


Date: Tuesday 11th June 2024

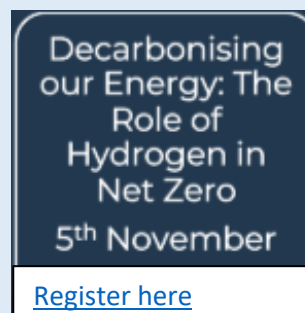
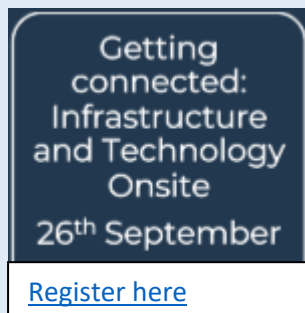
Attendees: Imogen Player (Action Sustainability); Sam Walker (Action Sustainability); Lynne Good (Action Sustainability); Max Lajtha (Action Sustainability); Gavin Allan (Robertson Group); Paul Allman (MJ Evans Construction); Peter Brown (CPA); Michael Bandy (Kier); Stacey Burton (Tilbury Douglas); Jason Chadwick (Murphy Group), Stan Chapman (Costain); Niall Conroy (Wolffkran); Tom Gleeson (Clancy Group); James Kearsey (Boss Cabins); Robert Lockwood (SCS); Rob Lowe (Nationwide Platforms); Paul Lynch (Lynch); Chris Matthews (Flannery); Samuel Mercer (Plant Force); Aurelien Morel (Bouygues UK); Steve Postlethwaite (Costain); Jane Quan (Workdry); Ben Rowe (Volker Wessels); Sam Ryan Proudfoot (Lynch); Nikolaos Sapounas (Octavius); James Smith (Plant Force); Edward Tainsh (Colas); Laura Watson (National Highways); Nicki Woodsworth (Boss Cabins); Richard Whiting (Nationwide Platforms).

Summary of Actions and Notes from the Plant Category Group Meeting

| Plant Category Group – Introductions and outstanding actions | | |
|--|--|-------|
| No | Action/Notes | Owner |
| 1 | <p>Welcome and Introductions</p> <p>Focus of Meeting: Development of new Sustainable Site Set-Up E-Learning Module</p> | |
| 2 | <p>Plant Group Updates</p> <p>Updates were given on recent work completed within the Plant Group. This included:</p> <p>The Plant Charter</p> <p>The Plant Charter outlines the minimum standards for plant machinery and equipment with the aim to reduce emissions from plant equipment and encourage innovation. Since our last meeting, we’ve had 4 new organisations join, bringing the total to 21 signatories. Congratulation to our new signatories:</p> <p>Advante, Bouygues UK, Explore and McLaughlin & Harvey (MCLH).</p>  <p>Please contact Imogen or Sam if you would like to sign up to the Plant Charter or discuss your application.</p> <p>More information on how to apply can be found here.</p> | |

2 Plant Group Virtual Conferences

Recent Virtual Conferences coming up which may be of interest to the Plant Group include:



Responsible Sourcing of HVO – A Comprehensive Guide

The HVO report has now been released and can be accessed [here](#).



This guide describes in detail the sustainability benefits and risks of procuring and using HVO as an alternative to fossil diesel as part of a Net Zero carbon reduction strategy. It provides facts and figures, gleaned from other published and peer-reviewed reports on these impacts, as well as advice and guidance, through several recommendations, on what you can do to mitigate these risks.

Update on the Minimum Standards

The final draft of the revised Minimum Standards V3 was shared, based on the discussions held with OEMs in late 2023. Key changes were highlighted, these included:

- Location differentiation:
 - Stage IV (rest of UK) and Stage V (London) for medium and large plant when hiring in
 - Stage IIIA (rest of UK) and Stage V (London) for generators when hiring in
- Generators combined
- Additional categories added: pumps, accommodation, in-use training

Feedback was collected from the group with comments focussing around:

- Whether the EPC rating criteria should be removed from the welfare cabins section and replaced with a different criterion (for example, renewable energy). Another suggestion made was to break the section down into those that aligned with building regulations and those that do not.
 - On this it was suggested that a sub-group could be created to create an EPC style standard that would apply to welfare cabins.
- Tools and the complexity involved with ensuring that these meet the minimum standards.

