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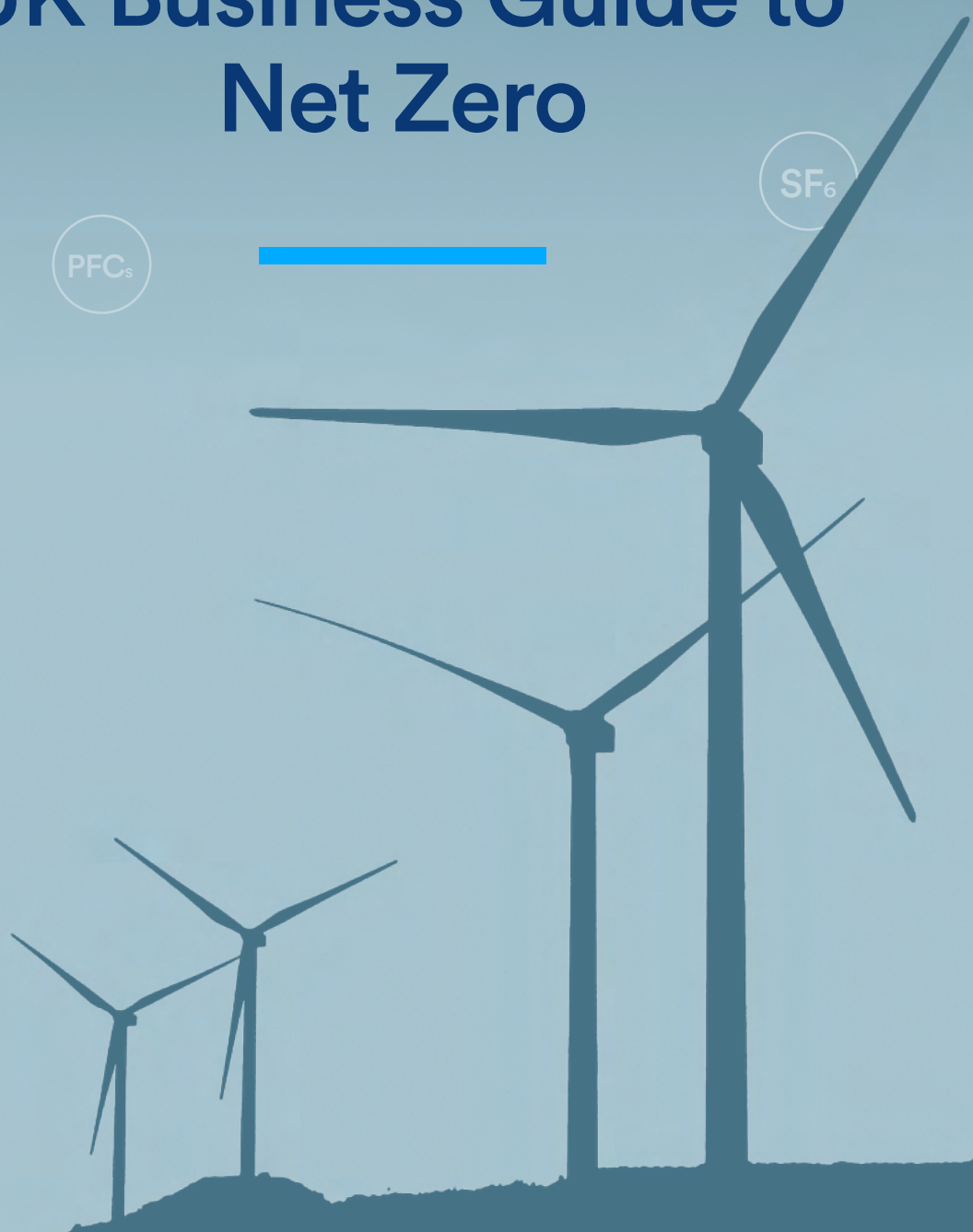
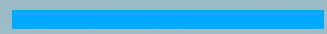
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UK Business Guide to Net Zero

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Newable

Executive Summary

Mark Carney, the former Governor of the Bank of England says: “Companies that fail to adapt to climate change will go bankrupt.”

