

**Environmental Sustainability Working Group Meeting**

**held 10:00-12:00 Friday 4th February 2022 via Teams**

**In Attendance:**

Warren Arnold *Bauer*

Nancy Austin *Bauer Tech*

Darren Brockett *Rock and Alluvium*

Craig Burton *Pile Designs*

Jack Clayton *Rock & Alluvium*

Stephen Daniels *Foundation Piling*

Luke Deamer *Keller*

Sharon Foley *Martello Piling*

Jan Jones *Van Elle*

Zohaib Khan *Aarsleff*

Alice Liddell *Expanded*

Stuart Norman (Chair) *Keltbray*

Tomasz Paprocki *BAM Ritchies*

Alasdair Revie *FK Lowry*

Matt Smith *Expanded*

Paul Smith *Roger Bullivant*

Nirmal Tiwari *Ex - BBGE*

Mark Williams *Keller*

Laura Williams *Keller*

**Present:**

Kathryn de Rochefort *FPS Secretariat*

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| **Owner**  | **Actions**  | **Date Due**  |
|  K de Rochefort  | To check if Isabel had put a call out to volunteers on the energy and water best practice webinars. | Next Meeting  |
| S Norman  | To contact Ed McCann to see what has been done as an industry to tackle factor of safety and design.  | Next Meeting  |
| S Norman  | To complete the FPS Sustainability Charter ready to submit to the Executive committee.  | 4th March |
| S Norman  | To bring the carbon reporting tool to the FPS Quarterly meeting. | 10th February |
| C Jennings  | Review the reuse of piles questionnaire and circulate to the group for comments.  |  Next Meeting  |
| Water Use TG | To draft a document of best practice with regards to water use.  |   |
| K de Rochefort  | Email FPS members about best practices with regards to water use and circulate to the Water TG.  | Next meeting  |
| Pile Re-Use TG | To draft a document of best practice with regards to the reuse of piles.  |  |
| S Norman  | To review and rewrite the brief for the Carbon Metrics TG and assign tasks to individual members.  | Next Meeting |
| S Norman  | To contact Julia Hill and David Major about the Early Careers Collaboration.  | Next Meeting  |
| K de Rochefort  | Chase Ciaran about recruiting members for the TGs.  | Next Meeting |

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|  | **Minutes**  |   |
| 1.  | **Apologies** Dafydd Belshaw *(Bachy Soletanche),* Malcolm O’Sullivan *(Van Elle),* Katie Atherton *(Skanska)* and Ciaran Jenning *(FPS Secretary)*  |   |
| 2.  | **Approval of the minutes from the meeting held on Thursday 20th May 2021**Stuart ran through the actions from the previous meeting held in May of last year. Stuart was to write a scope of the talks with the Plant and Technical committees. Luke reported that he has spoken to the Safety, Plant, and Operations committee about collaboration within this space in term of the HVO fuel discussions, which feed into the Machinery and Biofuels TG. Stuart asked the members that are also part of the Safety, Plant, and Operations group whether there were any further actions that had come out of that, Matt stated that there had been no further actions. Stuart asked to catch up with Luke and Matt after the meeting to discuss. Stuart highlighted a previous action regarding Warren giving the group an idea of current best practices and what progress is likely to be made in the next 5 years. Warren outlined that in terms of sustainability with electric driven and hydrogen drive plants it is all very much in the developmental stages. Most companies are now switching to HVO’s or will do at some point this year, electric driven equipment, we have electric machines in the UK now and lever have something similar on the way as well, but the electrics are a temporary solution until something better comes along. Stuart enquired if this is widely known amongst the members, Warren explained that they would be looking to promote this in the next few weeks and people can have a look at the machine before it goes to site in middle of March. Nirmal reported that Expanded have a battery powered crane that he will post on LinkedIn. Stuart asked Matt what his plans are around marketing or sharing best practice information. Matt stated that they took the first delivery of a large crane in the middle of last year at Olympia and have order three more that are now on their way over so we will have two electrical cranes by Monday and a total of four electrical cranes overall. Matt also highlighted that they have asked at the next OPS meeting for some of the suppliers/manufacturers to give a 15 minute presentation of what their plans are over the next few years.Stuart continued and asked Jack if he had sent the database work on the carbon of different concrete types. Jack confirmed that he had circulated the information in an Excel spreadsheet, Luke highlighted that it had fed into the EFFC simplified calculator for Scope 3 emissions included on their carbon reporting spreadsheet. Stuart informed the group that the Sustainability Charter is currently being drafted. Luke reported that FPS audits do include a section for social responsibility, which will be expanded to sustainability, the Task Group are trying to avoid duplications with the ISO criteria but there are some additional things that are being asked for at the European Federation level and things that we may want to consider in the UK based on existing legislation and what we want to set as a minimum compliance level. Stuart asked if Isabel had put a call out to volunteers on the energy and water best practice webinars Kathryn stated that she was unsure if this had been completed but will check. Luke stated that they have met. Stuart highlighted the action for Ben to attend the Technical Meeting to talk about pile design and testing, Ben was not in the meeting to confirm whether he attended or not. Stuart will contact Ed McCann to see what has been done as an industry to tackle factor of safety and design. The minutes were approved.  | FPS  **K de Rochefort** **S Norman**  |
| 3.  |  **Matters Arising** 1. **FPS Sustainability Charter Review**