Update on the Plant Charter

Updates on the Plant Charter were also discussed, with the changes made including:

- Within the Innovation commitment – also providing a carbon footprint
- Within the Platinum level – 1 point minimum must be obtained in both new categories to achieve platinum level:
 - 1) Telematics
 - 2) Charter Inclusion in Supply Chain & Procurement

Feedback was collected from the group with comments focussing around:

- The value of including a section on telematics due to its role in reducing carbon emissions on-site.
- Reviewing the bronze, silver, gold and platinum level to ensure that people are not alienated or deterred from applying.

A guide will also be developed which provides guidance on how the Plant Charter can be integrated into procurement. If any partners would be interested in feeding into this, please reach out to sam.walker@actionsustainability.com

All partners interested in supporting the development of a procurement guide to let Imogen / Sam know

3 New E-Learning Module: Sustainable Site Set-up

During our last meeting which focused on business planning for the year, the group identified that the development of a new E-Learning module on sustainable site set-up would be beneficial to develop. As a result, questions were asked on what should be included in the E-Learning and who the E-Learning should be aimed at.

Some of the elements to include, which had already been highlighted in the previous session, included:

- o New products and alternative fuels including, battery, hydrogen, HVO.
- o Awareness and training (eco-operator training etc.).
- o Digital tools, telematics.
- o Traditional vs offsite construction.
- o Collaboration between contractors.

For consideration: Which of these topics should be included?

