

# Climate Change, Net Zero and Nature

An external perspective

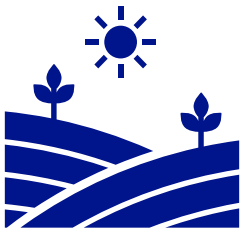


# Introduction

1

## Climate Change and Nature

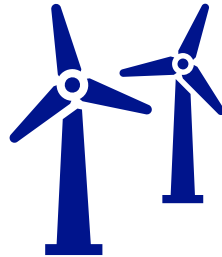
The global context



2

## Driving change

A business example



3

## Bringing it back to golf...



# Climate Change & Nature

## The global context



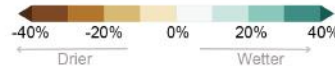
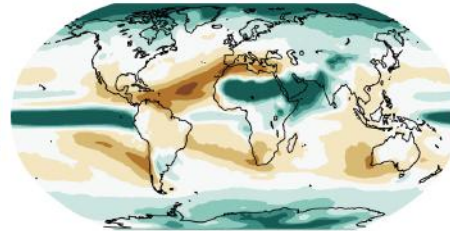
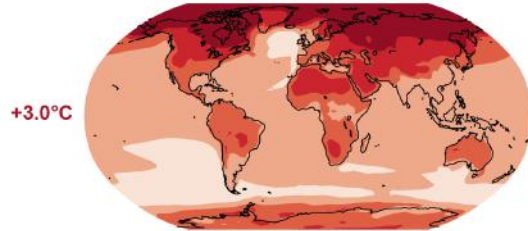
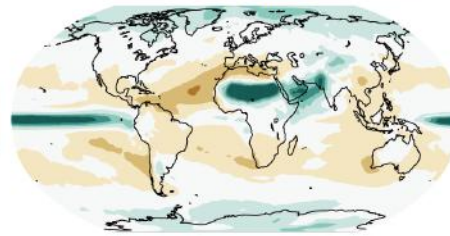
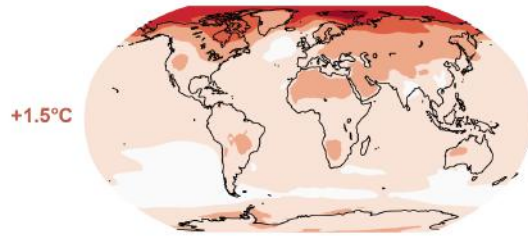


# COP27

## Global warming will exceed 2 degrees C by 2050

Warming will be **stronger** in the Arctic, on land and in the Northern Hemisphere

Precipitation will **increase** in high latitudes, the tropics and monsoon regions and **decrease** in the subtropics



## Land projected to be flooded in 2030



# What 1.1 degrees global warming looks like in 2022...

## Jun 22: UK Heatwave



Record-breaking heatwave  
Temperatures in some locations 2 - 6 degrees + previous records.

## Jun/Jul 22: Pakistan Floods



A flood event lasting months in Pakistan  
Reconstruction is estimated at \$117M USD.

## Sep/Oct 22: California Mosquito Fire



Severe wildfire damage compounded by drought conditions.