The UK government’s response to the climate emergency was to set a net zero emissions target by 2050. This means that all SMEs need to meet the legal requirement of net-zero emissions by 2050.

Sweden, France, Denmark and New Zealand have all set legal targets to bring their greenhouse gas emissions to net zero by 2050. In addition, legislation for an EU-wide net zero target is expected in the near future.

British goods and services are perceived as high-quality, reliable, internationally respected and good value for money. The objective of this booklet is to inform and provide insight to UK businesses on what net zero means to them and how they can incorporate sustainability values into their business model to ensure that they remain competitive in the global market place.

“ Companies that fail to adapt to climate change will go bankrupt.”

MARK CARNEY, THE FORMER GOVERNOR OF THE BANK OF ENGLAND



Chapter 1

What impact will Net Zero have on businesses?

In the last few years, we have seen unprecedented action for climate change, including international student strikes, extreme climate protests and revised environmental regulations. For businesses, the physical risks from climate change itself, in addition to the risks from societal responses to the climate emergency, have made climate change an issue that can no longer be ignored.

Increasing government regulations

The UK governments response to the climate emergency was to set a net zero emissions target by 2050. According to The Carbon Trust, companies with fewer than 250 employees account for almost 20% of the UK's total carbon emissions. In order to achieve the government's net-zero target, UK SMEs will have an important role to play. Countries around the world are also taking action. Sweden, France, Denmark and New Zealand have all set legal targets to bring their greenhouse gas emissions to net zero by 2050. An EU-wide net-zero target is expected in the near future. In addition to the cost of domestic regulations, businesses that export goods or services will need to account for the tougher environmental regulations in their target markets.

Changing consumer behaviours

SMEs are much more likely to be asked by customers/service users to reduce their environmental impact than three years ago¹. Consumers are more aware of the impact of their activities on the environment and just offering good products and customer service doesn't satisfy them anymore. They want to understand where the product came from and how the manufacturing process can help in fighting against greenhouse emissions of gases. They are demanding and opting for green products that are not only safer for them to use, but are also environment-friendly.

Pressure from main contractors on supply chain

Leading UK businesses like BP, Ericsson, IKEA, BT Group, British Airways, Unilever, Shell and Sainsbury's, are already committed to reducing their greenhouse gas emissions and many of them have set targets to reach net-zero emissions in their supply chains (Scope 3 emissions). These commitments are finding their way into procurement processes and requests for proposals; purchasers are requiring suppliers to deliver the same goods or services with lower associated emissions and are expecting them to match their climate ambitions.

1 <https://www.carbontrust.com>

Pressure from the banks

Most financial institutions are now committed to ensuring that they do not directly or indirectly finance activities that will have a negative impact on the environment. These commitments will impact the ease with which businesses can access trade finance and insurance products.

Employees

In a global recession, most people are thankful to have a job, however, research suggests that employees are more likely to be satisfied with their jobs if they are working for a company that is perceived to be "green." The financial performance of companies fails to correlate with employee happiness².

The opportunity for businesses

Companies that take a pro-active approach to demonstrate their commitment to reducing their greenhouse gas emissions, will be well set up to capitalise on the opportunity to leverage climate action as a means of:

1. **Winning and retaining business,**
2. **Innovating and offering new climate friendly products and services,**
3. **Reducing costs,**
4. **Appealing to employees,**
5. **Enhancing image and reputation with customers and stakeholders,**
6. **Enhancing access to capital and,**
7. **Increasing business preparedness to weather external shocks that may arise from new government policies and the physical impacts of climate related events.**

In summary, SMEs that can demonstrate and articulate their commitment to reducing their carbon footprint in a measurable and quantifiable manner will be more competitive in the current global market place, where the major buyers also have an incentive to reduce their greenhouse gas emissions. These buyers have set corporate net zero targets and are focusing their attentions on achieving their objectives by buying their goods and/or services from businesses that have similar net zero commitments.

