Developing your climate strategy

Wandsworth Climate Summit

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16th November 2020

The Carbon Trust

- **Our mission** is to accelerate the move to sustainable, low carbon economy
- **Deep expertise** – Over 200 engineers, scientists, policy experts, financiers and entrepreneurs
- Working **around the world** including in China, South Africa, Brazil, Mexico & US
- Impact is paramount - So far our work has saved our clients **£5.5billion** in energy costs and cut carbon emissions by **60Mt**

Developing your Climate Strategy: The Big Picture

Climate change is real & *already* having an impact

Record highs:

- Land & ocean temperatures
- Sea levels
- Greenhouse gas concentrations

Broader impacts:

- Increased dramatic impact of extreme weather conditions
- Escalating impact on public health

International *action* on climate change

- **International agreement** on the need to both limit & adapt to temperature rises
- **Aim to keep global temperature rise to less than 1.5 - 2 degrees** above pre-industrial baseline
- **UK Climate Change Act,** Net Zero CO_2 reduction by 2050, Declaration of Climate Emergency
- **Clean Growth Strategy** - delivering increased economic growth in tandem with decreased emissions

Developing your Climate Strategy: Barriers & Business Case

But climate action is confronted by *barriers*

The Case for Action

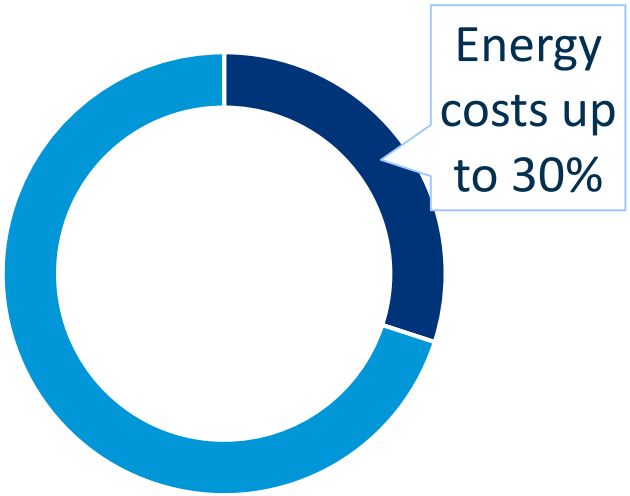
Climate action through energy efficiency & renewables

Why organisations prioritise energy efficiency….

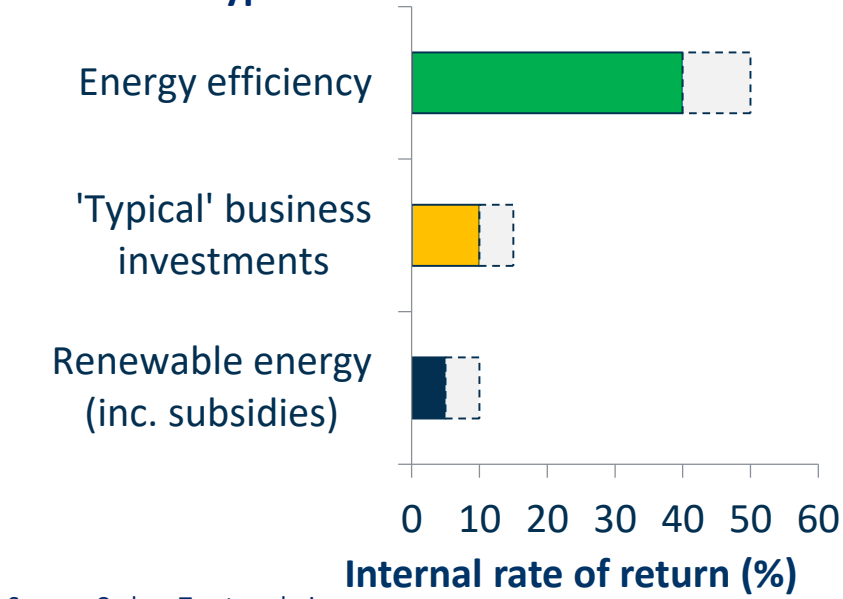
1. Improve brand & customer loyalty
2. Leadership on carbon reduction
3. Comply with standards
4. Engaging your employees
5. Reduce operating costs