## Oct 22: Florida Hurricane Ian



Hurricane Ian  
Cat 5 Hurricane

# Net Zero by 2050

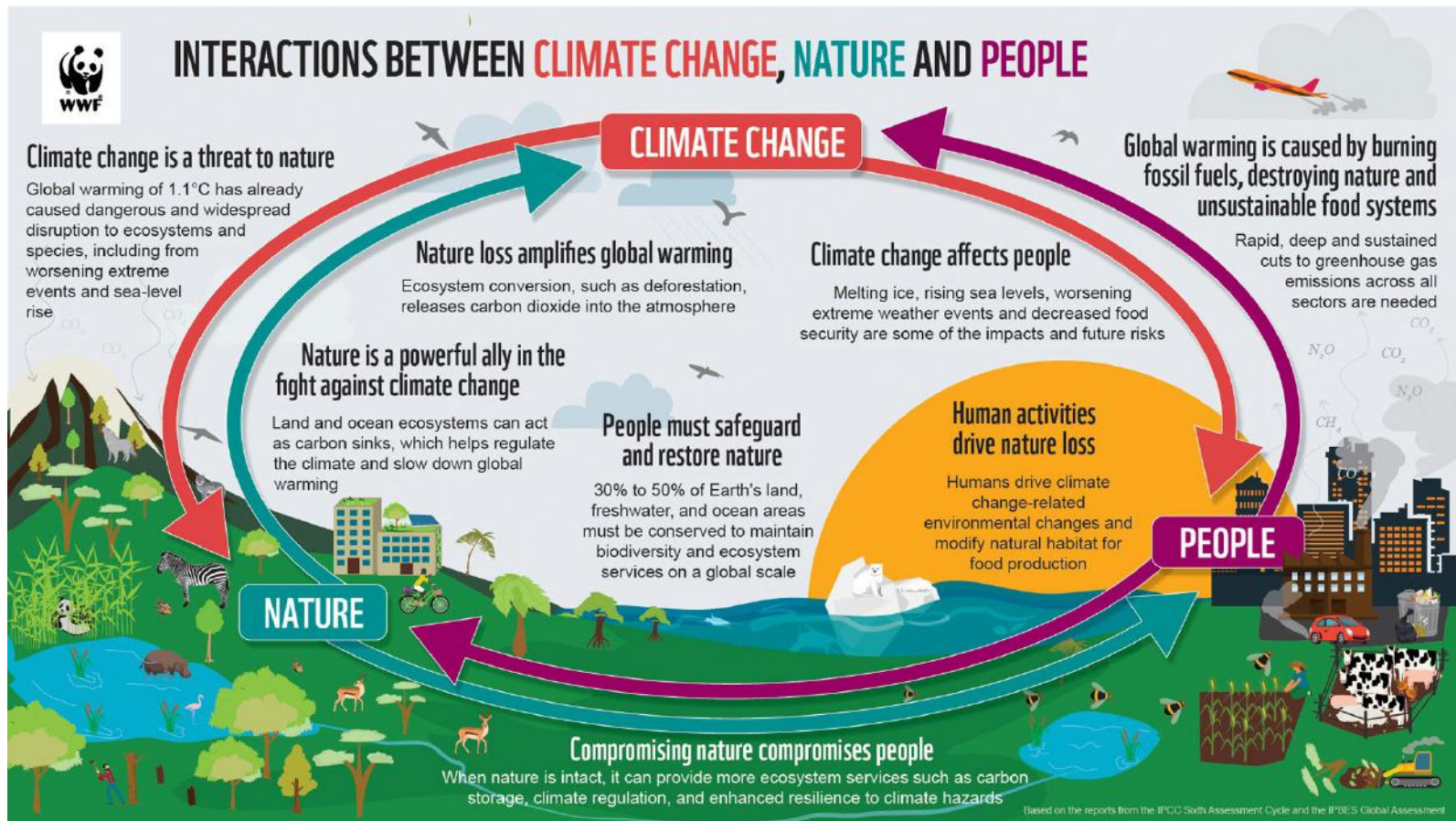


“Delivering net zero is the industrial revolution of our time”

