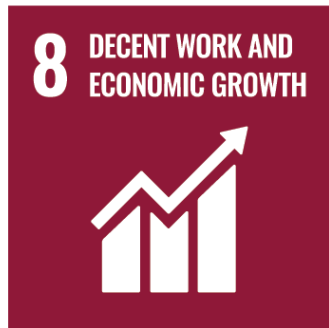


SUSTAINABLE DEVELOPMENT GOALS



**Singleton
Birch**

SUSTAINABLE DEVELOPMENT GOALS



1 NO POVERTY

Target 1.2

“By 2030, reduce at least by half the proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions” ²

Offering and promoting education and employment opportunities goes a long way to reduce the level of poverty and has long term effects on the area.



**Singleton
Birch**

has achieved this in several ways:

- **Working with young people**

Internships for undergraduates provides experiences that may not otherwise be available due to a lack of funding for schools in the area. By providing the chance to work on technical and vocational skills and giving experience in a real work environment, there is a better chance of success and progression as young people reach their full potential.

- **Working with schools**

Providing an insight into career opportunities in the local area for school children can help young people to have a better idea of the future they want for themselves.

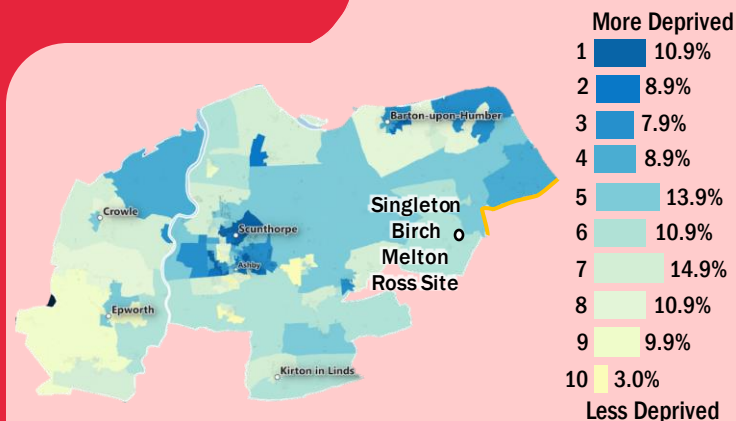
Educating and working with young people can help end the cycle of poverty that many live in by providing them with goals to encourage them to work hard at school and have well paid jobs to support their future children, giving them a better start in life.

POVERTY IS IN OUR LOCAL AREAS

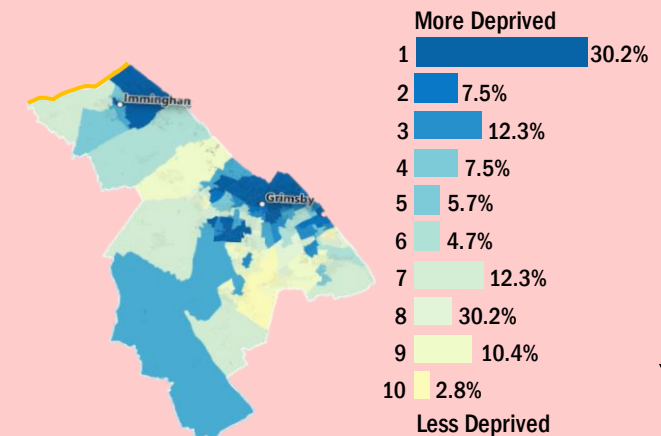
In North East Lincolnshire, there are multiple communities with a **47% child poverty rate**.

When you first think of poverty, the UK may not be the immediate thought – but as of 2020, approximately **14 million people** are living in poverty in the UK. As of 2018, over half of these households are a part of a working family. According to the index of multiple deprivation (IMD) report from 2019, North and North East Lincolnshire show high levels of deprivation. Through measuring income deprivation; employment deprivation; education, skills and training deprivation; health deprivation and disability; crime; barriers to housing and services; and living deprivation, **43 areas** are in the **1st decile**, with the most deprived area ranking **22 out of 32,844 areas** in England.

NORTH LINCOLNSHIRE ¹



NORTH EAST LINCOLNSHIRE ¹



2 ZERO HUNGER

Lime is essential in agricultural processes with purposes including:

- Increasing pH of soil
- Providing a source of calcium
- Improving water penetration in acidic soil
- Improving uptake of nutrients of plants growing on acidic soil
- Acts as a calcium supplement in animal feed

Whilst the agricultural lime produced by Birch Lime is vital for farms across the UK, thus aiding in meeting various targets under Goal 2 – Zero Hunger, there is also additional work being done towards this goal.