The *Business* Case

Business running costs



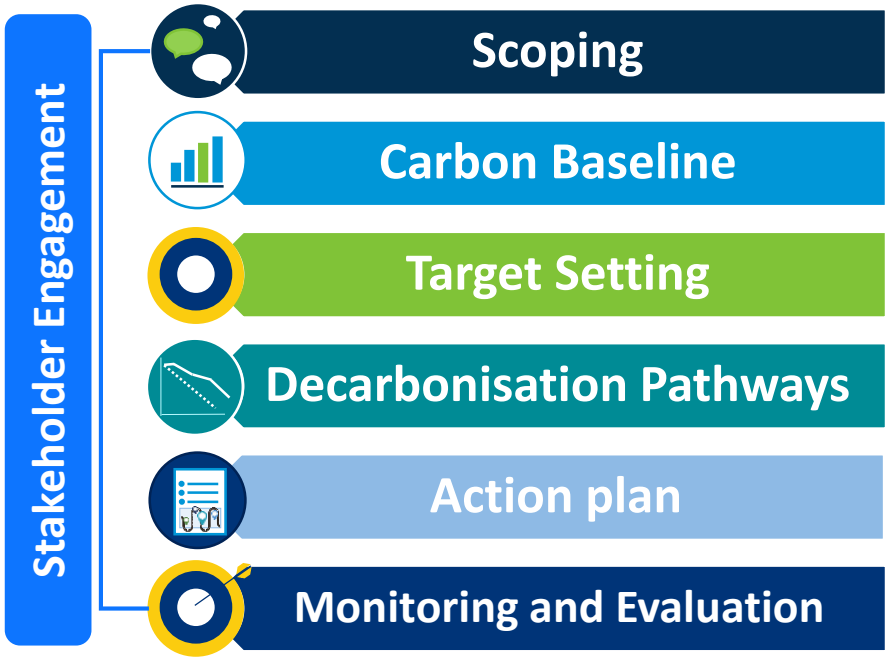
Typical investment returns



Source: Carbon Trust analysis

Developing your Climate Strategy: Approach & Tips

A *framework* for developing your climate strategy



- **Will the scope focus on organisational or community-scale emissions?**
- **What is the breakdown of the current emissions and where the hotspots?**
- **What is a credible and robust target to adopt?**
- **What are the different pathways that can be deployed to achieve the target?**
- **What are the actions that will be taken to achieve the target and how?**
- **How to effectively monitor the progress made against the actions and the target?**

How can the *UK* achieve net zero?

1. Resource and energy efficiency
2. Societal choices to reduce demand for carbon-intensive activities
3. Electrification of transport and heating
4. Expansion of renewable power generation
5. Development of a hydrogen economy
6. Carbon capture and storage in industry
7. Change the way we farm and use our land