*UK's Net Zero Review, Jan 2023*



# Why are Nature & Biodiversity important?



# COP15 – “the nature COP”



**“30 x 30”**

**Protect 30% of the world's land and seas by 2030**

**\$200  
billion  
funding  
p.a.**

**Monitor  
Assess  
Disclose  
Risk  
Dependencies  
Impacts**

**Cut global  
food  
waste in  
half**

**Reduce  
excess  
nutrients by  
half**

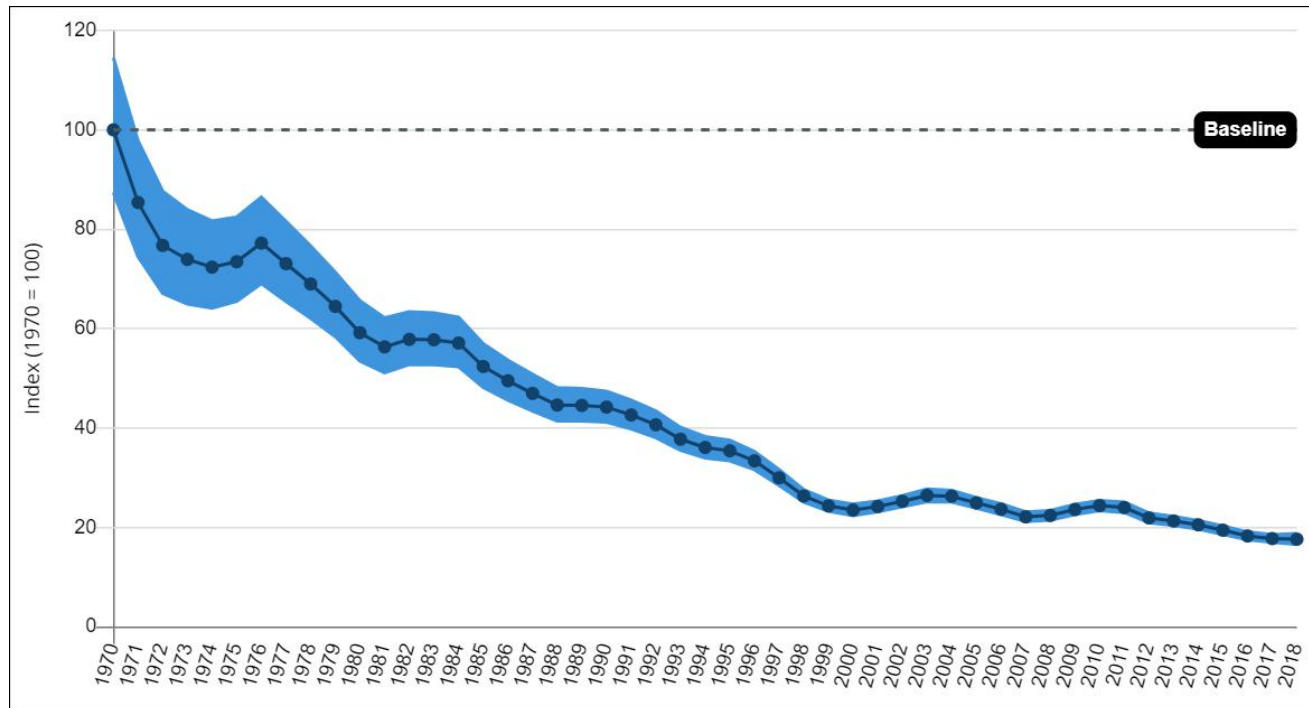
**Near zero  
loss of areas  
of high  
biodiversity  
importance**

**Phase out  
harmful  
subsidies by  
at least  
\$500b p.a.**

**Scale up  
incentives  
for  
biodiversity  
conservation**



# Abundance of 149 priority species in England 1970-2018



Department  
for Environment  
Food & Rural Affairs



DEFRA: Indicator: D6 - Relative abundance and distribution of priority species in England - Outcome indicator framework for the 25 Year Environment Plan ([defra.gov.uk](http://defra.gov.uk))