One notable example is:

RESTORING AGRICULTURAL LAND

Target 2.3

“By 2030, double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment”²

North Lincolnshire consists mainly of agricultural land. Many farmers, including small scale farmers and family farmers, are supported by the agricultural industry in the area.

The UN sustainability goals aim to measure the average income of small scale food producers and the overall volume of production per labour unit of farming enterprise size. By providing more land, more produce can be harvested, more jobs can be provided, and the income of local farmers will overall increase, meeting target 2.3 of goal 2.



“At the main Melton Ross site over 65 acres of previous quarried land has been restored back to productive agricultural land and is producing crop yields at least as high as that prior to quarrying. This was recognised by the receipt of a restoration award by the QPA.”³

“Each year in the UK, around 40,000 deaths are attributable to exposure to outdoor air pollution”⁴

- Royal College of Physicians

ALCOHOL AND DRUGS TRAINING

Target 3.9

“Strengthen the prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol”²

By encouraging an honesty system where employees affected by alcohol and drug misuse can come forward and confide in their supervisors, a safe environment is created where the employee can get help when needed. In the training, employees struggling with alcohol and drug misuse are encouraged to ask for help. If an employee does come forward with this, they are offered help.

ZERO CARBON

Target 3.5 LIME PRODUCTION

“By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination”²

In addition to the anaerobic digesters on site that provide electricity to power over 80% of the site, recent work with Origen Power has led to the potential for a new kiln based on oxy-fuel calciner technology. The kiln design would allow for carbon negative production.

Reducing the amount of pollutant released into the air could help to reduce the effect the polluted air has on people’s general health – potentially preventing asthma development and other respiratory disease.

3 GOOD HEALTH AND WELL-BEING



MENTAL HEALTH

Target 3.4

“By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and **promote mental health and well-being**”²

Mental health champions have been appointed after sending employees on training courses to aid in better understanding of their own mental health and being able to aid those around them.

In addition to this, there are many signs around site emphasising the importance of good mental health with resources pointing to places to go for help if needed. This includes the Employee Assistance Programme (EAP), with a phone line to call for any kind of mental health aid, such as help in dealing with stress or legal information to alleviate anxiety or distress. The EAP covers various areas, such as:

- Family issues
- Medical information
- Alcohol or drug issues
- Gambling issues
- Consumer issues
- Financial information
- Relationships
- Childcare and elder care
- Domestic abuse
- Tax information
- Legal information
- Housing concerns
- Stress and anxiety
- Retirement
- Bereavement
- Work-related matters

3 GOOD HEALTH AND WELL-BEING





4 QUALITY EDUCATION

Target 4.a

“Build and upgrade education facilities that are child, disability and gender sensitive and provide safe, non-violent, inclusive and effective learning environments for all”²

A donation of kettles and toasters to Engineering UTC helped to change the diets of the students from an energy drink or crisps to brown toast and hot drinks. Introducing slow-release carbohydrates into the students diet in the morning helps with steady energy levels throughout the day and any milk in the hot drinks will provide protein to help maintain hunger levels. This contributes to mental alertness and means that there is better retention throughout the day, increasing the effectiveness of learning through the introduction of new facilities.

“Students with decreased overall diet quality were significantly more likely to perform poorly”⁵
- Diet Quality and Academic Performance, Frontiers in Human Neuroscience

Target 4.4

“By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship”²

Members of staff are registered as STEM ambassadors. STEM ambassadors help young people in primary schools, secondary schools, and colleges by supporting learning by demonstrating how what is learned in a classroom applies to the workplace; illuminating career paths by sharing experiences in the sector and highlighting potential recruitment opportunities; and showcasing future opportunities available to all people regardless of background.



Apprentices and interns of various ages have been hired in the company, with links to colleges helping to provide training and workplace experience. Examples include training in the reception with administrative tasks, with skills taught being transferable between a large range of sectors or assigning more specific projects with exposure to other skills and opportunities alongside the tasked work.

Target 5.c

“Adopt and strengthen sound policies and enforceable legislation for the promotion of gender equality and the empowerment of all women and girls at all levels”²

WiME, Women in Manufacturing and Engineering, is an initiative to encourage women, both students and those returning to work, to become a larger part of the



Manufacturing and Engineering sector. Currently, 10.3% of the engineering workforce and 15% of the manufacturing workforce is made up of women. It is estimated that 30% is the point at which women will be able to make real change in the industry. Singleton Birch has attended several events by WiME aimed at informing women of the jobs available in the sector, as well as giving advice into career pathways, interview technique, and writing CVs.