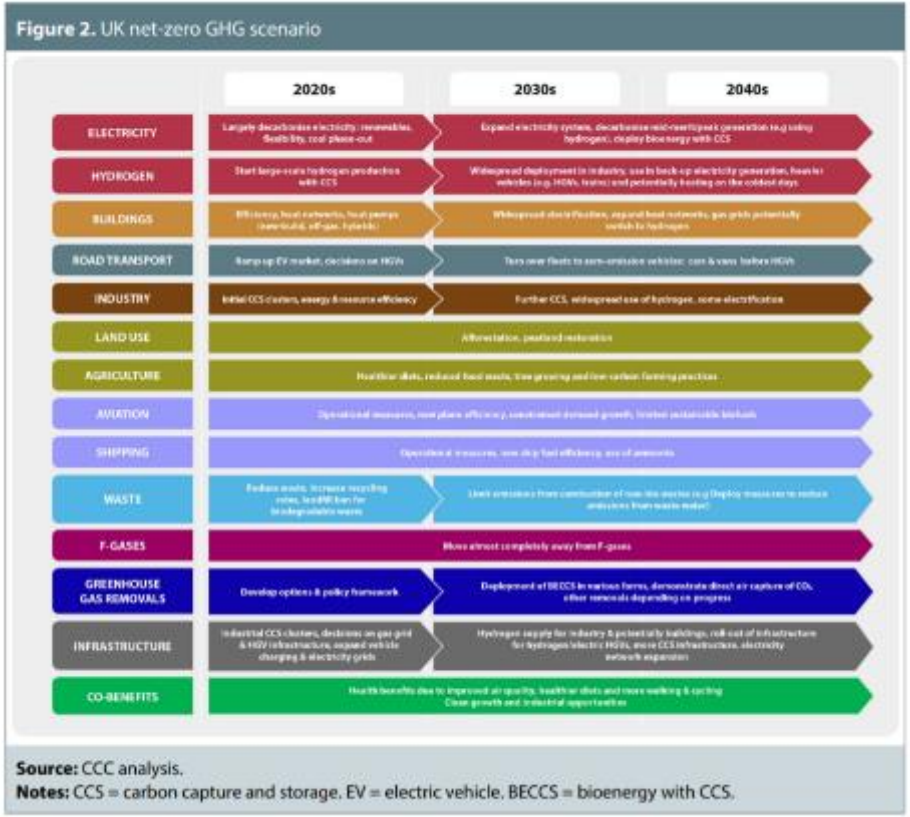


Figure 2. UK net-zero GHG scenario

Source: CCC analysis.
Notes: CCS = carbon capture and storage. EV = electric vehicle. BECCS = bioenergy with CCS.

So…..what can you and your organisation do?

1. **Understand your carbon footprint:** identify hotspots of emissions across the full value chain and identify opportunities for improved efficiency and cost saving.
2. **Develop a roadmap to zero emissions:** set out the practical steps required to deliver core products or services in a zero carbon future.
3. **Set science-based targets:** use the best available climate science to align emissions reductions goals with the requirements of a 1.5°C pathway.
4. **Invest in energy efficiency:** implement cost-effective opportunities to improve the efficiency of your buildings, fleet and industrial processes.
5. **Switch to zero carbon electricity:** invest in on-site renewable electricity generation and switch to electricity tariffs backed up by guarantees of origin.
6. **Move towards zero emissions transportation:** understand options for vehicles powered by non-fossil fuel sources, such as batteries, hydrogen and biofuels.
7. **Decarbonise heating and cooling:** replace existing fossil fuel sources of heating and cooling with more efficient or cleaner alternatives.
8. **Take action in the supply chain:** drive supplier emissions reductions, improving efficiency and performance, at the same time as exploring transformational changes.
9. **Use an internal carbon price:** implementing an internal carbon price can mitigate transition risks and improve decision making around investments.
10. **Introduce options for negative emissions:** explore long term potential to economically include negative emissions within a business model or supply chain.

Source: Carbon Trust

First step starts with the data

How to track data better?

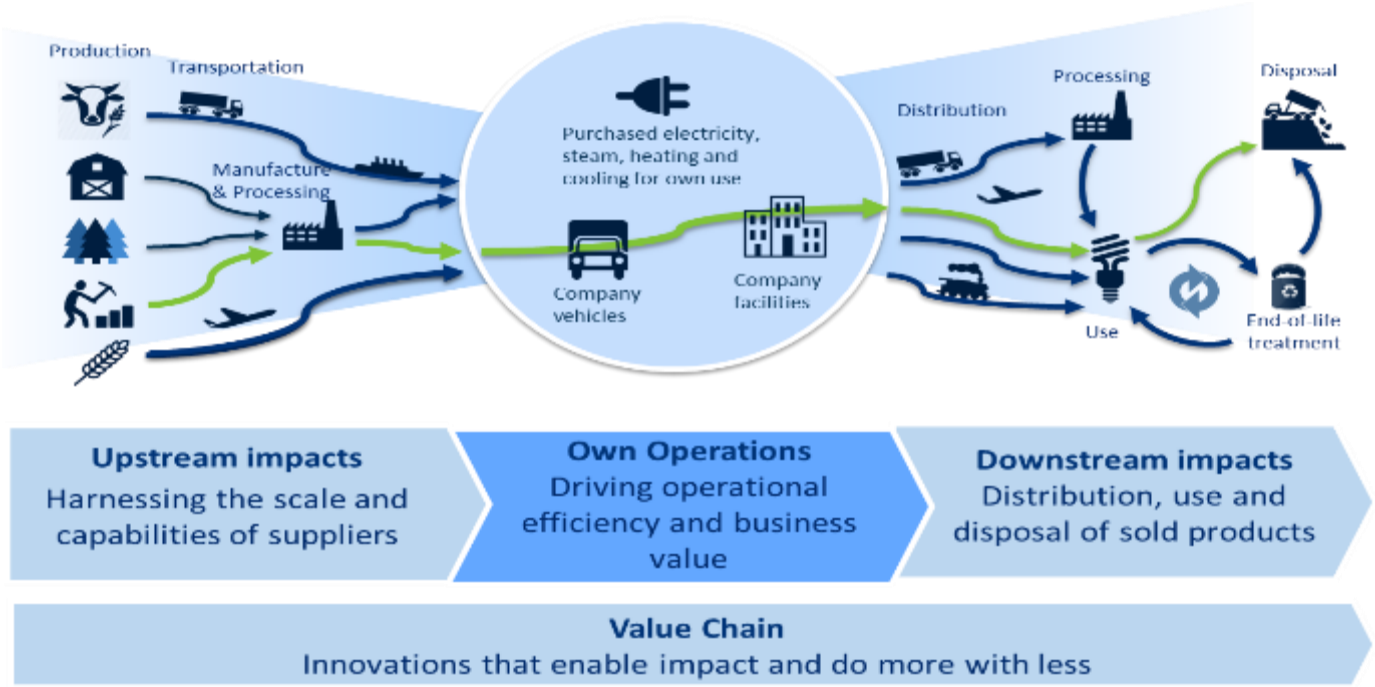
1. Assess what data you currently have available
2. Talk to your colleagues & review bills
3. Collect data using the best method for you
4. Analyse data looking for:
    - Cost savings opportunities
    - Innovation
    - Areas that require employee engagement
5. Use data to generate baseline for targets, strategies to reach them, assign roles to carry out the work and to continue monitoring and reporting back on progress…..