# 2

**What does this mean for business?**



# Using Natural Capital to inform business planning

Quantify

- Habitats on land we own

Assess

- Ecosystem Services provided

Value

- Each of these ecosystem services

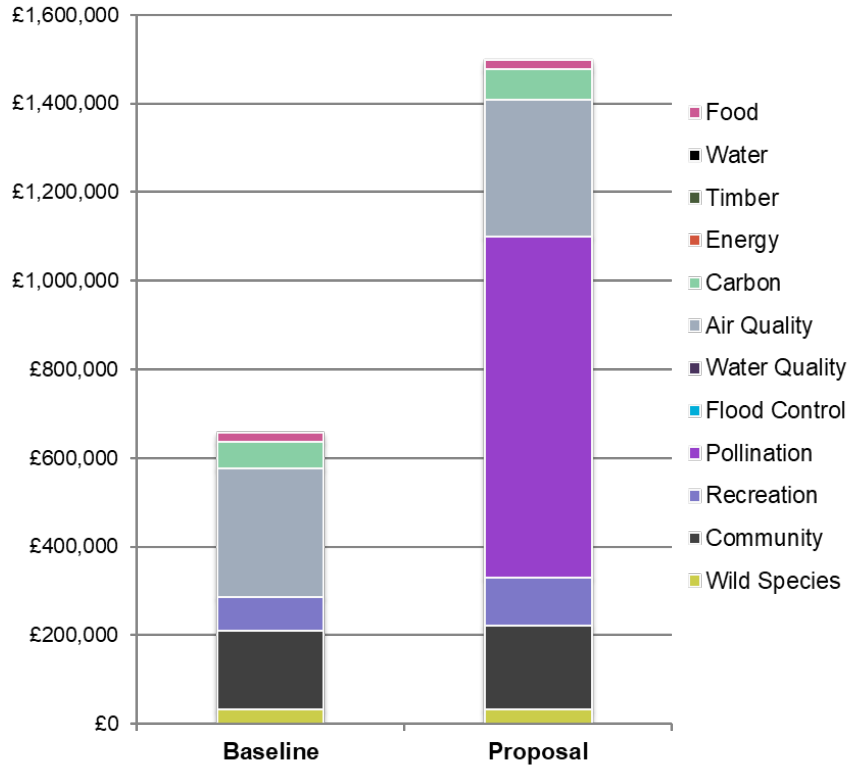
Identify

- Potential risks, opportunities and revenues

Develop

- More informed management decisions

# Return on investment



## ■ Initial Baseline Value: £650,000

- Air Quality from motorway and woodland
- Low recreation but high community potential
- High costs of anti-social behaviour / flytips

## ■ Proposal: +128% from baseline

- Pollination – wildflower meadow
- Reduced maintenance costs
- Increase in recreation
- Embodied carbon
- Nature based solutions – trespass/safety
- Community volunteering

Baseline cost: £7,200 per year

Proposal cost: £2,100 maintenance per year

**Significant return on investment in ££ and natural capital over 30 years**

# Engagement with community and organisations is key





# 3

**Bringing it back to golf...**



# Ullesthorpe Golf Club – natural capital assessment



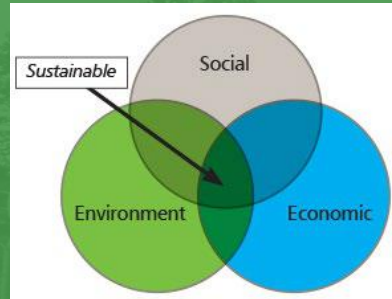
Magic.defra.gov.uk



	Ecosystem Services & Benefits	Baseline Units/Score	Potential Score	Completeness Score (Max=10)	Policy Priority
		①	①		
BIODIVERSITY	Biodiversity - Habitat	5			
	Biodiversity - Hedgerows	5			
	Biodiversity - Rivers	0			
PEOPLE	<b>People Score</b>	<b>152</b>	<b>40%</b>	<b>7</b>	
	<b>Cultural &amp; Health</b>	<b>69</b>	<b>46%</b>	<b>7</b>	
	Mental health	188	45%	8	H
	Physical Health	185	49%	8	H
	Aesthetic Values	229	54%	8	L
	Education & Knowledge	114	26%	5	M
	Interaction with Nature	115	28%	6	M
	Recreation	348	83%	9	H
	Sense of Place	208	49%	8	M
	<b>Regulating &amp; Supporting</b>	<b>67</b>	<b>46%</b>	<b>8</b>	
	Air Quality Regulation	91	32%	5	H
	Carbon Storage	193	69%	7	M
	Cooling & Shading	144	44%	7	M
	Erosion Protection	223	60%	9	L
	Flood Regulation	187	55%	7	H
	Water Quality Regulation	223	58%	8	L
	Pest Control	145	34%	9	M
	Pollination	143	34%	9	M
	<b>Provisioning</b>	<b>16</b>	<b>17%</b>	<b>5</b>	
Food & Fish - Commercial	0	0%	3	M	
Food & Fish - Community	3	1%	1	L	
Water Availability	194	46%	8	M	
Wood Production	54	14%	0	H	

# Sustainability & Golf

“Meeting the needs of the present without compromising the ability of future generations to meet their own needs.”



Golf has a unique relationship with the natural environment and a responsibility to ensure that future generations are able to enjoy the game played by millions around the world.



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GOLF

# Golf's Footprint

Golf is a game played by millions, with wide reaching impacts. It is critical to acknowledge the scope of it in order to emphasise the impact sustainability initiatives can have.