² Cassandra Walsh and Adam Sulkowski. A greener company makes for happier employees more so than does a more valuable one: a regression analysis of employee satisfaction, perceived environmental performance and firm financial value. *Int. Environ. Rev.*, 2010, 11, 274-282

Chapter 2

What can businesses do?

Business leaders need to act now and begin their journey to net zero emissions. Every action and decision will need to be made through the lens of the impact it will have on the climate. From commuting to the office, to the decision of what kind of coffee to stock in the office, to sourcing electricity, heating and water supply.

Businesses can support the transition to a low carbon economy by reducing their carbon footprint. The starting point for any business must be to:

- 1. Establish and understand what your current carbon footprint is (the amount of carbon being emitted) before setting out how to go about reducing it. There are a range of free tools and guides available on the internet that can help businesses do this. For example, the Government-backed Carbon Trust offer a free Carbon Calculator for small and medium-sized businesses.**
- 2. Set out a strategy to reduce your carbon emissions and offset what you can't reduce. Help, advice and guidance in this area is available from specialist consultancy firms.**
- 3. Educate and engage your staff. UK SMEs account for 99.9% of the business population³. An engaged workforce can enhance your net zero journey. In addition, failure to engage employees on sustainability could hinder recruitment and retention. For example, 78% of Millennials want to work for an organisation that makes positive social impact⁴.**
- 4. Review your business. What changes will you need to make to your products and/or services in light of the changing environmental policies in the UK and in your target markets?**

³ <https://www.fsb.org.uk>

⁴ <http://www.kinandco.com>

Chapter 3

Actions to implement carbon reduction



1. Find out your carbon footprint

The first step is to figure out how much greenhouse gas emissions your business generates annually. This will be your benchmark carbon footprint. Once you have determined your benchmark, you can work on reducing your carbon footprint from existing levels. There are numerous resources available on the internet to help you work out your carbon footprint.



2. Identify your areas of high emissions

This means identifying the exact activities that produce greenhouse gas emissions and to what degree. Areas to focus on include:

Transportation: The transportation sector generates the largest source of carbon emission - cars, trucks, ships, trains, and planes. Over 90 percent of the fuel used for transportation is petroleum based, which includes primarily gasoline and diesel.

- Logistics and fulfilment routes are areas to consider for emissions reductions. You can significantly reduce the distance your products need to travel to reach retailers or consumer homes by operating out of regional warehouses. Secondly, with proper planning to account for the time, you can reduce logistics emissions by using sea freight rather than air, to deliver products. Sea freight is also substantially less expensive.
- Employees can be incentivised to travel in more sustainable ways. You can transition to an all-electric fleet for company owned vehicles. Another way to encourage climate friendly transport is to offer incentives for employees that commute via carpool, public transport or bicycle travel. Additionally, you can offer your employees loans to buy their own electric vehicles. There are government grants available to subsidise the cost of new low-emissions vehicles and subsidies to those installing charge points at home.
- Business Travel is another area to consider for emissions reductions. Many companies are choosing to reduce international travel, instead, opting to hold virtual business meetings by using popular software programmes such as MS Teams, Zoom and Skype. By reducing emissions and expenses related to business travel, you can minimize your company's impact on the environment while potentially increasing your bottom line. For domestic business, it is worth considering travelling by train to reduce emissions from air travel.

Energy: Electricity, heating and cooling are all major sources of carbon emissions. Improving energy efficiency is a great way to reduce your carbon output. It is important to focus on facilities in your entire value chain including corporate offices and store-fronts, as well as factories and third party warehouses. You can switch your energy supply to renewable sources and Renewable Energy Guarantees of Origin (REGO) certificates assures that the origin of the energy supplied to you is 100% renewably sourced.

