

# Three Rivers Sustainable Business Programme

## Construction Sector Sustainability Guide

**THREE RIVERS**  
SUSTAINABLE BUSINESS



SUSTAINABLE X



## Construction sector actions

### Carbon

#### Carbon Management:

Green House Gas emissions (measured as CO2 equivalent emissions), is the biggest and most urgent aspect of the sustainability agenda. This can be a significant impact compared to other sectors.

1. Measure your **Scope 1 and 2** Carbon Footprint
2. Measure and continuously reduce the embodied energy in your materials and end products
3. Consider your travel, transportation and sourcing choices (including deliveries and waste haulage carbon footprint)
4. Create a strategy for and start measuring your wider **Scope 3** Carbon Footprint
5. Complete and communicate post handover evaluations – energy in use vs design
6. Could you install renewables on your own property?
7. Consider your offsetting strategy for emissions you cannot eliminate

### Significant Actions for Construction Sector Businesses to Consider

### Digitalisation

#### Digital transformation:

Maximise efficiency, reduce journeys and paperwork.

1. BIM and MMC strategies and plans (inc training & R&D)
2. Digital active risk assessments and method statements
3. Digital progress reports and quality records
4. Geo-location enabled for reporting
5. Drone Lidar for site surveys and measurements
6. Digital model linked machine control
7. Digital clash checking

### Habitat

#### Conserve, enhance, add:

Avoid destroying habitat in the first place wherever possible, and then try to find ways to create a Net Gain

1. In design consider how to minimise removal of existing habitat, and maximise enhancement or addition
2. In construction arrange site logistics to prevent unnecessary damage to habitat areas e.g. with material storage
3. During construction add habitat and plant early at every opportunity
4. In reinstatement add habitat, features and planting that support biodiversity
5. On handover, educate customers on how to protect the habitat they now have

## Waste

### Reduce waste generated:

One of the biggest and most urgent aspect of the sustainability agenda

1. Classify the waste by type
2. Measure the weight generated
3. Create a waste elimination plan
4. Apply Lean or Six Sigma to your processes
5. For unavoidable waste, measure % to landfill
6. Measure office and site water consumption, and introduce reduction initiatives

## Engage your people

### Retain and attract the best talent:

Identify and harness the passion and interest of people already engaged with the agenda.

1. Involve employees in the development or update of your organisation purpose and valued behaviours
2. Create a sustainability team or group to drive action
3. Link compensation to valued behaviours and initiative success
4. Provide job specific, management and leadership training and development
5. Measure employee diversity and inclusion relative to your community, introduce long term initiatives to address gaps

## Community

### Support the communities you impact:

Through providing jobs, supporting local initiatives, education and charities

1. Measure the time and value given to community support and projects
2. Engage with community based initiatives and events
3. Assess your supply chain for their community impacts and contributions
4. Consider supplier sustainability assessment schemes
5. Address any employee diversity gaps relative to your community



### Your Premises And Equipment:

This is an area you will need to address on your journey to Net Zero, which requires you to reduce as much as possible before offsetting what is unavoidable. Actions you can take include:

1. Switch all sites and offices to green energy tariffs
2. Make energy rating and emissions savings key buying criteria on all new equipment.
3. Upgrade controls on heating and lighting - including time, zone and sensor controls.
4. Change lighting to low energy or LED.
5. Install electric car and bike charging facilities.
6. Make building fabric energy efficiency improvements, including air leakage reduction.

## Health & Wellbeing

### Physical and mental wellbeing:

Measure (keep an eye out), provide or signpost help, identify root causes of incidents

1. Make near miss reporting and analysis valuable
2. Find root causes and eliminate them
3. Monitor and proactively reduce road traffic accidents
4. Control working hours within recommended limits
5. Update your stress risk assessment (HSE requirement)
6. Consider wellbeing surveys and training people to be mental health first aiders
7. Carry out post handover evaluation assessment of project impact on user behaviours related to health

**Your supply chain has a big influence on your business sustainability impacts.**

**How do you work with them to assess and improve their sustainability?**

## Procurement

### Materials and their supply chains:

Consider supply certainty, buying local, circular economy and supplier sustainability

1. Actively monitor for and adopt a zero tolerance to corruption, fraud, bribery and modern slavery in your supply chain
2. Seek input materials that are in a circular economy streams, have high % recycled content and renewable or non virgin materials
3. Assess the risk of climate change to material availability and delivery reliability
4. Collaborate with suppliers to reduce waste in all its forms in your supply chain

## Collaboration

### Partner to solve shared challenges:

Share knowledge and resources to solve issues that will improve environmental and social outcomes across the construction sector

1. Put your collaboration efforts into areas that help address your biggest impact areas
2. Wherever possible adopt shared platforms with customers and suppliers to facilitate easy collaboration
3. Encourage and support innovative startups and supplier innovations - trials, pilots introductions etc
4. Continue to learn about and adopt more collaborative forms of contract
5. Given the opportunity, choose to work with more collaborative clients and suppliers

## Sustainability definitions

It is important that everyone in your organisation shares the same understanding and definition of sustainability. The three major impact areas are often categorised as environmental, social and economic.