Target 5.1

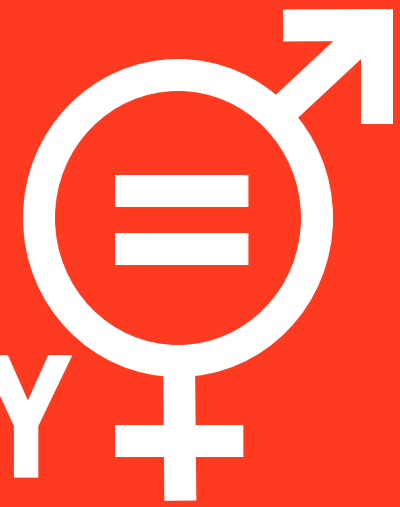
“End all forms of discrimination against all women and girls everywhere”²

Hygiene Facilities

A new building is in development with unisex changing facilities, offering better access for women on site to much needed facilities especially in regard to women’s hygiene.

5

GENDER EQUALITY



Target 5.4

“Recognize and value unpaid care and domestic work through the provision of public services, infrastructure and social protection policies and the promotion of shared responsibility within the household and the family as nationally appropriate”²

Maternity and Paternity Leave

The maternity policy used on site was originally written with the aid of a pregnant worker, with paternity leave covering same sex partners and partners of those adopting. A separate adoption leave policy is also in use.



6 CLEAN WATER AND SANITATION

Goal 6 is met by the role of Singleton Birch in supplying water companies and waste management with lime, crucial in the treatment of water. However, this can apply to many lime suppliers – there are ways in which Singleton Birch is contributing in an independent manner.

Target 6.6

“By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes”²

Singleton Birch repurposed the Elsham quarry after disuse, using the high nutrient soils to grow trees creating an area of woodland. Woodland forests are host to varying water based ecosystems, and play a major role in freshwater environments.

The area is now classified as one of the 17 local nature reserves in North Lincolnshire, providing vital sanctuaries for local wildlife.

This also means that the local community is invested in the water management of the local area as the council pushes for participation of their volunteer programmes for the local nature reserves, indirectly contributing to target 6.b – support and strengthen the participation of local communities in improving water and sanitation management.



Target 7.2

“By 2030, increase substantially the share of renewable energy in the global energy mix”²

Singleton Birch produces its own energy through the use of anaerobic digestors, taking the strain off the national energy grid and ensuring that energy to power various areas of the site, such through powering electric vehicles, using power produced on site. Such as building a new AD plant to supply biomethane to the

grid

Target 7.3

“By 2030, double the global rate of improvement in energy efficiency”²

- ISO 14001:2015 – Environmental Management
- ISO 9001:2015 – Quality Management

By being certified for the above ISO standards, efficiency of work is boosted, environmental impact is minimised, and energy consumption is cut overall. The standards provide a framework for workplaces to boost all of these areas, encouraging efficiency increases across all areas – including energy efficiency.

Additionally, there is work towards being certified for ISO 50001:2018 – Energy Management.

7 AFFORDABLE AND CLEAN ENERGY

Target 8.6

“By 2020, substantially reduce the proportion of youth not in employment, education or training”²

As mentioned in targets 1 and 4, work has been done with the youth population in the local areas involving their education through work with schools, and training through the development of technical and vocational skills through providing internships.

Target 8.8

“Protect labour rights and **promote safe and secure working environments for all workers**”²