Food: While it might not be apparent, the food we eat has a significant impact on our greenhouse gas emissions. In fact, agriculture is responsible for roughly one third of global greenhouse gas emissions. In general, plant-based foods are less carbon intensive than animal-based products. Of note, the production of red meat and dairy are especially carbon intensive. Therefore, if you offer company lunches or cater events, you can reduce your carbon footprint by sticking to plant-based foods and specifically avoiding beef and dairy-based eats.

Supply chain: Supply chain emissions are often responsible for the majority of corporate carbon footprints. Adjustments to your supply chain will have a significant impact on your business's carbon footprint.



3. Develop a Corporate Climate Action Plan (CCAP)

Now that you have worked out your benchmark carbon footprint and identified the activities that produce greenhouse gas emissions, you can develop your CCAP. The CCAP combines your specific sources of greenhouse gas emissions with ways you can reduce them.



4. Set a reduction target and timeframe

To make measurable changes it's imperative to set quantitative and time sensitive emissions reduction targets. The UK has set a legal target to be net zero by 2050. Businesses can mirror this target or be more ambitious. You should look at emissions reductions like a business plan. To help quantify your emissions reductions, it's good business practice to set an internal price on carbon. This way you can assess metrics like the opportunity cost of capital, internal rate of return and payback periods. Be sure to obtain cost estimates for strategies in your climate action plan so you know the cost and time required to make reductions before starting.



5. Monitor progress

Once you've set targets and implemented a plan, it's essential to assess your progress. Working with a third-party consultancy is imperative to maintaining accountability and measuring your true footprint. Monitoring progress not only validates your hard work, but can also offer insights on where you can improve.



6. Educate and engage employees

One of the most powerful ways to make your workforce more carbon accountable is to actively engage your employees in the cause. When employees understand why they are being told to change long-time habits, they are less likely to resist new eco-conscious policies. In order to inspire your team members to take ownership of their carbon impact, encourage input on workplace energy-saving ideas at staff meetings and by setting up suggestions boxes. Consider instituting a corporate matching program where you financially replicate employee donations to eco-friendly non-profits.



7. Shout it from the rooftops

Finally, let everyone know what you are doing to minimise the carbon footprint of your business. You can build your brand's reputation as a leader in sustainability and gain new clients as a result – all while protecting the resources and planet we need to operate and thrive.

Appendix 1

Greenhouse Gas Protocol

Greenhouse gas emissions are broken down into three categories by the Greenhouse Gas Protocol - the most widely used international accounting tool.



Scope 1 – covers all direct emissions generated by an organisation from owned or controlled sources. This includes fuel combustion on site such as gas boilers, fleet vehicles and air-conditioning leaks.

Scope 2 – covers indirect emissions generated by an organisation from purchased energy supply consumed by the company - electricity, steam, heating and cooling. Emissions are created during the production of the energy and eventually used by the organisation.

Scope 3 – covers all other indirect emissions from activities of the organisation that occur from sources that they do not own or control. These are usually the greatest share of the carbon footprint. Examples are emissions associated with business travel, procurement of goods & services (supply chain), employee commuting, waste disposal, use of sold products and water.

Appendix 2

Resources

[The SME Climate Hub](#) – One-stop-shop climate action platform for SMEs to curb carbon emissions, build business resilience and gain competitive advantage¹.