**8.4 million total  
golfers in England,  
2.4 play regularly  
(twice/month)**

**2213 clubs in  
England, 1760  
affiliated to  
England Golf**

**Golf courses take  
up approximately  
1200km<sup>2</sup> of land  
in England**



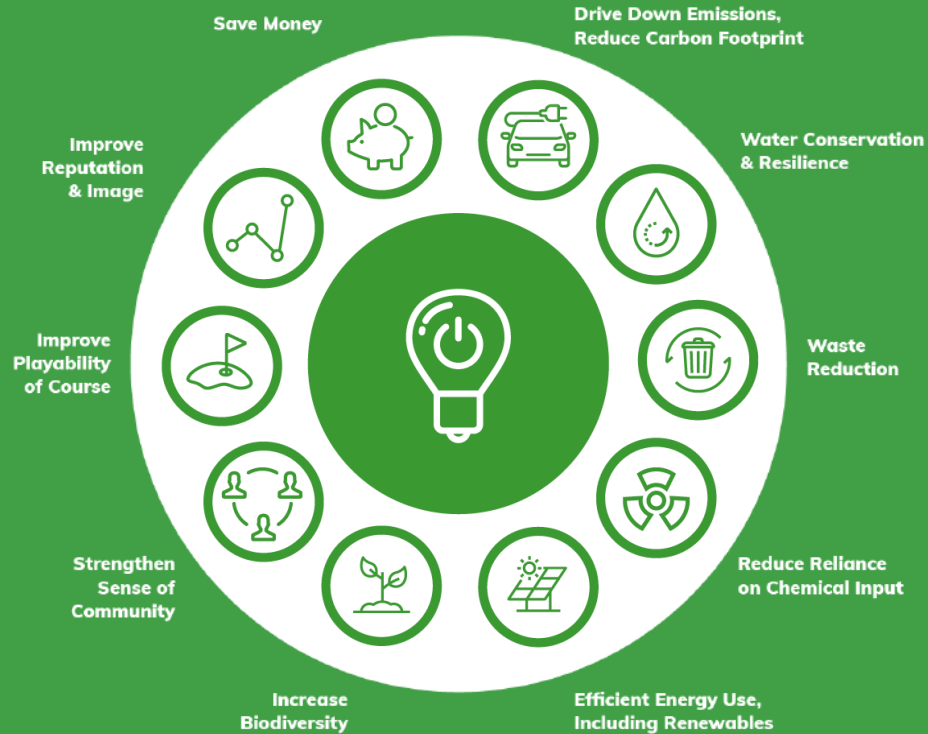
Each golf club, county and golfer has an impact and can work to reduce resource consumption and carbon footprint.



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# Opportunities

Sustainability provides the opportunity to turn challenges across England into advantages, including financially, environmentally and socially.



Note: this list is not exhaustive and all inclusive; other challenges do and will exist.



# Writing, and implementing, a sustainability strategy...



## 1. RECOGNISE AND LEARN

- What is sustainability all about?
- How will it help us?
- Will there be support for it?

### Why are you going to make changes?

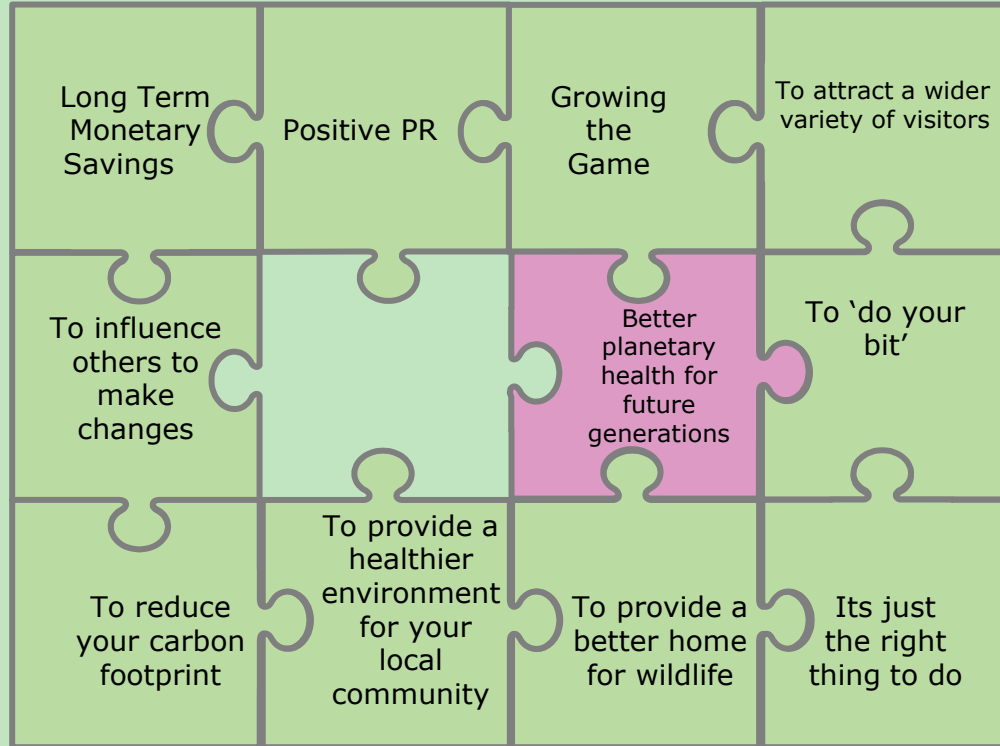
Where are you, in terms of sustainability at your club/facility?