Luke and Stuart presented a presentation to the group. Stuart stated that the current charter on the website is dated September 2007, so it is out of date. The aims of updating the Sustainability Charter are to raise awareness, ensure best practice is shared, to measure progress; benchmarking where we are now and measure the progress form there and to drive change. In terms of the delivery process and contents we have drivers which can be legislative, demands from the public etc. This then comes to us to make a materiality assessment to look at what we can do as group in the construction industry and then need to priorities the ones that we can influence the most in terms of carbon reduction, water reduction etc. These issues will then be handled among the individual task groups, the hope is that from these TG we can develop a set of guidance or best practice and put those forward to the Executive and the Members. The overall idea is that this process can be repeated and reassessed through the years as drivers change. Luke continued the definition of sustainability from the Brundtland report that was published in 1987 which states, ‘Development that meets the needs of the present without compromising the ability of the future generations to their own needs.’ In terms of Geotechnical companies, it is more practical to look at the three pillars of sustainability environmental, social, and economic which make up the more holistic sustainability. Within these pillars we align our actions to the UN Sustainability Development Goals (SDGs). These comprise of 17 UN goals that every UN country has signed up to meet by 2030. The benefits of this are that they take a more holistic approach, it is used globally and many of our stakeholders use the SDGs to talk about their own sustainability, so they become a common language between companies. Stuart outlined the drivers that re pushing sustainability forward within the FPS and other companies. Client demand, legislation, efficiency improvements, access to funding, employee demand, risk management and reputation. The FPS Charter will be linked to the EFFC Sustainability Overview which has guidance and definitions of terminology and will avoid us repeating the work that has already been completed. Luke advised the group that we can use the materiality assessment to determine our priorities (slide 6 of the presentation) we have used the logos and plotted them on a graph based on the priorities of the stakeholders on the Y axis and the impacts of geotechnical companies on the X axis. He gave an example whereby a high priority for a stake holder would be no poverty and zero hunger but we have small impact on those issues, but on the other hand things that we do have an impact on like carbon reduction etc. Luke continued to emphasise the three pillars of sustainability and look at each goal that sits under each pillar. Luke continued by outlining the task groups that we have developed to tackle these issues across the pillars that will be apart of the FPS Charter. Stuart finished the presentation by outlining the next steps that need to be taken. The charter will need the prioritisation of issues in the materiality analysis to be agreed and the document to be written up (3-4 pages long) and then seek the approval of the Executive Committee and FPS Members and then it will be subject to annual reviews. Stuart stated that the intention is to have it completed and ready to submit to the Executive Committee within the next four weeks.1. **Carbon Reporting Spreadsheet**