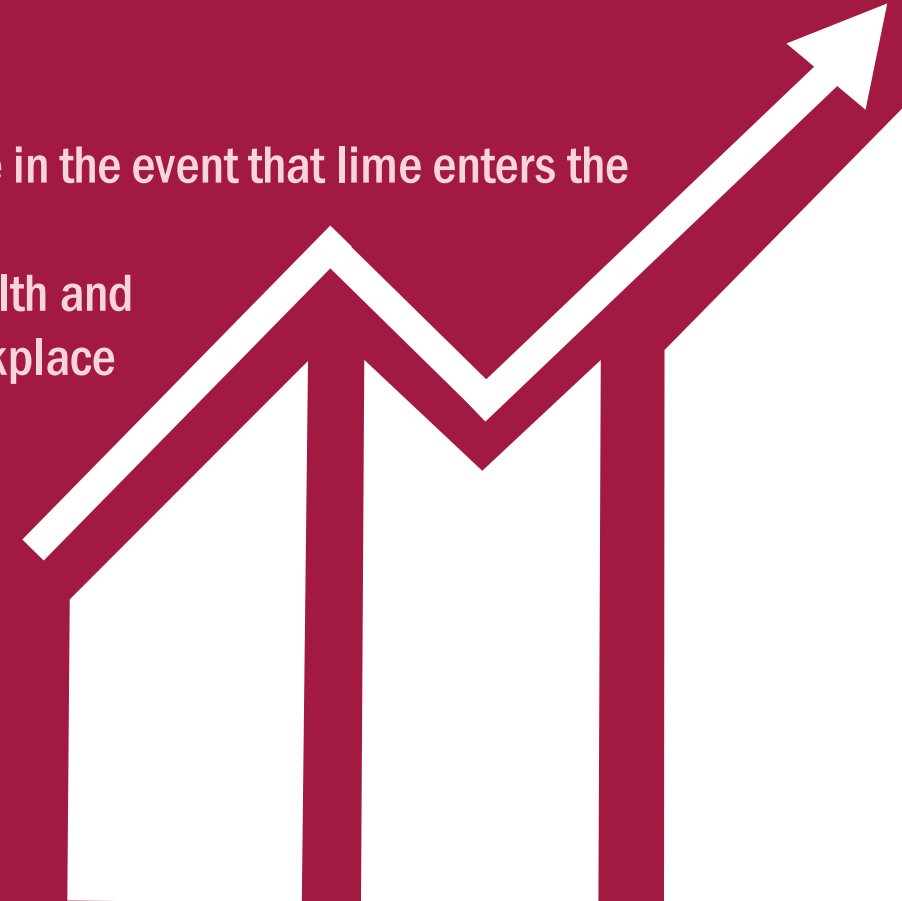
Many strategies have been put in place to make the working environment safe and secure. Working at a lime quarry comes with serious risks, so by having a robust health and safety system and a clear motto that all accidents can be avoided, the hazardous environment can be made as safe as possible.

Examples of safety solutions include:

- Diphotérine required to be carried on any workers person at all times when on site in the event that lime enters the eye so that it can promptly be washed out
- Working with the Uni of Hull using a knowledge transfer partnership to fund in health and
- safety around the workplace, such as changing the culture and climate of the workplace to facilitate safer working conditions in the lime industry
- An easy-to-use report system for anybody who witnesses near misses, injuries, or ill health whilst on site

DECENT WORK AND

**8 ECONOMIC
GROWTH**



Target 9.2

“Promote inclusive and sustainable industrialization and, by 2030, **significantly raise industry’s share of employment and gross domestic product**, in line with national circumstances, and double its share in least developed countries”²

There are five sub companies that make up Singleton Birch, all contributing to the share of employment in the lime industry. As of 2019, the British Lime Association, which Singleton Birch is a member of, reported on the maintained sales performance of the UK lime sector, with production levels gradually improving after the 2008 recession.