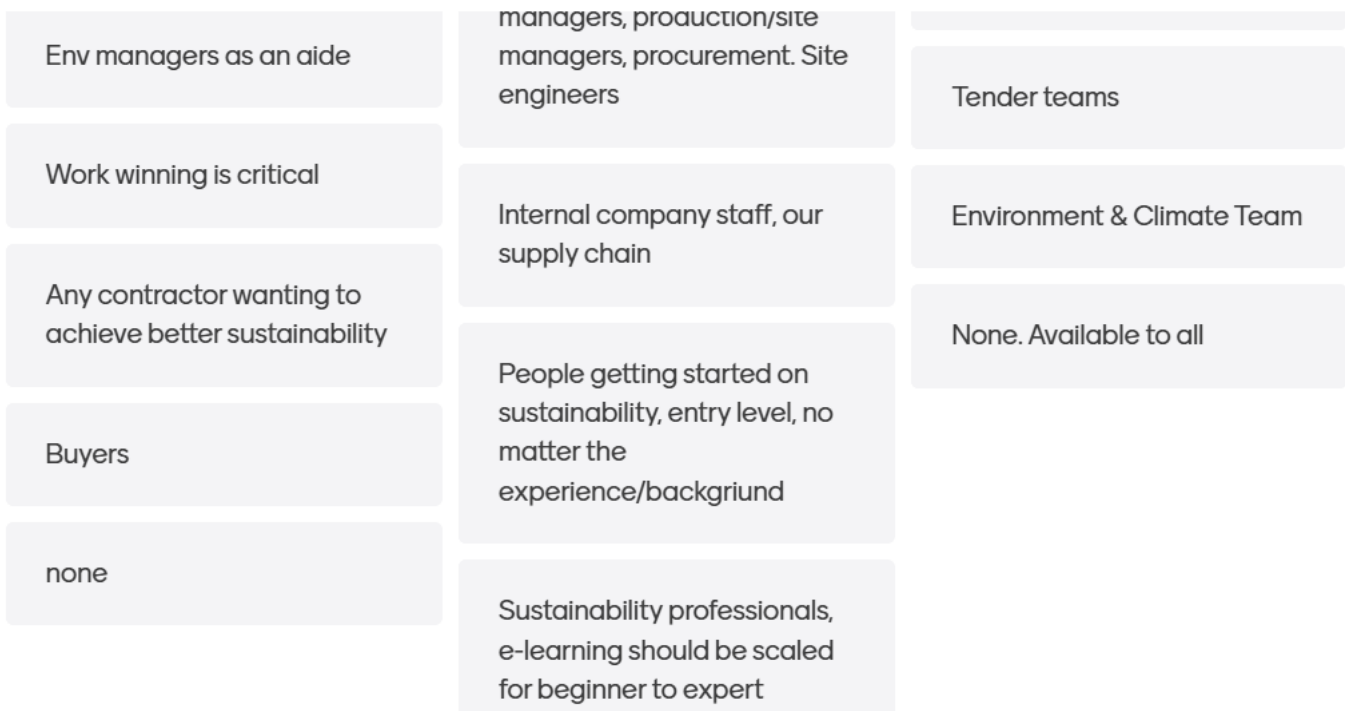
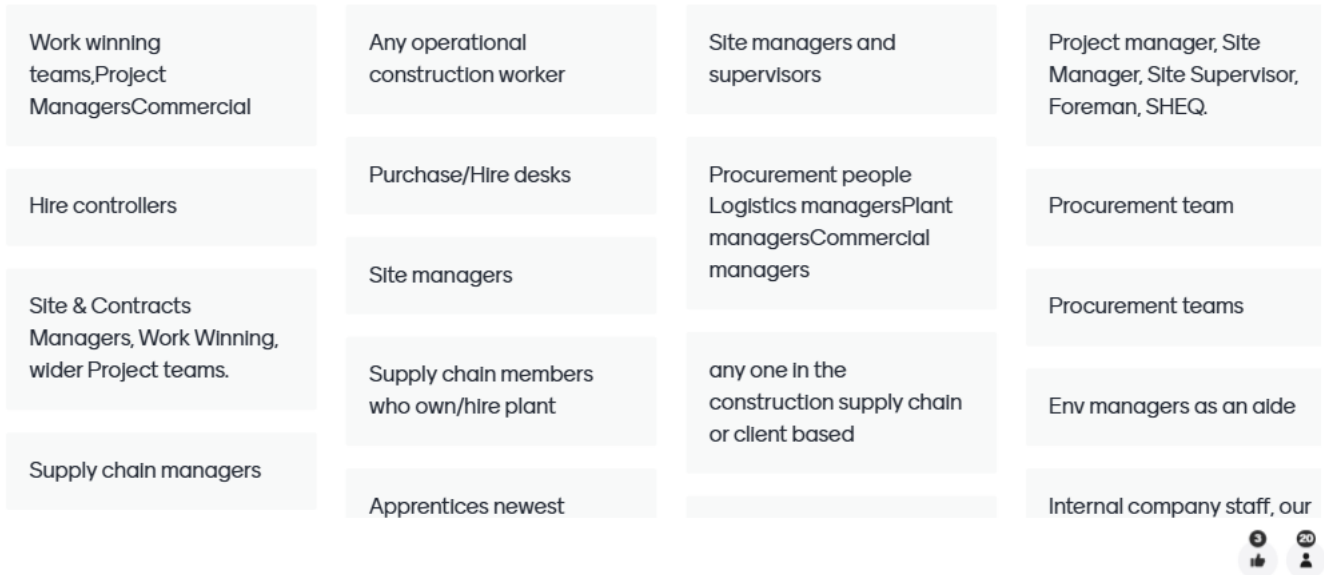
| | | |
|---|---|--|
| | <p>A MENTI was then done asking Partners on the learning objectives and who the audience should be. Please see the appendix for the results of this.</p> <p>The group was then split up into different groups to discuss in further detail what should be included in the E-Learning module. Groups were split and asked to either focus on the planning of the site or the implementation to allow all sustainability areas to be considered. The results of the Jamboard can be seen in the appendix.</p> | |
| | <p><u>Partner Benefits</u></p> <p>Lynne Good spoke on the Supply Chain Sustainability School and the benefits available for Partners. If you would like to understand how you can get more out of the Supply Chain Sustainability School then please reach out to lynne@supplychainschool.co.uk</p> | |
| 7 | <p><u>Diversity Survey</u></p> <p>Max Lajtha presented the Diversity Survey data collected from the industry and the challenges around diversity in the industry. For more information please see the slides or contact liv.Banfield@actionsustainability.com</p> | |
| 8 | <p><u>Next Meetings</u></p> <p>Next meeting will take place on Tuesday 10th September 10am-12pm</p> <p>Dates for next year include:</p> <ul style="list-style-type: none">• Tuesday 10th December 10am-12pm | |