Luke informed the group that the FPS is a part of European Federation of Foundation Contractors (EFFC), and they have their own Sustainability WG. The EFFC is introducing quarterly reporting of Scope 1 and 2 from their members. Scope 1 is direct emissions from the fuels that we use, and Scope 2 is indirect emissions form the electricity that we use. Large companies will already be reporting S1 and S2, but smaller companies may not, which is why we have created two sperate ways of reporting. Section 1 allows for companies that already have the data to report and Section 2 covers companies that may not be reporting and to calculate their consumption; all data will be anonymised and given that carbon consumption can fluctuate during projects there is also a revenue box so you can calculate emissions per million pounds of revenue. Luke asked the group, do you think this is feasible, do people have the data available for this and what do you think about the initiate generally. Alice stated that it is definitely feasible. Darren suggested that it would depend on the size of the company, but they will have to start recording this data sooner or later anyway. Luke added that the push for certain Government projects as well, means that it has been passed down to smaller companies. It now is the case that it isn’t just listed companies that are expected to capture this data. Stuart stated that he would be happy to push this through and it can be taken to the quarterly meeting that will be held on Thursday 10th February.  |   **S Norman****S Norman**   |
| 4. | **Task Group Updates** Kathryn gave an update from Ciaran about the task groups. Kathryn outlined that there has not been a great amount of participation in the task groups on Water reduction and Pile Reuse. Ben Smith has dropped out of the pile reuse group as JRL are no longer a member of the FPS. There has been a particular lack of participation in the water reuse group as only two members showed up for the last meeting. Kathryn stated that she has drafted a reuse of piles questionnaire of Ciaran behalf that needs to be reviewed. Katie Atherton was part of the pile reuse group, but she is now leaving the piling industry taking the group down to three members and Luke will be gone for most of the year to complete his doctorate leavingfour for the water reduction group. Nirmal stated that progress has been slow as a leader for the pile Re-Use Task Group is still being sought and we were also short of people in this group. In our last meeting in September 2021, Katie Atherton advised that Andy Bell, Chief Engineer would be interested. Perhaps he should be contacted if he has not yet been approached. Nirmal continued that he chased Ciaran in early December and sent him several examples of piles being reused. Stuart raised a concern that we may have too many working groups and should we look to table some of the issues for now to focus on the top three or four. Nirmal outlined that the pile reuse group had decided to create a questionnaire and all members had put questions forward to Ciaran. Ciaran needs to review and circulate the question for comments from the group. Nirmal highlighted that the questionnaire may show how willing or not companies will be to consider reusing piles, which may in turn eliminate the need for the group. Jan reported that both herself and Alice are part of the water use task group, and they were the only ones that attended the meeting and had little success in arranging any further meetings and agreed that it would be worthwhile parking a couple of groups, or we need to expand the resources per group as it is challenging for just two people. Alice agreed and highlighted that we are not very developed when it comes to water consumption and asked the group if anyone has an effective method of capturing their water consumption. No one in the group had this ability. Stuart stated that Alice raised a good point and asked Luke if this would fall under S1 and S2. Luke stated that water does not have a carbon footprint and indicated that we do not have the metrics to measure the water consumption. Alice asked the group is the water TG something we wanted to table or get it up to a minimum standard. Stuart suggested that we use the group to highlight the best practices and then we can park the group for now, an email can be sent out to members to ask for people to come forward with best practices regarding rainwater use, grey water use etc and contribute to the group. Stuart continued that we should also contact the insurers to ask whether the reuse of piles would be a risk they would be willing to take and if not, then why are we looking at it as an industry. Darren agreed and stated that he can not see insurers willing taking the risk. Nirmal reported that insurers must have approved the reuse of piles as it has happened. Luke added that there are whole