9 INDUSTRY, INNOVATION, AND INFRASTRUCTURE

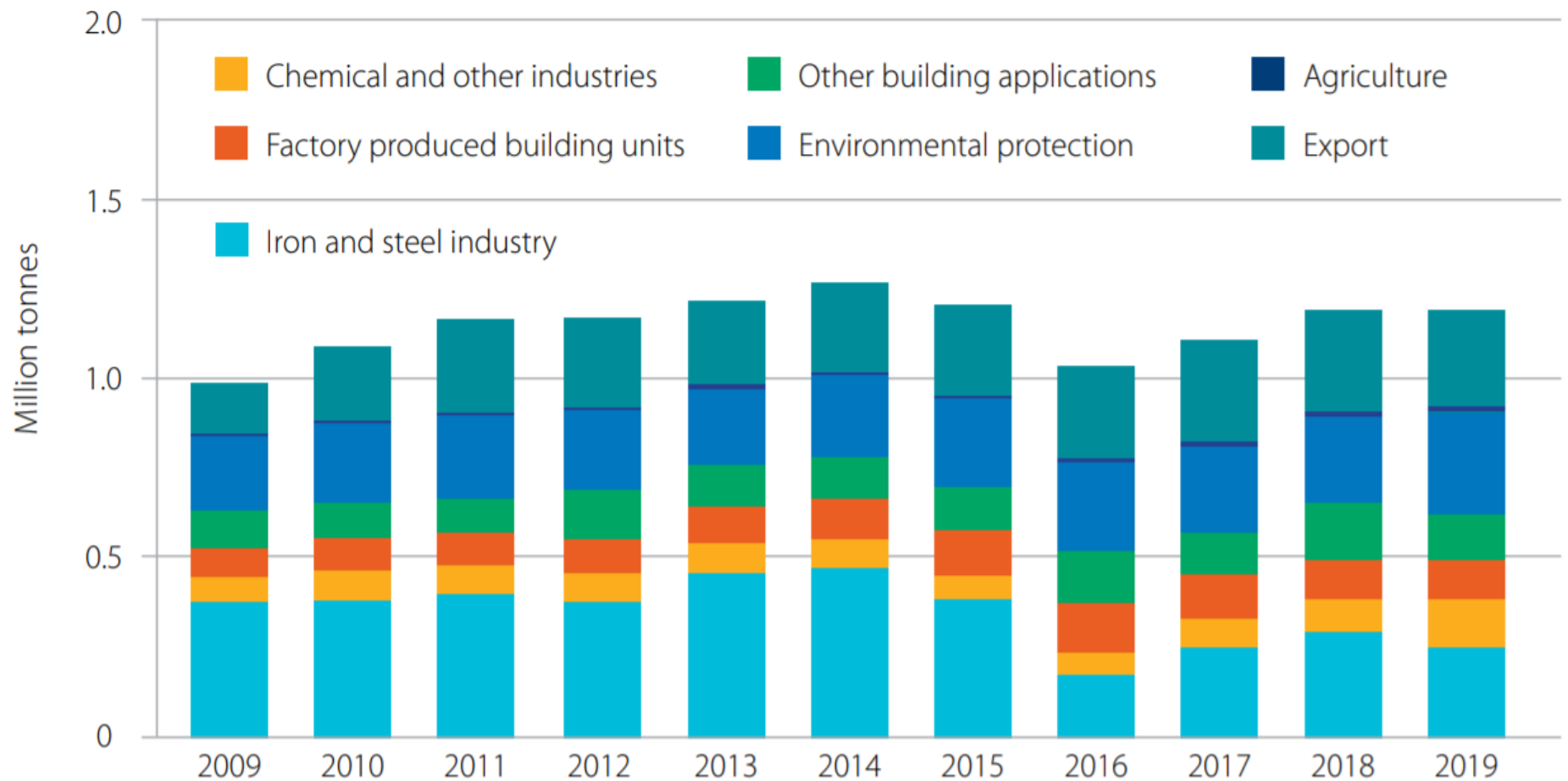
Target 9.4

“By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and **greater adoption of clean and environmentally sound technologies and industrial processes**, with all countries taking action in accordance with their respective capabilities”²

There is a focus on completed cycles in product use on site, such as the development of the Origen Kiln that burns oxygen as a fuel meaning that the carbon dioxide produced is pure enough to use in other products such as fizzy drinks, a growth promoter in plants, or the potential use of methane gas from the anaerobic digestors in fuelling vehicles by using a gas engine in the trucks. By increasing the amount of product used from what is produced, the resource-use efficiency is increased and the impact of releasing waste products into the environment is reduced.



INDUSTRY, INNOVATION, AND INFRASTRUCTURE 9



Graph produced by the British Lime Association⁶ shows the gradual increase from 2009, after the global financial crisis in 2008 (2008 Q2 – 2009 Q3). The overall increase shows contributions towards target 9.2.



Health and safety
50% fewer incidents than 2011



Waste to landfill
36% lower than 2011



Export sales
12% increase since 2011
and 25% since 2006



Environmental incident free
No category 1 or 2 incidents



Particulate, NO_x, and SO₂ emissions
4,310t less than 2011
50% fewer incidents than 2011

**INDUSTRY, INNOVATION,
AND INFRASTRUCTURE 9**



Infographic
produced by the
British Lime
Association
highlighting key
areas of
improvement in the
industry.⁶

10 REDUCED INEQUALITIES



Target 10.3

“Ensure equal opportunity and reduce inequalities of outcome, including by eliminating discriminatory laws, policies and practices and promoting appropriate legislation, policies and action in this regard”²

The inappropriate behaviour policy in place, as mentioned in the company handbook, ‘recognises that inappropriate behaviour, which may include harassment or bullying, can take place and aims to ensure that if inappropriate behaviour does occur it is dealt with in a serious, sensitive and confidential manner so that the matter can be solved as quickly as possible for all concerned’. Managers and supervisors have a particular responsibility in this regard, as they are the first place to report to.

By enacting this policy, any discriminatory behaviour can be dealt with swiftly, with any harassment being defined by the victim of said behaviour.

Target 11.2

“By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all”²

The company has introduced a cycle to work scheme, allowing employees to choose a bike and safety equipment with value of up to £1,000 to be used with the intention of cycling to and from the workplace. This is paid for via a salary sacrifice over two years, where the employee can then choose to pay for the bike at fair market value or continue using the bike without transferring

ownership. The scheme encourages the use of a sustainable, environmentally friendly transport system at an affordable price.

Target 11.7

“By 2030, provide universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities”²

As a part of goal 6, the repurposing of old quarries into wildlife spaces was brought up – this also feeds into goal 11, as by improving the land for old quarries a woodland trail for the local community has been made - a green space for anyone to enjoy.

