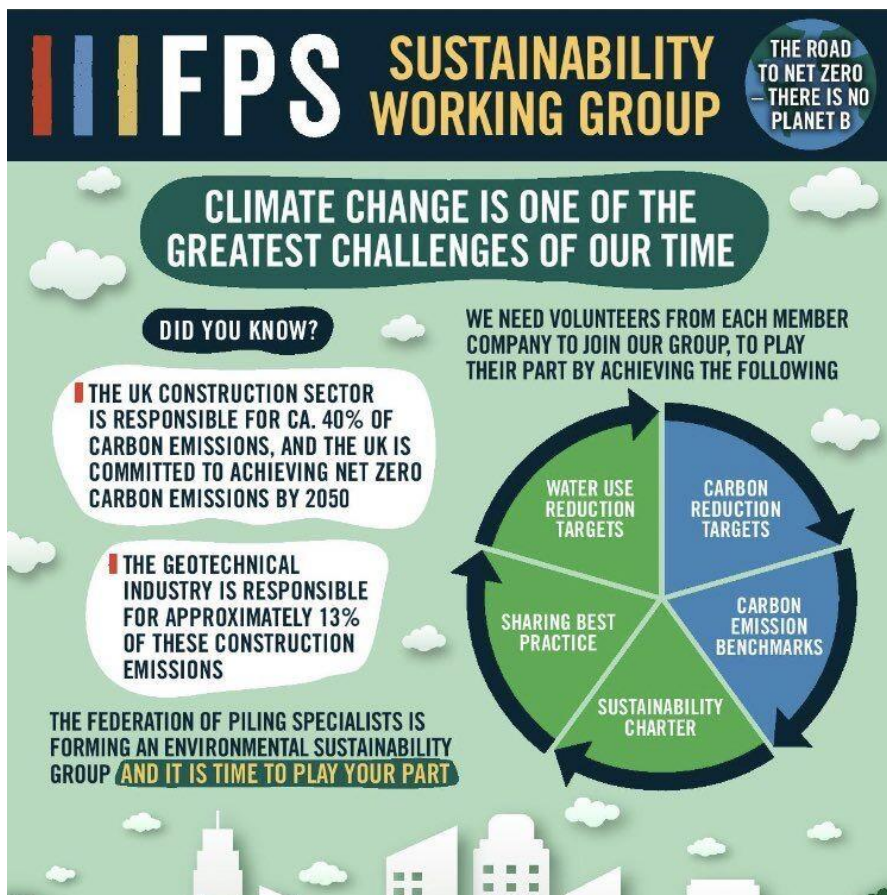


FPS Sustainability Working Group

The FPS is searching for a volunteer from each company to come together and form an Environmental Sustainability working group with the principle aims as follows:

- 1) Review the existing FPS sustainability charter and update it
- 2) Raise awareness of existing carbon reduction targets and initiatives across the industry
- 3) To derive functional, easily measurable units that benchmark our carbon emissions for various techniques
- 4) To jointly agree on achievable embodied carbon reduction targets
- 5) To share best practice and knowledge, together with the working plant group, of the latest construction plant powered by renewable energy fuels and/or alternative power sources
- 6) To share best practice, knowledge, and experience of working with low carbon concretes
- 7) To first baseline and then set achievable water use reduction targets

The intention is that bi-monthly workshops will be held, chaired by Stuart Norman.



FPS SUSTAINABILITY WORKING GROUP THE ROAD TO NET ZERO – THERE IS NO PLANET B

CLIMATE CHANGE IS ONE OF THE GREATEST CHALLENGES OF OUR TIME

DID YOU KNOW?

- THE UK CONSTRUCTION SECTOR IS RESPONSIBLE FOR CA. 40% OF CARBON EMISSIONS, AND THE UK IS COMMITTED TO ACHIEVING NET ZERO CARBON EMISSIONS BY 2050
- THE GEOTECHNICAL INDUSTRY IS RESPONSIBLE FOR APPROXIMATELY 13% OF THESE CONSTRUCTION EMISSIONS

WE NEED VOLUNTEERS FROM EACH MEMBER COMPANY TO JOIN OUR GROUP, TO PLAY THEIR PART BY ACHIEVING THE FOLLOWING

WATER USE REDUCTION TARGETS

CARBON REDUCTION TARGETS

SHARING BEST PRACTICE

CARBON EMISSION BENCHMARKS

SUSTAINABILITY CHARTER

THE FEDERATION OF PILING SPECIALISTS IS FORMING AN ENVIRONMENTAL SUSTAINABILITY GROUP **AND IT IS TIME TO PLAY YOUR PART**

If you are interested in representing your company in this initiative, then please contact Ciaran Jennings at fps@fps.org.uk.

Prep ahead of Meeting on 15-12-20

What is the FPS sustainability charter? [[click here to view](#)]

Raise awareness of existing carbon reduction targets – Who has said what? British Land, Landsec, UK Government, HS2

Functional, easily measurable units that benchmark our carbon emissions for various techniques

Benchmark Embodied Carbon per diameter with a standard 50/50 cement replacement mix design. Aim will be to determine the embodied CO₂ per m drilled for the various techniques as well as the emitted carbon per m drilled for the various techniques and diameters. It may be that we can simplify this.

Also, worth noting the emitted carbon for the spoil movement (input average distance say 20 miles) and for the machine attendance as well.

Volunteers for the key techniques to be sought – Use the EFFC carbon calculator and other standard industry tools. Get an approx. split from each FPS member for each technique and determine an easy way to calculate each member average emitted carbon based on these techniques.

Note – Some will be better than others e.g., use of biodiesel, better control of idling time, better rig drivers, better rigs so this will just be a benchmark for these businesses that do not have the resource to delve deeper than this. Ideas from Luke Chalmers?

How often do we do carbon calculations for the projects that we have completed? Should this be a requirement? What about those companies that do high turnover of projects, e.g. driven piles.

Can we develop the EFFC calculator to be an online tool which each member can feed into and take information from? Is there something which is standard that we could use e.g. Smart waste or will we be converting excel spreadsheets?

List keyways which we may reduce embodied Carbon moving forward

Key message – Often the lowest concrete volume is the lowest embodied carbon standard solution. This can be further reduced by 75-80% through the use of low carbon concretes, we should not be happy just with doing what comes natural to us as we would be doing this to win the job anyway!

Moving to a 56-day design strength – Technical committee note & support

Using low carbon concretes – CEMFREE & EFC. 75-80% Embodied Carbon savings. Where can you use them and what's the additional cost? Route to use for permanent works – SN to provide

Guidewalls, slabs. Kentledge blocks, anchor piles

Plant Group – What is the latest in Green plant – Nomination to work with the plant committee to compare carbon emissions and capability. Has anyone used this green plant before? Keltbray to review 13Ton excavators and dumpers

Other plant – Standard cost for hire and operation vs low carbon alternative

Generators – Hydrogen, solar Powered?

Water use – Per plant item?, e.g. Jetwash, concrete pump, agitator

Quick Wins

1. 56-day strengths
2. Use of low carbon concrete for temporary works
3. Vice-chair – Appoint
4. Benchmark different techniques using standard equipment