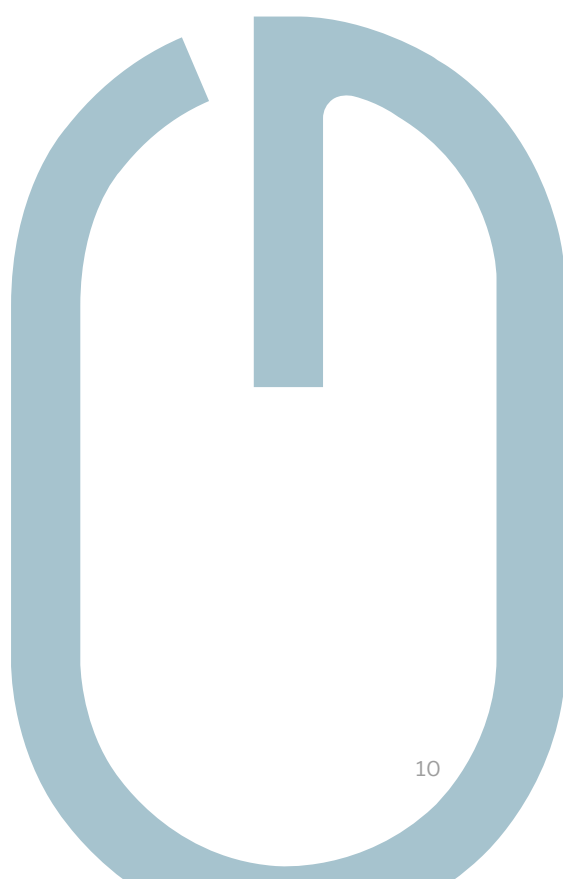
[The Carbon Trust](#) – are a not-for-profit company providing specialist support to help business and the public sector make efficiency savings and seize opportunities by cutting carbon emissions, saving energy and commercialising low carbon technologies.

[CDP](#) – is a not-for-profit charity that runs the global disclosure system for investors, companies, cities, states and regions to manage their environmental impacts.

[Science Based Targets Initiative](#) – a partnership between CDP, the UN Global Compact, World Resources Institute and WWF has launched a special, streamlined target validation route for small and medium-sized enterprises (SMEs).

[The Prince of Wales's Corporate Leaders Group](#) – is a corporate membership organisation that aims to provide a strong voice to support UK leadership both nationally and internationally on the transition towards a climate neutral, resource efficient, socially inclusive economy by 2050.

[The Renewable Energy Guarantees of Origin \(REGO\) Scheme](#) – provides transparency to consumers about the proportion of electricity that suppliers source from renewable generation.



Appendix 3

Climate change

What is climate change?

Climate change describes a change in the average conditions — such as temperature and rainfall — in a region over a long period of time. Global climate change refers to the average long-term changes over the entire Earth.

Is it usually rainy or usually dry? Is it typically hot or typically cold? Climate change is when the usual weather conditions that are expected in a region has changed.

Scientists have observed that the Earth's average temperature has been increasing much more quickly than they would expect over the past 150 years and many of the warmest years on record have happened in the past 20 years.

