

# 10 top tips to zero carbon

For construction companies  
looking to go green



# How you can use this guide

Everyone is talking about decarbonising  
- but where do you even begin?

In this guide, BE-ST has teamed up with  
consultants Turner & Townsend to  
provide you with 10 top tips to help you  
get started on zero carbon.

Save this document and use it as a  
reference for areas that you can start to  
focus on. Pass it onto your leadership or  
sustainability teams to help identify  
areas where you can make the change.

“The journey of a thousand miles  
begins with one step”

Lao Tzu

# 1 Understand your emissions

Measuring the carbon impact of your whole company will be vital to the start, middle and end of your strategy. It shows you what areas you can improve and how you're progressing.

- Find out what your baseline emissions are
- Before baselining data, be clear about what is in scope in your strategy. Areas to include are:
  - All direct energy emissions (scope 1)\*
  - Indirect energy emissions (scope 2)\*
  - All other indirect emissions i.e. your supply chain (scope 3)\*
- Gather data throughout the process (so you know if you've improved). This will allow you to benchmark against your peers and know where you are doing well or where you can improve

\*Scopes as defined by the [Greenhouse Gas Protocol](#). Learn more about scopes [here](#).

# 1 Understand your emissions

- Reach out for help with benchmarking. Assessments are available and can give pointers on how to work towards net zero
- Improve actual emissions data collection across all areas of the business
- Where data is based on estimated or benchmarked data (e.g. emissions factors), implement methods and systems to collect actual emissions to support an accurate baseline
- Establish robust emissions tracking and review processes to support continuous improvement and drive further reductions
- Also look at definitions of key climate terms to improve literacy and help spot green washing. See [www.carbonliteracy.com](http://www.carbonliteracy.com) for free resources
- For understanding a buildings' sustainability, see RIBA's guidance on evaluating sustainable outcomes for buildings [here](#).

# 2 Reduce operational carbon

Operational carbon is the emissions from your business' processes and buildings. Take steps to make your operations more efficient, whether through travel considerations or low carbon heating systems, to see carbon and cost benefits.

- Have a route map and action plan. Look at the key stages and targets you have set
- Identify your short, medium and long term priorities and how they align with procurement, behaviours and capital investments
- Be aware of how you are operating your building and try to:
  - Use a low carbon energy supplier
  - Use LED relamping
- Be thoughtful when planning this process. When LED relamping, you may chose to do so progressively as old light fittings fail rather than disposing of working units. If you do replace a whole system, think about what options are available for recycling



# 2 Reduce operational carbon

- Have setpoints for heating and air conditioning – consider adjusting the temperature to reduce heating and cooling load. This means lowering your heating setpoint temperature and raising your cooling setpoint one
- Prioritise the transition to electric vehicles and switch to them where you can: one of the most significant benefits of driving an electric car is the difference it can make to the environment
- Install solar electricity panels on site with a battery so that you use all the energy you generate
- Carefully plan your workforce deployment to reduce unnecessary travel – especially any sub contractors
- Look at ISO14001 – you may have an ISO14001 system in place which could be used as a structure to fully integrate low carbon management and improvements





# 3 Reduce embodied carbon

Embodied carbon is the overall emissions it takes to build, make, grow and transport a material or building before it is made operational.

- Reduce embodied carbon by adopting circular practises. Learn more about the circular economy in detail [here](#)
- Remember the 5 Rs: refuse, reduce, reuse, repurpose, recycle
- Refusing to procure new unnecessary materials is one of the most sustainable things you can do. If this isn't possible, look at reducing the amount that you will need
- Also look at what you can reuse or repurpose in your organisation to suit your needs
- Think outside the box when it comes to these new processes. Remember is always better to retrofit an existing building instead of building a new one; it is better to reuse something than recycle it

# 3 Reduce embodied carbon

- Choose longer life span products and materials. The longer something lasts, the less it needs to be replaced
- When you source new materials, look at the impact of using this material
- You can compare materials using an [online materials library](#) to help you choose what materials to design or build with
- Buy local where possible to reduce transport impacts
- Wood structures can reduce embodied impacts substantially
- Know that you can compare products by seeking out Life Cycle Assessment report and [Environmental Product Declarations](#). It is important to find 3<sup>rd</sup> party verified reports where available
- Organisations such as BRE offer guidance on the [life cycle environmental impacts](#) of construction materials and components and more



# 4 Look at company culture

Small daily changes across a workforce can result in a behavioural shift which can contribute to reducing carbon footprint.