Smart meters

- ✓Remove the need for estimated billing and manual meter reading
- ✓Record usage (at least) every half-hour
- ✓Unlock the potential for energy data to be relayed to you in an actionable way…

Tips on target setting

1. Decide on your boundaries
2. Gather enough data to establish a baseline (baseline year)
3. Decide on your benchmark
4. Calculate energy intensity
5. Set target based on the inputs above
6. Track and report progress

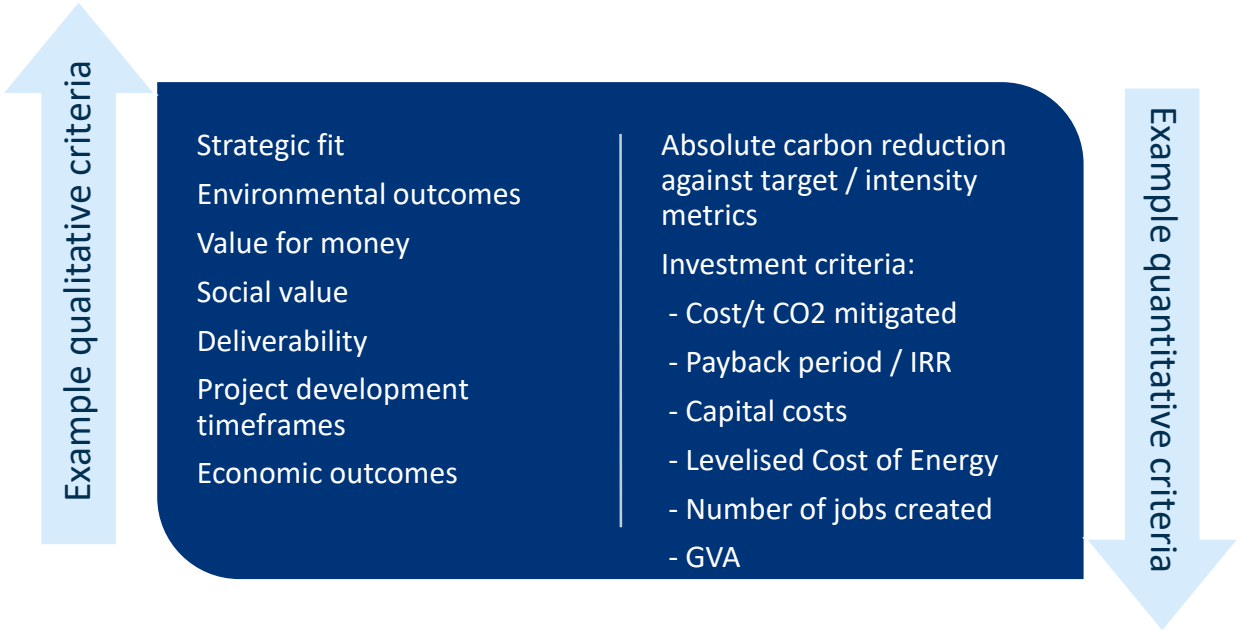


Five energy saving technical actions…

1. Check the building **insulation** – this can improve staff comfort
2. Check **timings on HVAC** (heating, ventilation and air con) systems
3. Check if **BMS** (building management system) is set up correctly
4. Put **timers on equipment** so it can be switched off automatically outside of working hours
5. Check the temperature set in the **server room** – can often be too cold