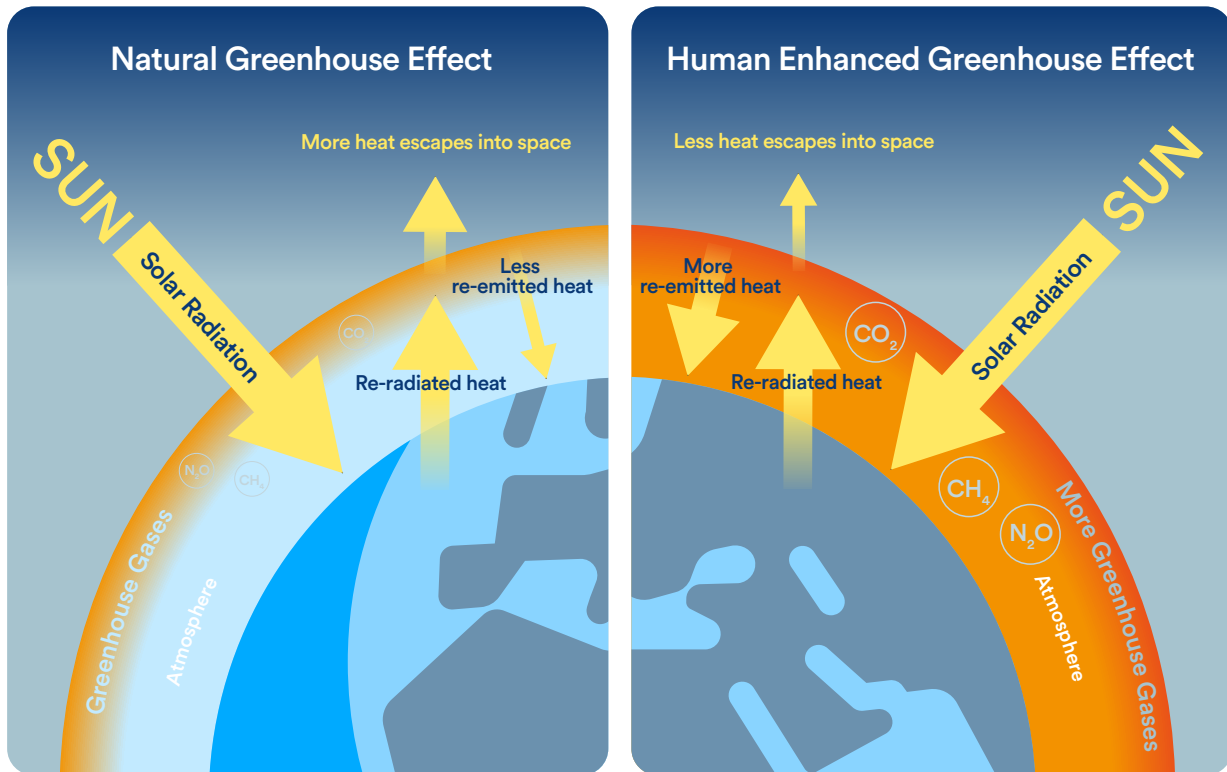
Why is it important?

The energy from the Sun is the primary driver of Earth's climate. Most of the Sun's energy that reaches the Earth is reflected back into space, but some is trapped by gases in the atmosphere as it radiates back from the Earth's surface. This is the 'Greenhouse Effect', and it warms the Earth like a blanket, playing a crucial role in making life on earth possible. These naturally occurring gases, known as greenhouse gases, are Carbon Dioxide (CO₂), Methane (CH₄) and Nitrous Oxide (N₂O). The earth only needs a tiny amount of these gases (0.1%) to be in the atmosphere.

In order to maintain a stable global climate, a balance must exist between the incoming solar radiation, and the combination of the outgoing solar radiation reflected back out to space from the Earth's surface and radiation emitted from the earth because of human, animal and plant activities. This is known as the Earth's energy balance.

According to the Intergovernmental Panel on Climate Change (IPCC), human activities are estimated to have caused approximately 1.0°C of global warming above pre-industrial levels, with a likely range of 0.8°C to 1.2°C. Global warming is likely to reach 1.5°C between 2030 and 2052 if it continues to increase at the current rate.

In effect, human activities such as burning fuel to power factories, homes, offices, cars and buses, has caused an increase in the greenhouse gases in the Earth's atmosphere. This is causing the atmosphere to trap more heat than it used to, leading to a warmer earth.



Source: Centre for Climate and Energy Solutions

The increase in greenhouse gases has turned the blanket from a summer duvet to a winter duvet!

Why does this matter?

Many people, including scientists, are concerned about this warming. As Earth's climate continues to warm, the intensity and amount of rainfall during storms such as hurricanes is expected to increase. Droughts and heat waves are also expected to become more intense as the climate warms.

When the whole Earth's temperature changes by one or two degrees, that change can have big impacts on the health of people, plants and animals. The IPCC estimates that a 1.5°C average rise in global temperatures may place 20% to 30% of species at the risk of extinction, for example.

Appendix 4

Carbon Offsets Standards

Carbon offsetting products fall into two categories; Certified Carbon Credits and Voluntary Carbon Credits.