- Start asking yourself questions around culture:
  - How can you encourage your workforce to make sustainable choices?
  - Could they open windows vs. turning on air conditioning?
  - Can they open blinds vs. turning on lights?
  - Are there choices that can be made that can both work towards sustainability and improved wellbeing?
- Support a behavioural shift in employees by creating top-down cultural changes. Identify and track emissions hotspots such as commuting or business travel
- Enable emission reductions by:
  - Carbon and net zero awareness training
  - Supporting home working where possible through the provision of telecommuting hardware and software
  - Developing incentive schemes to support low carbon commuting such as cycle to work schemes, EV incentive schemes, availability of EV infrastructure at offices, carpool schemes, wellbeing schemes, carbon reward schemes



# 5 Use carbon accounting

Carbon accounting is the process of measuring your emissions. This is important to know as procurement and consumers shift towards low carbon products.

- Measure your emissions in order to manage them
- Don't be afraid to seek help with this - it can be complicated without knowledge and support
- Remember to decide upon the three scopes that you want to account for: 1) All direct energy emissions; 2) Indirect energy emissions; 3) All other indirect emissions
- If unsure, begin with 1) and build on accounting from there
- Try to approach carbon accounting with 3 essential features:
  - Setting the carbon baseline to serve as a benchmark target
  - Developing a route-map to improve carbon performance
  - Applying consistent measurement through each step to bring control and secure the desired outcome



# 5 Use carbon accounting

- Use a toolset which includes an Embodied Carbon Calculator (ECC) tool and an operational carbon assessment
- When looking at toolsets, make sure they:
  - Assure accuracy in the carbon count
  - Are compliant with industry best practice
  - Cover all building elements
  - Provide an output on the carbon performance of your project or programme
- Also try browsing [digital resources](#) to help you learn more about carbon accounting
- Consider working towards [PAS2060](#) certification which is a standard that sets measurements and reduction targets (accounting and auditing). It provides independent 3rd party verification



# 6 Focus on more than carbon

There's more to sustainability than emissions. Make sure you look at other ways to become greener too.

- Assess climate resilience through your operations, supply chain and communities they operate within.
- Identify areas for concern including:
  - Physical risks, taking steps to mitigate
  - Net zero economy transition risks, developing mitigation measures as part of a resilience strategy. Examples include resources limitations, policy shifts or legal requirements
- Review water usage and identify methods for water conservation
- Review waste generation and identify opportunities for waste reduction, recycling, EfW and circular waste solutions
- Waste/Recycling: Work with your waste services teams to ensure that your waste segregation and storage maximises recycling. Waste contamination requires a behavioural shift. Track your waste generation and seek to reduce waste going to landfill by procuring goods with the circular economy in mind.
- Waste Tracking and Reporting: Is your organisation aware of the UK wide developments for a Digital Waste Tracking system? The UK is developing a system to digitise and streamline waste related data to support the route to net zero and a circular economy



# 7 Know your why

If you're prioritising zero, it's important for you to know why you're doing it. Some reasons that could be motivating for a business to go zero are:

- A better business case for yourself for investment, winning bids and contracts
- Financial incentives: investment in low carbon technology increases property value, locally sourced materials cuts transport costs, and more efficient energy saves on bills, to name a few
- Improved efficiencies in your organisation which will align sustainability with growth as you leverage these improvements
- Positioning yourself as a market-leader in your space
- The opportunity to enter new markets - with sectors such as low carbon heating set to grow - and helping boost the overall economy
- Increasing your brand awareness and perception
- Helping tackle the climate, energy and cost of living crisis
- Talent attraction and retention
- Having better engaged stakeholders



# 8 Make zero the priority

When you're able to provide evidence backed accounts that you're prioritizing zero, you position yourself with a stronger business case for consumers, investment and buy-in.

- Develop your products, services and how you deliver them so that you differentiate yourself because of your net zero credentials – every project, every day
- Declare your baseline and targets, and report externally on progress – be proud and show leadership to your peers
- Make sure that you grow the leadership team with people that support and are role models for the strategy
- Help your clients to get grant subsidy to drive the scale and pace of activities
- Celebrate your successes through internal and external channels
- Show how net zero is enhancing your business through achieving better business outcomes in sales, delivery, staff recruitment/retention or simply achievement of your vision & purpose





# 9 Explore financial help

Time and time again across sectors, surveys suggest that the biggest barrier to sustainability is perceived or actual costs. Green grants and funding exist to help make it easier for your organisation to innovate and become more sustainable.