Is the strategy *working*? Monitoring & evaluation

- Ongoing monitoring & evaluation of how the strategy is delivering against it's objectives
- Embed into your governance structures, capture lessons learned and adapt approach



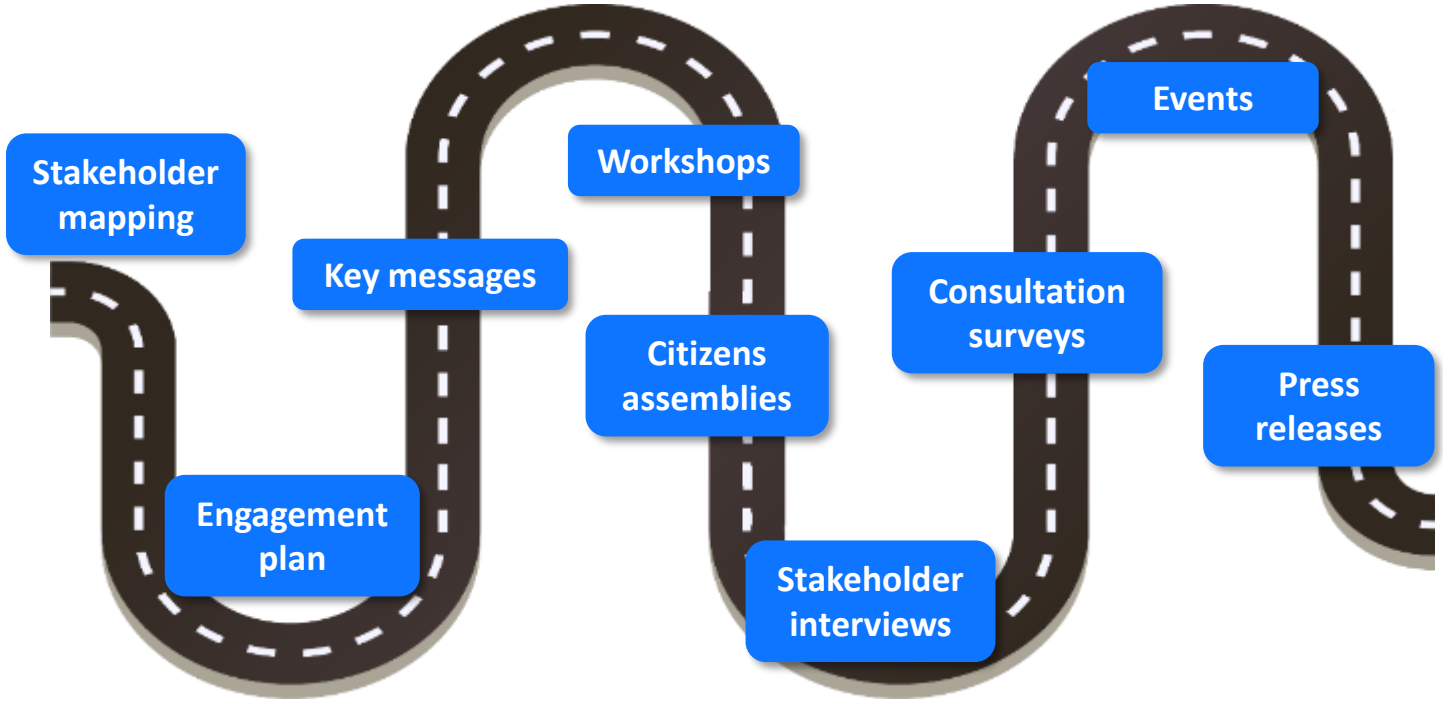
Stakeholder Engagement

Engage your stakeholders