Typically people think of environmental issues including carbon reduction, and clearly this is a key aspect. Sustainability is also about your business succeeding on the long term, and providing positive economic impacts through providing jobs and supporting local supply chains. There are also many social impacts enabled by providing good work and enabling people to develop skills and careers.

Carbon reduction is a good metric, and is supported by improving all environmental impacts such as bio diversity and waste reduction.



### Cambridge English Dictionary:

The quality of being able to continue over a period of time.

This is a key aspect of business sustainability. An organisation must be able to continue to trade while improving their sustainability.

Otherwise a less sustainable alternative may be adopted by their customers in their absence.

### The text book” definition is from the Brundtland Commission:

**“..... development which meets the needs of current generations without compromising the ability of future generations to meet their own needs”**

(WCED, 1987)

# United Nations Sustainable Development Goals

## SUSTAINABLE DEVELOPMENT GOALS



Clearly the goals were written for governments, however businesses are key drivers of the necessary changes.

There are many benefits to using this model as your framework for sustainability. As it's a framework adopted by the UK Government, it is reflected in legislation and cascaded to local government so it's our agenda too.

It also provides a common language and focus to enable people to collaborate on sustainability issues more effectively.

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# Sustainability Models

Models and frameworks provide useful ways of communicating sustainability, and bringing granularity to impact measurement.

There are many which we will list here and they progress in complexity. The remainder of this section will provide four alternative models. They can all be mapped to each other, so adopting one does not inhibit you from reporting against another, though the less granular your framework, the more work that will be.

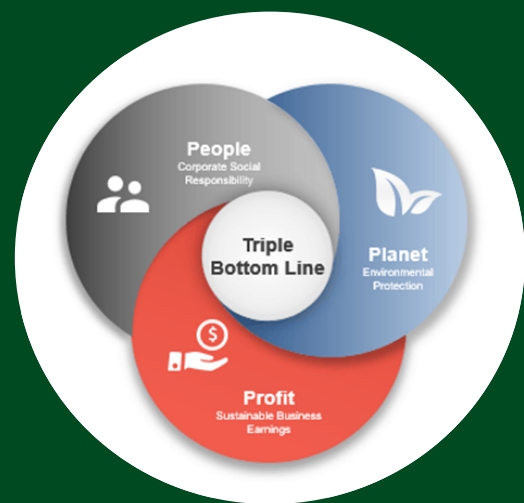
## 1. The Triple Bottom Line

This was very popular for a while but has since been suppressed by more detailed models, and has even been evolved to move profit to prosperity.

This recognises that many organisations have positive social, environmental and economic impacts if they are not for profit or making low profits.

“The triple bottom line wasn’t designed to be just an accounting tool. It was supposed to provoke deeper thinking about capitalism and its future.”

—John Elkington in his  
Harvard Business Review article



## 2. ESG - Environmental, Social And Governance:

Environmental	Social	Governance
<ul style="list-style-type: none"> <li>Climate action</li> <li>Resource depletion</li> <li>Waste</li> <li>Pollution</li> <li>Deforestation</li> </ul>	<ul style="list-style-type: none"> <li>Human rights</li> <li>Modern slavery</li> <li>Child labour</li> <li>Working conditions</li> <li>Employee relations</li> </ul>	<ul style="list-style-type: none"> <li>Bribery and corruption</li> <li>Executive pay</li> <li>Board diversity and structure</li> <li>Political lobbying and donations</li> <li>Tax strategy</li> </ul>

### ESG model from the United Nations Proponent of Responsible Investment (PRI)

Commonly used by investors and bankers, these criteria are used to support investment decisions by ethical funds.

Increasingly they are also used by investors as good business practice to drive better business outcomes and therefore financial returns.

## Sustainable X Model



Extracted from a number of models, this adds a business focus to the key environmental, social and economic impacts of sustainability

Having a framework has helped us manage a lot of things that were difficult to pigeon hole. We now have clear measurement and accountability for sustainability in a structured way"

*MD, Civil Engineering Contractor*