Certified Carbon Credits

Certified Emission Reduction (CER) products are Kyoto Protocol compliant. They are fully traceable, and will have been verified by the United Nations (UN). Examples of standards within the compliance market are CDM, JI and EUAs, these are explained below:

CDM - Clean Development Mechanism

This standard produces emission reductions in developing countries, generating CER (Certified Emission Reduction) credits. They can be used to meet part of the emission reduction targets set for industrialised countries under the Kyoto Protocol. Under CDM projects are verified by 3rd Party auditors and reviewed, approved/ rejected by a CDM Executive Board. CDM requires strict additionality for certification of carbon offset projects and has been operational since 2006.

<https://cdm.unfccc.int/about/index.html>

JI - Joint Implementation

This standard produces emission reductions in other developed countries also with legally binding targets under the Kyoto Protocol. This standard generates ERU's (Emission Reduction Units).

<https://ji.unfccc.int/index.html>

EUA - European Union Allowances

EUA means the tradable unit under the European Union Emissions Trading Scheme (EU ETS), giving the holder the right to emit one tonne of carbon dioxide (CO₂), or the equivalent amount of two more powerful greenhouse gases, nitrous oxide (N₂O) and perfluorocarbons (PFCs). Offsetting in this way reduces the amount of carbon dioxide allowance, available for the largest polluting companies to buy. The EUAs would otherwise be traded on to companies to help them to meet their emissions targets. By buying these types of offsets you are encouraging organisations to continue to make savings of CO₂, and pushing the market to make it increasingly expensive for polluting companies to buy more credits.

https://ec.europa.eu/clima/policies/ets_en

Voluntary Emission Reductions (VER) Carbon Credits

The following is a list of the most commonly used international standards, used in the Voluntary Offset Market:

VCS - Verified Carbon Standard

This standard was developed by the Climate Group and International Emissions Trading Association (IETA). It provides real, quantifiable, additional and permanent projects based emission reductions. Credits are managed through registries to register, transfer and retire Voluntary Carbon Units (VCUs).

<https://verra.org/project/vcs-program/>

Gold Standard VERs - Gold Standard Verified Emissions Reduction (GS VER)

Launched in May 2006 by WWF-UK (a nonprofit foundation). It is a simplified version of the CDM Gold Standard, using the same basic methodologies. Only available for projects in developing countries. They are focused on renewable energy and energy efficient projects with strong sustainable development benefits.

<https://www.goldstandard.org/articles/gold-standard-emission-reductions>

VOS - Voluntary Offset Standard

Launched on the 28th June 2007 it is the latest voluntary standard to be released. It is based on the existing standards promoted by the UNFCCC. It brings the voluntary market up to the level of the regulated and standardized procedures of the (Kyoto) compliance market. VOS endorses the existing gold standard methodology. It meets and at some points exceeds CDM and JI standard.

CCB - Climate, Community and Biodiversity Standards

This standard has been developed by the Climate Community and Biodiversity Alliance. It is for land based projects that can simultaneously deliver compelling climate biodiversity and community benefits. It uses methodologies of the intergovernmental panel on climate change good practice guidance (IPCC GPG) but can also use approved CDM methodologies for calculating carbon reductions/savings.

<https://www.climate-standards.org/ccb-standards/>

Green-e

The Green-e is a US based, nationally recognized standard. It is an independent certification and verification program for renewable energy and companies that use renewable energy.

<https://www.green-e.org/>

Climate Action Reserve (CAR)

CAR began as the California Climate Action Registry, which was created by the State of California in 2001 to address climate change through voluntary calculation and public reporting of emissions. It has now become the premier carbon offset registry for the North American carbon market. CAR establishes high quality standards for carbon offset projects, oversees independent third-party verification bodies, issues carbon credits generated from such projects and tracks the transaction of credits over time in a transparent, publicly-accessible system.

<https://www.climateactionreserve.org/>





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Teju, the author of this document, is a business mentor and adviser to UK SMEs in the energy and infrastructure sector. She works directly with C-Suite to develop new strategies and structure for business resilience, expansion growth and sustainability in the transition to the low carbon economy.

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