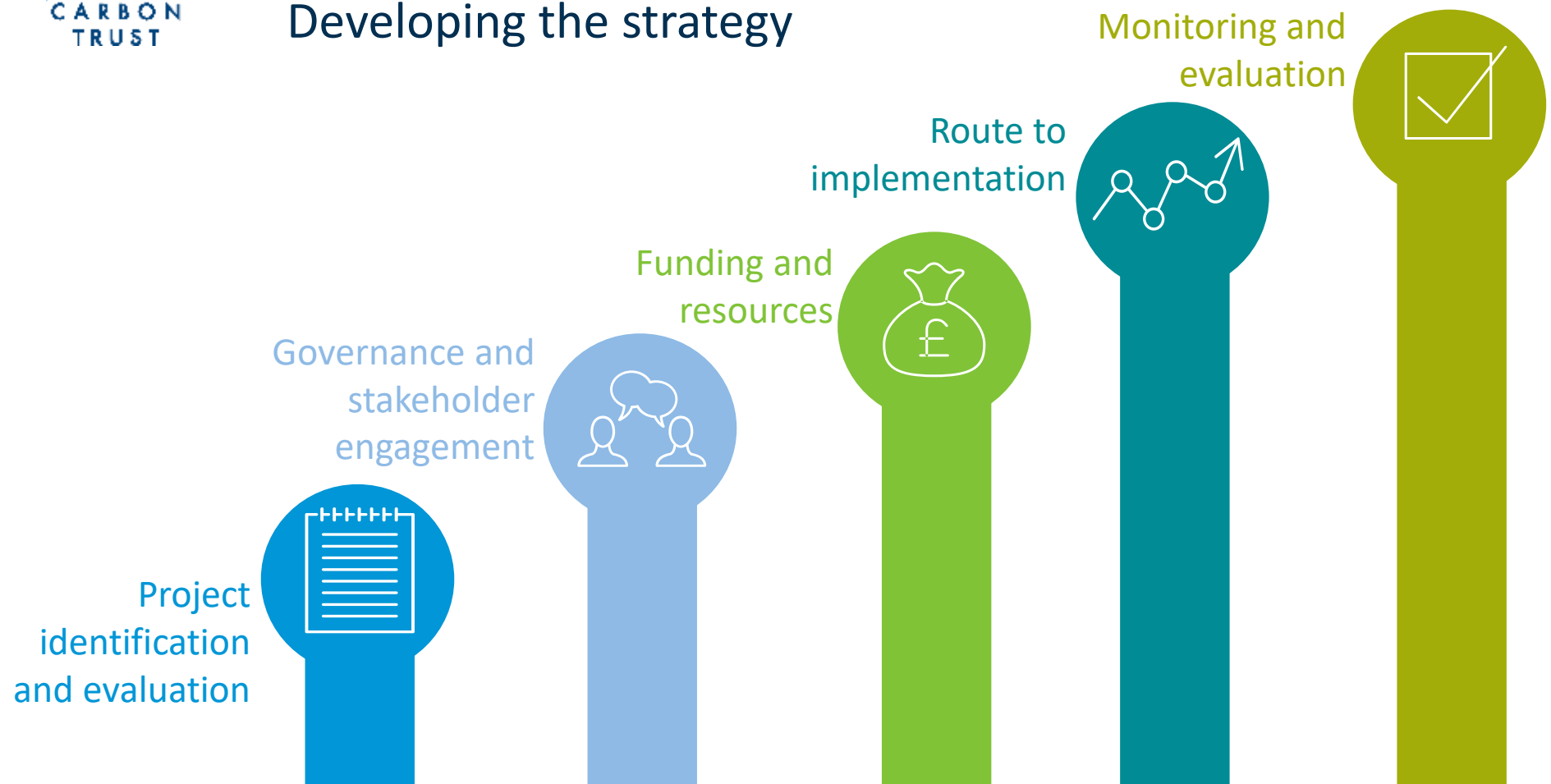
You need to secure input to and support for the climate action plan and *buy in to it's delivery* from across your stakeholder group

Explore partnerships –

Engage your local community groups, your local schools, public bodies and of course your local authority