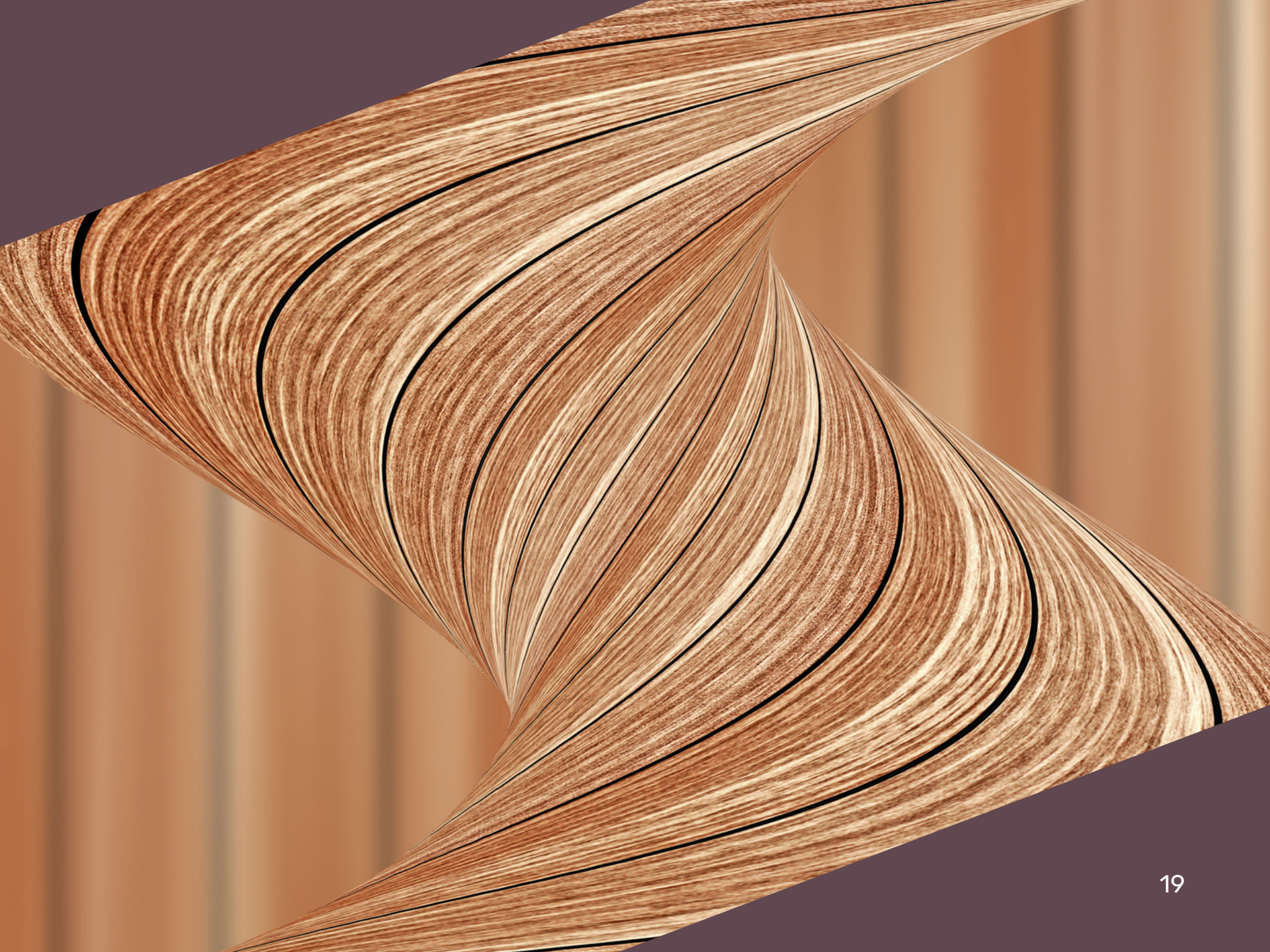
- Stay up to date with funding on the UK Government website: [UK Government's guidance on green funding](#)
- Browse other funding directories: the [Innovation Funding Service](#) and Scottish Enterprises' [Funding Information and Support Service \(FISS\)](#), or with other organisations who offer funding and grants such as Innovate UK
- The Construction Industry Training Board offers skills training funding every year which helps construction companies deliver learning and development experiences to their employees. Two funds exist – one for micro and small companies, one for medium sized companies
- Remember funding calls and grants are always changing so it's important to stay up to date
- Sign up to news bulletins that signpost to any new funding opportunities available
- Make sure to check if you are eligible for [Research and Development \(R&D\) tax relief](#) - you might be engaging in innovation without realising it



# 10 Don't delay, raise awareness

Targets like 2045 seem far away but going green can have real effects on your business now, from efficiency savings to employee retention. When you start conversations, internally and externally, you can start to make changes for the better.

- Start raising awareness on the topic and encourage any changes that can be implemented that will contribute to this initiative
- Spark the conversation with all staff and employees - raise more awareness about what can be done to improve





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