What are you going to do to become more sustainable?

Who is going to be involved?

How are you going to do it?

When will it happen?





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# Sustainability Toolkit...

**ENERGY AND EMISSIONS**

Saving energy will not only hugely reduce the carbon footprint of your organisation, but, in line with the recent energy costs, could save huge amounts of money in the long run. Granted, there is an initial cost to a lot of energy saving measures, although not all of them, but given time, you should see savings off your energy bill, as well as having a hugely positive impact on the planet.

Ensuring your facility is on a **renewable energy tariff** is an easy method of reducing your carbon footprint. **EMG group can easily facilitate the switch.**

Without **monitoring your energy use** it is hard to work out areas for improvement. By carrying out an **energy audit**, you will identify areas where you can make changes to reduce energy use. You will also note any **behaviour changes** might be needed.

**Solar Panels** are a **great way of reducing your carbon footprint**, as they use the sun's energy to provide power instead of using fossil fuels. By installing them on roof spaces, in areas of open land, or even as a canopy over car parking spaces, energy can be created on site, stored, and used when needed. There are many different options when it comes to financing solar installations, so chat to **EMG** as soon as you can. With electricity costs so high now, the payback time of solar panels **has never been shorter.**

**EMG**



**FOOD AND DRINK**

Although one of the smaller 'slices of the pie' when it comes to reducing carbon emissions, there are certainly options when it comes to making your food and beverage offerings more sustainable.

Using **local produce** is an easy method of reducing the carbon footprint of your staff canteen. Meat and veg can both be locally sourced, reducing the **food miles of your produce**. Organic food and grass-fed meat is less carbon dense than factory produced too, so making this swap could help. Local beer can be a nice draw for 'housing' guests to sample after a round.

Spare bits of land, troughs, planters, and even the walls of your clubhouse can be used for **growing herbs and vegetables**. Why not ask a working party to plant some seeds that can then be used by catering staff in clubhouse kitchens? Herbs and veg for great add-ons to food, as well as some health benefits in a post-round G and A, while **storing carbon and reducing food miles** and expense!



**PROCUREMENT AND EMPLOYMENT**

Sustainable management of your day-to-day activities takes care of your direct (what's called Stage 1 and 2) emissions. However, upstream of Stage 1, emissions are harder to manage. Looking into your procurement and employment practices can help with your indirect emissions.

Look into the **supply chain that you use** and establish whether your suppliers are **environmentally conscious or not**. With sustainability becoming a bigger issue now, suppliers are under pressure to become more sustainable, and many are now offering sustainable alternatives. If your current supplier doesn't have an environmental policy, **ask yourself why not**, and shop around to see if there are alternatives or offers.

Select suppliers that use **modern, low-emission fleets** for delivery and transport of goods. Further, try to ensure routes are planned to be as efficient as possible, to avoid multiple vans coming to the same location. Reducing the number of deliveries to your facility **will reduce the carbon emissions** associated with your facility.



<https://www.Englandgolf.org/resource-detail/sustainability-toolkit>



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## Learnings and future steps..

- Make improving biodiversity a business case, by attaching a value to it
- New guidance has been released recently which we are digesting and finding opportunities for golf clubs
- Working with DEFRA to provide accurate guidance for golf clubs, without the 'sales' pitch offered by some consultants/providers
- Piloting some biodiversity software that will allow us to use GIS to map improvements to biodiversity more accurately
- Looking into offset schemes and how golf clubs can get funding from other sources than just those offered by grants/governments
- Without good governance, its incredibly hard to drive change within a golf club.