agreements: This includes the increased targets and actions announced and the commitments made to work together and with non-party stakeholders to accelerate sectoral action by 2030.

Come back stronger next year: Parties were asked to revisit and strengthen their 2030 targets and align with the Paris Agreement temperature goal by the end of 2022.

Fossil fuel phaseout: Parties are to accelerate the transition towards low-emission energy systems and phase-down unabated coal power and inefficient fossil fuel subsidies,

Called out on climate finance: The Paris agreement made it clear that rich countries had an obligation to help them pay for the transition to clean energy and for adapting to climate impacts. The goal of them contributing US\$100 billion per year by 2020 has not yet been met.

Loss and damage finance scheme: Urges developed countries to provide reparations to developing countries for those climate impacts that can't be adapted to. This remains almost entirely unfunded and unstaffed.

Well, one plausible course of action would be to seek out a company that has been “doing it” for many years already, a company that has already won awards for sustainability, find out what they are doing and then copy it. One such organisation that is setting the gold standard in sustainable cereal processing is a double award winner found in the UK county of Suffolk.

As a global supplier of brewing and distilling malts and malted ingredients to the food & drinks industry, sustainability is the common objective that links all aspects of Muntons' business activities.

In fact, the company describes minimising the impact of its business activity on the environment wherever and whenever possible as its key objective. A decade ago, the company was one of the first malting and milling plants to install an energy efficient kiln heating system at its Stowmarket site.

The company won the prestigious Sustainability category at last month's Baking Industry Awards for developing an energy-saving bio-energy plant in the same location. This follows the company winning the Environmental Leadership Award for the same project at the Food & Drink Federation Awards in September.

This latest project forms an integral part of the company's strategic pledge to be carbon neutral by 2050, and this, along

with an existing system at its Bridlington site, is set to take the company over 60 percent of the way towards that goal.

Since receiving the awards, the mill has been fielding inquiries from other companies keen to follow in their carbon-free footsteps. And it has been the job of its Director of Technical Sustainability Dr Nigel Davies to satisfy these requests.

Milling and Grain magazine recently met with Dr Davies to discuss COP26, the environmental impact of our industry, the measures he recommends to reduce our carbon footprint and the importance of creating a sense of togetherness within a workforce when tackling climate change.

What advice would you give to companies that are looking to reduce their carbon footprint and become more sustainable, where do they start?

In my professional life I currently have two hats on; I am the Director of Technical Sustainability at Muntons for three days a week, and I run my own sustainability consultancy called Maltdoctor Ltd for two days a week.

For the past 20 years at Muntons I have been pleased to lead our sustainability drive and to go boldly where many are only just beginning to tread. Muntons has made transformational change

and bucked the trend in promoting rather than resisting change.

The reason I set up my consultancy is because I was finding I was getting a lot of interest from companies that just didn't know where to start on this journey. Many company boards of directors didn't really understand what a carbon footprint was, had no idea how to calculate it and didn't see why it was relevant for their business.

They used to think - I say used to think but I think they still think - that sustainability is just about the environment and tree hugging. Many customers of Muntons love to engage with us and help them see the art of what is possible in sustainability in a manufacturing setting.

When I talk with customers at Muntons or clients of Maltdoctor Ltd I often explain that it is about business risk management, operational cost reduction, and trying to get them to use the Triple Bottom Line model of people, planet and profit.

So yes, we tell them that you can benefit the planet and still make a profit. There's nothing wrong with that; you should be able to make a profit out of being environmentally conscious.

It is equally true that you need to invest to make sustainable improvement so profit does not necessarily mean greater margin and can require a longer payback period on investments

Taking these steps will also help to engage people - and these people are not just your own people, but it's also your customers and your suppliers too.

How important would you say a sense of togetherness is in not only achieving the results that you have, but also in ensuring that this positivity continues into the future?

I think the importance of doing this as a team is essential because the decisions you make involve more than one part of the business.

For example, let's say the procurement team are the ones that are currently buying your gas and electricity. If you then come in with some new technology to get this through a different method, whether through new technology or something else, what we are saying to them is right, we're going to completely change what you are doing and you have a new challenge in a new market with new suppliers.

Installing new plants like our bio-energy centre meant there would be different environmental issues so you will also need to involve the environmental team on site. They need to consider the environmental impacts such as: Is there going to be more water use on site? Is there going to be more water disposed of? What emissions levels will be going up the stack and how does that fit with legislation and what is that going to look like in terms of impact on the local community?

Then you have to get the marketing team involved, because marketing again is going to be able to tell your good story. They also need to be kept up-to-date with the changes, whilst also helping them to understand that it is a continuing project.

Then you help them understand carbon footprinting scopes, one, two, and three science based targets and the United Nations Sustainable Development Goals. What are they? Why are they relevant?