pieces around the testing and quality of piles, it may be helpful if we can put that together. Stuart suggested that we again create a document of best practices and then park the group for now. Noone had any updates for the circular economy, Luke provided a link to an article that was written for the EFFC. [EFFC influences FIEC response to EU Circular Economy Action Plan - EFFC](https://www.effc.org/news/effc-influences-fiec-response-to-eu-circular-economy-action-plan/)Stuart suggested that it might be better produce a position paper rather than having a dedicated task group. Luke highlighted that it might be a slight educational piece and there is legislation coming that will be coming down the track. Stuart stated that there was a webinar about Low Carbon Concretes and is now available online. Should the use of low carbon alternatives be something that we ask for each quarter along with all the other statistics. Luke reported that it has been mentioned to be added to the audit as an unscored question, but the audits are triennial, so it depends on what kind of reporting we want for this. Craig suggested that we could impact the carbon use by looking at the design of piles Luke highlighted that with regards to impact it might be helpful to look at the carbon hierarchy. Nirmal suggested that due to battery operated rigs and cranes having limitations in terms of their use in high torque rigs, maybe we should also start putting more emphasis on the use of hydrogen during our discussions with Plant manufacturers for larger cranes and rigs.Warren agreed that although battery powered machines do exist the technology still is not well developed. Luke suggested that it might be worth putting together an information piece about the sustainable machines and fuel sources currently available. Stuart suggested that he meets with Luke, Kathryn, and Ciaran to discuss setting up TG meetings and streamline the briefs for each group. Stuart continued to say that it would be worth prioritising the Machinery & Biofuels, Low Carbon Materials and Carbon Metrics TGs and a gentle wrapping up in the next three months of the Pile Re-use and the water reduction and consumption TG and just have the circular economy as an information piece. Stuart continued to say if any TG need any further support to let the group know and for others to step into the group.  | **C Jennings** **C Jennings****K de Rochefort****Pile Re-use TG** **L Deamer** **K de Rochefort****C Jennings** **S Norman** |
| 5. | **Decarbonising/Environmental Sustainability Webinars** Stuart suggested that we could base the next webinar around Machinery and HVO/Biofuels and ask the group for their thoughts. Warren agreed that would be good item.Luke suggested that the next task group meeting should be based around what to present in the webinar and Matt Smith can take the lead. Stuart suggested that we could do a quick speech at the beginning of the next Safety, Plants and Operations meeting to bring together information with aim to have the webinar before the end of August.  |  |
| 6. | **Carbon Metrics** Luke reported that this was taken to the EFFC in terms of our legal requirements for carbon reporting at the company level. It is intended that this would allow an industry benchmark for carbon use and reduction over time to be identified and set. There is also a need to analyse the relative carbon intensities of different techniques in order to consider lower carbon options on projects. This can be done with the EFFC Carbon Calculator, but thought needs to be given to developing individual benchmarks for each technique. Craig asked if there was a task group for carbon metrics. Stuart pointed out there was a brief created but the task group did not ever meet. It was agreed that benchmarking would be useful to the industry. Stuart volunteered to take the brief away to reassess and rewrite and find a time in the diary to assign tasks to each member with the group. Stuart, Luke, and Craig will discuss separately.  | **S Norman**  |
| 7. | **Any Other Business** 1. **Early Careers Group Collaboration**

Luke reported that the early careers group reached out to every working group to say that we have young enthusiastic people can you get them involved in anything and get these people onto these working groups. Kathryn stated that there has been a degree of push back. Stuart testified that some of the working groups have reported a lack of participation and that they need more help, so why wouldn’t we accept young people that are willing to get involved. Stuart will discuss with Julia Hill for the FPS and David Major for the EFFC for further information. Nirmal stated that Ciaran was recruiting for more people to join the task groups, Kathryn will chase Ciaran about recruiting.  | **S Norman****K de Rochefort**  |
| 8. | **Date of Next Meeting** Thursday 10th March 2022 09:30-11:30 |  |