11

SUSTAINABLE CITIES AND COMMUNITIES



RESPONSIBLE CONSUMPTION AND PRODUCTION

Target 12.4

“By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment”²

Target 12.5

“By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse”²

Target 12.6

“Encourage companies to adopt sustainable practices and to integrate sustainability information into their reporting cycle”²

There are multiple ways in which the goal for responsible consumption and production is being met at Singleton Birch. There is a very small amount of waste that is put into the site landfill – which is on site, managed by the company and not left to the general public. Any waste unsuitable is managed by external waste management companies. As **target 12.5** states, the reduction of waste generation is of importance – by reducing the overall amount that is not used, there is less of an impact to human health and the environment

overall. There is continual efforts towards developing and adopting further sustainable practices – such as working with the University of Hull regarding their partnership with INCUBIS, a project to deliver incubators to allow the implementation of energy symbiosis in the Humber region.

For any waste that is produced there is an importance placed on the ideal disposal to minimise any adverse effects. Guidance from the environment agency is taken into key consideration, with criteria detailing acceptable waste being followed.

ISO 14001:2015

Following the guidelines of ISO 14001:2015 contributes to many of the UN goals, but a unique goal it meets is climate action. Whilst many of the targets for climate action are on a large scale, encompassing whole countries in some, ISO 14001:2015 helps climate action become more accessible to organisations of any size by helping them to achieve goals in an environmentally friendly manner.

“One notable example is the ISO 14000 family of standards for environmental management systems, which details practical tools for organizations to manage the impact of their activities on the environment. This suite of standards, which includes one of ISO’s most widely used standards – ISO 14001, Environmental management systems – Requirements with guidance for use, covers overall frameworks, audits, communications, labelling, life-cycle analysis and methods to mitigate and adapt to climate change.”⁷

- ISO Standards, Sustainable Development Goals



13 CLIMATE ACTION



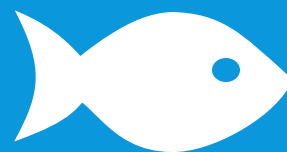


European Lime Association

Work with the European Lime Association is being carried out in order to see the feasibility of ocean liming.

By treating with laked lime, the ocean's alkalinity is increased, which means that more CO_2 can be absorbed by the ocean and stored as bicarbonates, helping to both reduce CO_2 levels in the atmosphere and increase the alkalinity in areas where ocean acidification is causing issues. Organisms that make hard shells from combining calcium and carbonate in the seawater are particularly impacted by ocean acidification – by adding slaked lime, species could be saved from extinction.