Appendix

Appendix A – MENTI Results

Who should the target audience be for the E-learning module?

28 responses



What - if any - prior knowledge should people have before completing the E-learning module?

14 responses

| | | | |
|--|--|-----------------------|---|
| None | Not important | None | Open to all |
| Limited ideally | Basic or none | No previous knowledge | None |
| Need basic & intermediate to cover all | Assume starting from scratch | none | Some understanding of siiiit operatoond |
| Behavioural change | What are the concrete solutions available on the market on how can they be implemented on site | | |



What should the learning objectives for the e-learning module be?

14 responses



| | | | |
|--|--|---|---|
| Come away with practical steps to follow; knowledge to go away and think about what next | Basic - what good looks like and why Intermediate - how to implement and when | Assist on giving others a starting point on sites | Obtain a basic knowledge of the subject and what they can do to improve |
| Reasons for module | Basic fundamental understanding of the topic(s), and avenues to expand knowledge further | Illustrate best practice and show what types of equipment, materials, practices should be used to achieve it. | Promote successful steps/practices in the industry |
| Expected behaviours | Use as signposting for further info wources | About reducing consumption of energy, not just using minimum standard equipment | Teach people how to monitor what they are achieving and what data reporting can be done |
| Know your topics to work on and those that might not be greatly influenced | | | |



How do you define a 'sustainable' construction site setup in your organisation?

23 responses

| | | | |
|---------------------------------|--|--|--|
| So many parameters | Mains hook up asap | Using as much renewable energy as possible and aiming for lowest emissions | Need bands of attainment that cover the wide spectrum of issues |
| Minimising use of generators | Look at water use | A place where everyone wants to improve on low emission savings | Go through each construction stage and follow a hierarchy of preferred sustainable actions |
| Resource Efficiency measures | Recycle / reuse waste , use renewables where you can, fuel efficient (inc plant) , operator training, inclusion for all. | Tailored for local environment or community | Using solar, battery storage or alternative fuels. Efficient cabins. |
| Minimising waste from materials | Must be safe | | |

| | | |
|--|---|---|
| for all. | | Use of mains and opting for green tariff, use of HVO for fuel, batteries, solar powered CCTV, etc. as much green alternatives as possible |
| Minimising waste from materials | Ability to measure your savings and transparently quantify | |
| leaving site the same as they found it | Low impact on surrounding areas - low noise and not dirty/polluting | Visual impact |
| Or leaving the site better!! | consider all aspects of sustainability, carbon, waste water etc | Minimizing site carbon footprint while maximizing social and natural benefits |
| Better , yes | | |

Appendix B – Jamboard Results

SCHOL Group 1: Pre-Planning & Design

What sustainable practices are you currently designing into your sites?