Muntons have set being carbon neutral by 2050 as a strategic

pillar. In order to achieve this the company has put together a whole staff engagement piece on what it means to be carbon neutral, as well as why it is important to the company.

The other thing as well is that, this is going to continue. So we need to have the teams enthused, so that they're also looking for the areas that we can improve. Gradually, there's so many people in the company that need to be involved.

We want our staff and any of our stakeholders to understand this is a wonderful project, but not standalone and in no way is this - my goodness, we won two awards for this, job done. There's much more to do.

So, the project team needs to know that they've got the backing of the board, the finance is there, the raw materials are there. The environmental team is happy that all the certificates are in place.

And myself as director of sustainability, I'm sitting there thinking yes, nobody can point the finger at anything that we've done in the company and say that there's any greenwashing, because there's none of that - so that's where the team is useful.

Which aspects of the outcome of COP 26 would you say are most relevant to the cereal processing industry?

I think the one that's the one that is most likely to have an impact is the fact that we've been told we're going to get legislation coming out by 2023, that we've all got to publish a carbon roadmap.

To me that is probably one of the best things because it's going to mean that companies are going to have to get a handle on carbon foot-printing, and they're going to have to select the technologies that they are going to put in place.

Therefore, I think this is going to have the most practical impact and I think it's going to scare people in many sectors who haven't even started on this journey into action. We hear it too often that we're 20 years too late starting, but Muntons started on this journey 20 years ago, so I don't think we're 20 years too late.

Since COP26, I think there must be a number of Chief execs saying, What the heck is a carbon roadmap, how do we get that put in place? I say this because through my consultancy, I've already gained two contracts to do carbon roadmapping for people in the malting and brewing industry since COP 26. This is because on the whole, our industry doesn't know how to act to do this, but my experience shows that it doesn't have to be that complex or arduous.

I think for many that this is going to be the call to action that they need to finally take this seriously. So gone are the days where we just have to sign up to say we think climate protection is important, we now actually have to sign up to write down on paper exactly how we're going to do it, how we are going to get the technology that we plan to use, work out how much it's going to cost us - and we're going to have to do that within a couple of years.

How would you see the future for this panning out? If there's any kind of financial burden associated with this, do you think that this might be passed on to the consumer?

I think there's almost an inevitability that this is going to happen. The government does not have an endless pot of money

10 steps to reducing your organisation's environmental footprint:

1 Get your board interested in sustainability: Tell them that this is about business risk management, that it's about operational cost reduction and try to get them to use the "Triple Bottom Line" business model of People, Planet and Profit.

2 Calculate your carbon footprint: You need to use a model which takes everything into account: scopes 1 and 2 in the factory and scope 3 - the impact of materials coming in and going out. Don't spend too long worrying about the accuracy though, as you may miss the opportunities to change. Action does not need 100% certainty. Some of the most forward looking and sustainable companies move ahead with 70-80% certainty and are not afraid if something does not work as well as expected.

3 Make a carbon map across your supply chain: This step will help you to understand which supply chain areas have the greatest carbon intensity. Be ready for an adverse reaction if your supply chain partner thinks you are blaming them for their carbon intensity and make sure they understand that you want to work with them towards a common goal: the spirit of the United Nations Sustainable Development Goal 17 is partnership.

4 Set a science based target (SBT): look at what you've done so far and see how your current savings match up with the target required to minimise the human impact on climate change. There could be a four-to-five fold higher target to achieve a SBT but those that set such an ambitious target find it drives innovation, regulatory resilience and gives a competitive advantage.

Join the 2000 companies globally who have agreed it's a good initiative and the 50 percent of those who are bold enough to have already progressed to setting a target. It will align you with the Race to Zero and fast track your GHG reduction programme. The target has to be set no more than five years backwards in time and has to be achieved within a 15 year window.

5 Align your investment plans with your carbon roadmap. Be mindful that 63 percent of Chief Executives who have elected to take a science based target say that it has driven innovation within their operation. You can achieve remarkable changes in GHG emissions with existing technology whilst we wait for new options to become available.

6 Engage with your capital project team : These are the people who are going to liaise with your contractors to actually install new equipment and oversee projects and they'll be involved with local planners, the environment agency and other important stakeholders inside and outside the business.

7 Use the United Nations Sustainability Goals to broaden your outlook on sustainability. Don't just agree they are a good idea. Be very specific about how your operations address each of the 17.

8 Don't think of offsets first: Hunt down the technology that's available now, there is a lot out there. If you have done all you can and still have a small residual amount to offset choose offsets within your supply chain if possible and always those which capture new additional carbon from the atmosphere and are not just previously captured carbon now allocated to you through a financial transaction.

9 Intention needs action: All of the previous steps count for nought without action. Action can come from any part of the organisation. Don't fall into the trap of thinking it is only the young who drive sustainability.