14 LIFE

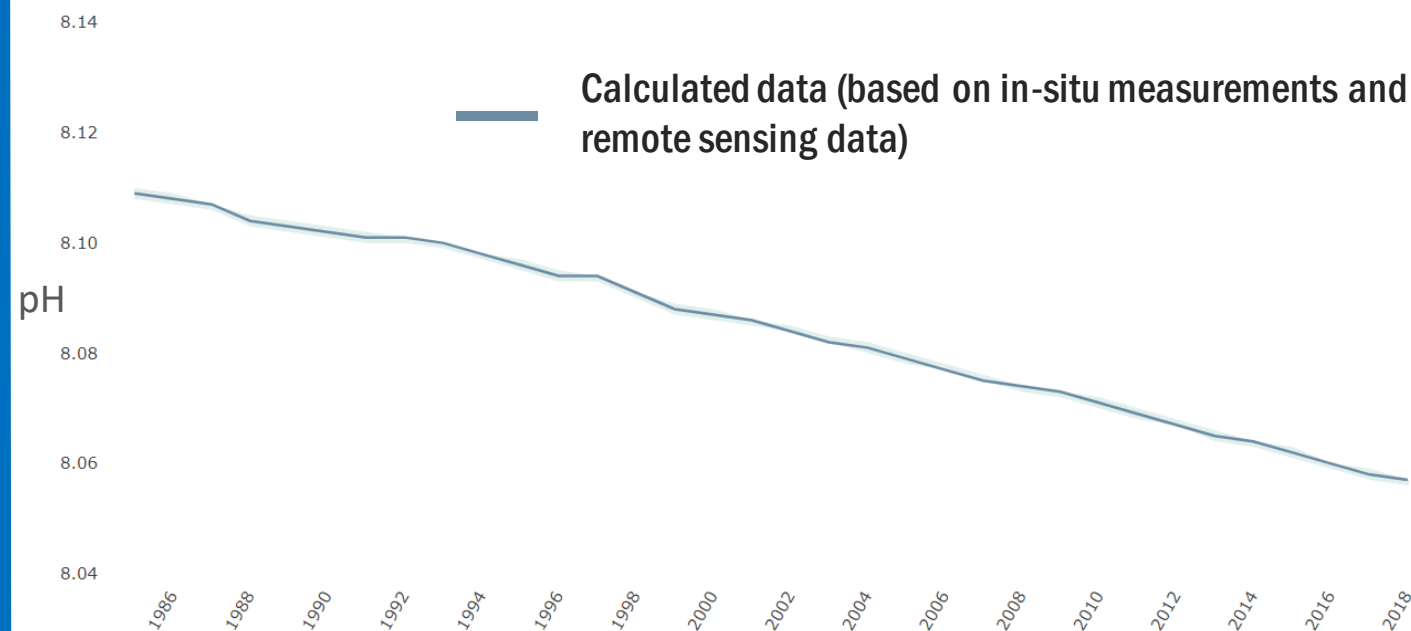


BELOW WATER OCEAN pH IS DECREASING

Target 14.3

“Minimize and address the impacts of ocean acidification, including through enhanced scientific cooperation at all levels”²

Yearly mean surface seawater pH reported on a global scale⁸



Target 15.1

“Ensure the conservation, restoration, and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountain and drylands”²

Target 15.2

“Target restoration of degraded forests and increase afforestation”²

Target 15.5

“Halt the loss of biodiversity”²



Lincolnshire Wildlife Trust



Singleton Birch supports major not for profit organisations such as the Lincolnshire Wildlife Trust and the RSPCA in protecting the UK's ecosystems and biodiversity. The Katherine Martin Trust, Singleton Birch's largest shareholders, have made large donations to the organisations, with shares in the company being left to three not for profit organisations by Katherine Martin: the NSPCC, Barnardo's and the RSPCA. With a long history of support continuing to this day, life on land is being supported.

These are not the only examples – as previously mentioned, disused quarries are converted to wildlife spaces through the planning of trees and hedgerows, encouraging biodiversity independently as well as supporting organisations contributing to these targets.



I 15 LIFE ON LAND

Target 16.b

“Promote and enforce non-discriminatory laws and policies for sustainable development”²

In the workplace there is now a stronger emphasis on equal opportunities than ever before, with the following characteristics considered protected:

- Age
- Disability
- Gender reassignment
- Marriage and civil partnership
- Pregnancy and maternity
- Race
- Religion or belief
- Sex
- Sexual orientation

Positive action is also being considered, which refers to encouraging the participation from certain groups – for example, women are under-represented in industry, so by encouraging applications from female workers there is a greater chance for more women to be hired in the industry.

Target 16.2

“End abuse, exploitation, trafficking, and all forms of violence against and torture of children”²

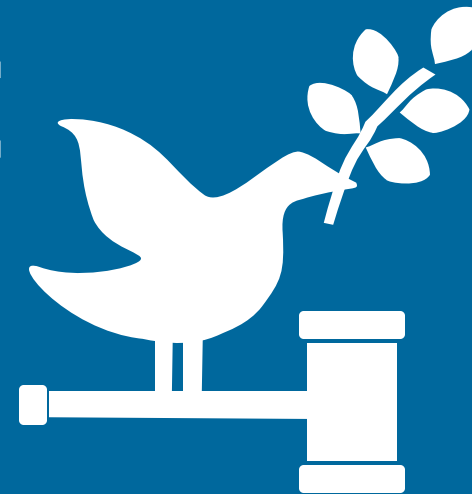
Modern Slavery Act 2015

Singleton Birch aims to maintain the utmost transparency and integrity in all business dealings, and is dedicated to continuing to meet the objectives of the Modern Slavery Act 2015.

All employees are encouraged to report any instances of unethical behaviour through the whistleblowing policy.

Suppliers must evidence compliance through their Supplier Assessment Questionnaire, and are expected to have taken steps to assess, prevent, and eradicate modern slavery within their own business and that of their suppliers.

PEACE, JUSTICE 16 AND STRONG INSTITUTIONS



NET ZERO HUMBER

Target 17.16

“Enhance the global partnership for sustainable development, complemented by multi-stakeholder partnerships that mobilize and share knowledge, expertise, technology and financial resources, to support the achievement of the sustainable development goals in all countries, in particular developing countries”²

Singleton Birch is committed to supporting a net-zero Yorkshire and Humber industrial cluster by 2040.

Several projects are being considered for creating a greener industry, with a large project being for a carbon pipeline to capture, transport, and store carbon.