Developing the strategy



Developing your Climate Strategy: Resources available

Carbon Footprint Calculator, measuring your carbon footprint

Step 1

Measure your carbon footprint

Step 2

Benchmark your energy use

Step 3

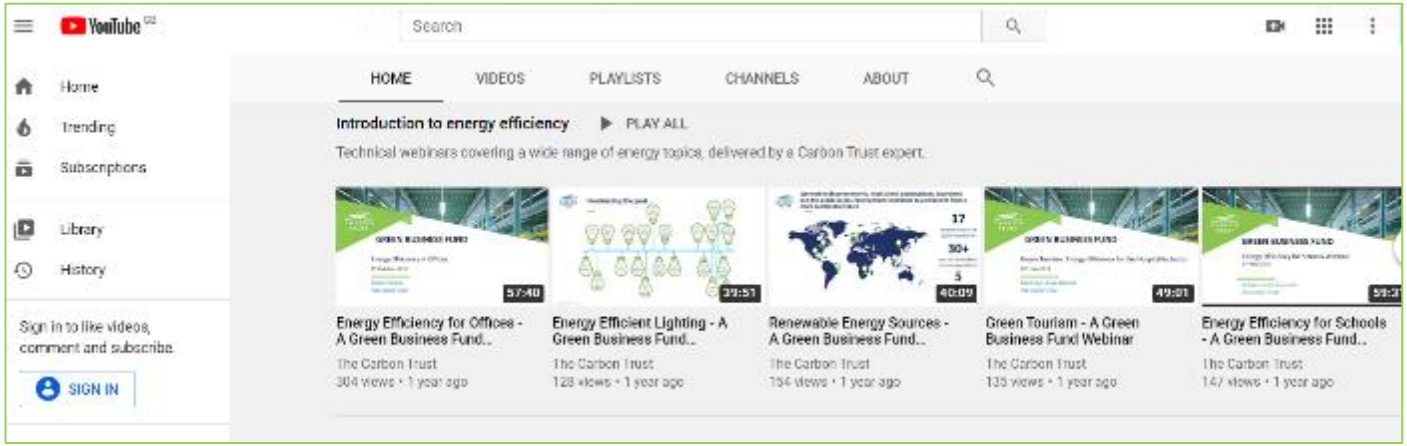
Build your business case for lighting upgrades

Step 4

Upgrade your business fleet

https://www.carbontrust.com/resources/steps-to-energy-saving-tools-for-smes

Technology *Webinars*



Our free guides give expert advice on energy efficient technology & renewable energy, as well as *sector-based advice*

- Green events guide, published Dec 2019
- Implementing energy efficiency for a start-up, published Dec 2019
- Energy Storage, published Dec 2019
- Energy efficiency in agriculture, published Dec 2019
- Commissioning an energy efficiency project, published Nov 2019
- Energy procurement and green tariffs, published Oct 2019
- Refrigeration guide, published Oct 2019
- Effective energy management for business guide, published Jul 2019
- SME guide to financing energy efficiency projects, published May 2019
- Electric and smart vehicles guide, published Mar 2019
- Warehousing and logistics guide, published Feb 2019
- Heat pumps guide, published Dec 2018
- Office efficiency guides, published Dec 2018
- Manufacturing sector guide, published Nov 2018
- Better business guide to energy saving, published Sep 2018
- Motors & drives, published May 2018
- Retail sector guide, published Apr 2018
- Hospitality sector guide, published Apr 2018
- Building fabric guide, published Mar 2018
- Renewable energy sources, published Jan 2018
- Carbon footprinting guide, published Jan 2018
- How to be a good supplier, published Dec 2017
- Heating, ventilation and air conditioning guide, published Dec 2017
- Lighting overview guide, published Dec 2017

https://www.carbontrust.com/our-projects/green-business-fund

Top Tips
Saving energy at work

Individual actions to save up to 10% of energy use

- Switch off all PCs, laptops and monitors when not in use
- Set computers to auto sleep after five minutes of inactivit
- Charge electrical devices for no longer than necessary
- Switch off all non-essential lighting out of business ho
- Switch off lights if you leave an area
- Never open the window when heating OR cooling systems are on

Building-wide actions to save up to 20% of energy use

- Switch off heating and cooling before the end of the working day where possible
- Make sure heating and cooling don't run at the same time
- Set your heating to 19-21°C in winter and your cooling to 24°C or above in summer
- Replace old lamps with LEDs and keep controls in good working order
- Clean windows and light fittings regularly to reduce the need for artificial lighting

http://uk.start2act.eu/assets/content/knowledge_base/Supplementary%20material/S2A%20Walk-around%20checklist_CT.docx

Thank you and good luck!

Keep in touch

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