At a recent conference Dr Nigel Davies described it as a silver bullet - a reference to seniority and experience in the right hands being able to drive transformational change in sustainability, as is evident through Muntons winning many awards for sustainability leadership and GHG reduction.

10 Appoint a consultant with a good track record of sustainability improvement: If you are still unsure of what to do, a sustainability consultant will be able to help you to align board strategy with action and demystify the jargon, barriers and fears that can at times stifle sustainable improvement. All of us in the UK now have to act fast to generate robust carbon plans as legislation is proposed from 2023.

to support green initiatives although it does have funds such as the Industrial Energy Transformation Fund and support consultants to help companies plan for carbon neutrality.

These funds can be difficult to access for SME's and are more likely to support regional or collaborative cross sector projects. We know Covid has made a big dent in the treasury and someone's got to pay for that. Green project support is still there but not necessarily easy to access.

There has been a lot of interest from financial institutions in creating carbon roadmap platforms that link energy efficiency to business strategy and then present a suite of potential solutions with cases studies and experts to support and suggest finance options that are available.

I think the difficulty comes from the fact that this is happening just after Covid. Many, many companies will have struggled financially and they are really not best placed to suddenly start a major investment, which is what introducing a carbon saving program is.

However, there's two ways of looking at it. If companies can do things which don't cost an awful lot like putting an energy management and monitoring system in place, they will save quite a lot of money. But if they haven't got one in place already, and many companies don't, they will save a lot of money operationally on that anyway.

The other thing I think people will need to understand is that quite often with a number of the carbon saving schemes, the payback won't be three years for capital investment, like most companies have, it is going to be more like six to nine years.

This means that the boards that are going to be signing off projects that will have to take a longer term view. That said, they legally have to do something now in the UK, it's not something that is just a CSR (Corporate Social Responsibility) issue anymore - this is strategic business.

However, if the board views that also as de-risking it from the impacts that its business would face through climate change, then that has to be a good thing to do.

Does the cereal processing industry have a damaging effect on the environment when compared to other industries?

No, I don't think it does. If you look at a lot of the impact for the cereal processing industries, the greatest contribution will come from the production of the raw material itself - maybe 60 to 70 percent from the growing of the wheat or barley.

In fact, there has already been a huge amount of work in that area by the suppliers that make the biggest impact. For example, the fertiliser manufacturers, which represent around half of that impact, have already reduced embedded carbon in their products by about 40 percent. And they're set to go even lower in the future. Overall, there's a huge surge of interest in improving the agronomic practices and growing cereals.

Now, if you look for it, there are much better

options available than just going to plant a forest somewhere, which will take a long time to have any positive effect. One better option would be to invest in your own supply chain - why not buy those offsets from within your own raw material supply chain? Because you'll be putting money back into the pockets of the farmers.

This will mean that they will be able to grow a crop, which sometimes is very marginal in terms of profit, and you're protecting your own supply chain by promoting greenhouse gas saving, that has to be a good thing to do.

There's a Muntons example at the moment, where we've got a group of farmers that are now able to grow their barley in a carbon negative way. They do this by using cover crops, things like clover, sown in the intervening period between the harvest of one crop and the next crop being sown in that period. Those cover crops can sequester more CO₂ from the atmosphere than was grown in the first place.

So, it's additional carbon capture, it's the proper sort of additional carbon capture, they are producing real carbon offsets. This is something that people will undoubtedly genuinely want to buy in to and I think that it is something that the milling, baking and malting industries would do well to get really interested in too.

The possibility of the milling supply chain generating its own carbon negative raw materials, is something which some people think is going to be many decades away - but the truth here is, it's right here on our doorstep.

Greening Finance: A roadmap to sustainable investing

In November 2020, the UK government announced that it intends to make disclosure requirements mandatory across its economy by 2025.

The Greening Finance roadmap outlines plans for new sustainability-related disclosures and implements a Green Taxonomy to evaluate corporate environmental behaviour and to counter so-called greenwashing. This scheme parallels one currently being introduced in the EU, with the ultimate objective being to establish a globally consistent reporting standard for environmental sustainability.

Starting with "economically significant" companies, organisations will be required to make disclosures on their carbon reduction plans, with certain firms required to publish plans that align with the UK Government's net zero commitment, or provide an explanation as to why they have not done so.

The Green Taxonomy element will set out criteria that specific economic activities must meet to be considered environmentally sustainable and has six environmental objectives, which are:

- Climate change mitigation
- Climate change adaptation
- Sustainable use and protection of water and marine resources
- Transition to a circular economy
- Pollution prevention and control
- Protection and restoration of biodiversity and ecosystems

The Roadmap will initially focus on developing the first two objectives (climate change mitigation and climate change adaptation), before turning to the remaining four objectives in 2023.