Using the pipeline planned to be installed across the Humber region, carbon produced by Singleton Birch and many other large industry figures throughout the region, such as British Steel, can be captured and stored in naturally occurring, porous rock formations. This prevents escape into the atmosphere and can help halt the current rate of climate change.

17



INNOVATION TASKFORCE

Target 17.16

“By 2030, build on existing initiatives to develop measurements of progress on sustainable development that complement gross domestic product, and support statistical capacity-building in developing countries”²

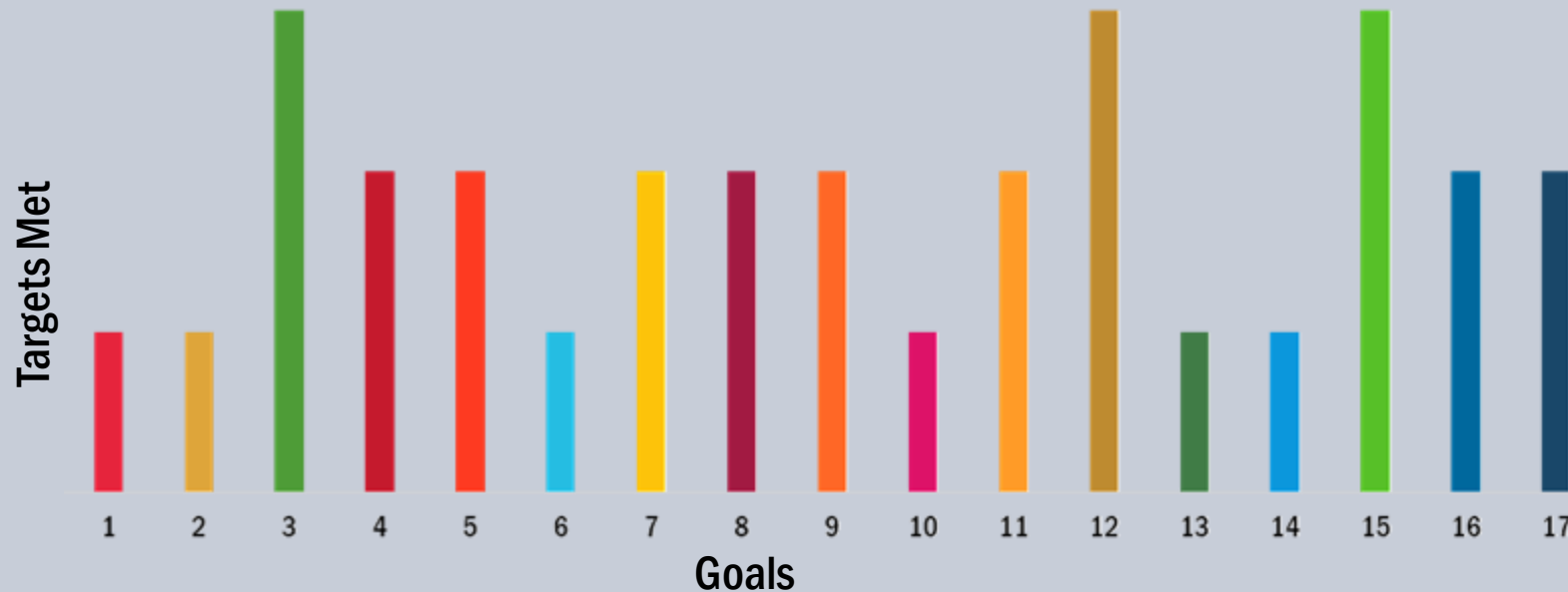
Singleton Birch is a contributor to the European Lime Association’s Innovation Taskforce, meaning there is constant contribution to further development of sustainable development, including environmental impact as well as other aspects such as efficiency across the sector.

Summary

Singleton Birch has met many areas of the UN's 17 Sustainable Development Goals, even without factoring in the many uses of lime itself. The graph on the right shows how many targets have been met per goal as shown in this report – it is not encompassing of all targets met when including the uses of lime.

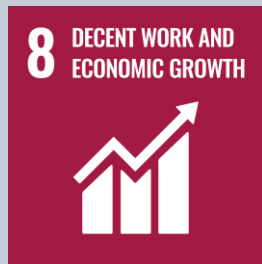
Throughout this report, an effort has been made to not repeat the same example – but many examples used apply to many different goals and targets.

The Amount of Targets Met by Singleton Birch per Goal



Work with Schools and Young People

There has been mention of the work done with young people, such as donations to local schools and offering work opportunities for college and university students throughout the slides, which reaches areas of each of these goals:



Repurposing Old Quarry Sites

Repurposing old sites meets many of the goals, as different sites have been repurposed into different areas such as green spaces or agricultural land.



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