- Moving all welfare cabins to ECO / renewable powered versions
- Solar or Hybrid Tower Lights
- Sustainable procurement standards
- Idling awareness campaign - Eco-operator training
- Battery Storage units where possible
- looking for highest standard - insulation / U-values
- Awareness training for operatives and management team
- Temporary grid connections (infrastructure)
- Accommodation : LED lighting, PIR, push tap, waterless urinals
- HVO options
- Hybrid Plant
- EV Chargers, but connected to mains, not generators

What common challenges might arise when designing a site sustainably?

- Making sure the job can still be done to the standard we require
- Lack of concrete case studies
- budget - a lot of solution are available but difficult to implement.
- Availability of suitable resource; e.g electric supply for vehicle charging
- Local regulations, LEZ's and ULEZ's
- Site safety regulations for Hydrogen/LPG storage, fire risk for battery storage
- Awareness / buy in from interested / affected parties
- The risk of trying innovative sustainable practices
- Compromising functionality and sustainability
- Getting sub-contractors to follow sustainable site practices
- Lack of availability of certain sustainable site solutions
- Lack of availability of competent people and knowledge on designing sites sustainability

What environmental regulations and standards should we be aware of when designing a site sustainably?

- EPC rating for temporary site structures
- LEZ's and ULEZ's
- Construction Waste and the Environment Act
- Invasive species regs (japanese knotweed, etc)
- HVO Certification from suppliers, RFAS, ISCC etc..
- NRMM Regulation
- BREEAM
- BNG legislation

Do you have any existing resources, materials, or case studies that could be incorporated into the module?

- Ask for case studies from suppliers such as GAP/Sunbelt
- Wolffkran have an in-progress comparative case study between Stage III, V, Hybrid, and Battery power sources for tower cranes

sustainable site operations - working title?

SCHOL Group 2: Pre-Planning & Design

What sustainable practices are you currently designing into your sites?

- Solar Hybrid Generators
- Connect to mains ASAP on a green energy tariff
- low maintenance equipment
- saving water - using products that will support this
- reduced noise onsite also leads to happy workers
- social side as well, not just 100% focused on environment eg. reduced noise from onsite, happy community
- reducing scope 3 emissions from visiting site e.g. efficient and reduced site maintenance etc.

What common challenges might arise when designing a site sustainably?

- limited resources (space/people/disposal)
- Lack of understanding on new technologies
- Limited availability (not developed yet) in technologies
- No mains connection close to site
- Cost of new technologies
- additional training aspect for new technologies - can be pushback at times but often ends up bringing people onboard

What environmental regulations and standards should we be aware of when designing a site sustainably?

- Plant Charter minimum Standards..
- low emission zones and clean air zones
- SSSI
- CDM regulations (H&S)

Do you have any existing resources, materials, or case studies that could be incorporated into the module?

- Case studies and brochures of what good looks like - BOSS CABINS (welfare cabins, drying cabins), SOLGEN (solar hybrid generators) can provide case studies
- Supplying information packs and case studies in the past of projects

SCHOL Group 3: Execution / In Practice

What sustainable practices have you implemented at your sites/ are you aware of/ should we consider?

- use of solar hybrid generators
- HVO Fuel**
- Battery Storage
- EPC A cabins**
- Solar Power CCTV towers
- Solar rarray to provide power to the pods

What common challenges have you identified when implementing sustainable practices on-site?

- QS/Commercial - Cost
- Availability of equipment
- Energy sources / access to mains
- Vehicle charging
- Reliability of new technology / lack of trust

What environmental regulations and standards should we be aware of when working on a sustainable site?

- All of regulations should be taken into consideration
- Different minimum standards across different tier's and/or customers

Do you have any existing resources, materials, or case studies that could be incorporated into the module?

- Solar Hybrid generators - M&J Evans
- Use of telematics and its benefits - Murphy
- Solar panels to power site - Octavius
- HVO generators with Battery Storage - Octavius

SCHOL Group 4: Execution / In Practice

What sustainable practices have you implemented at your sites / are you aware of/ should we consider?

- De-carbonisation audits
- Environmental/Sustainability Site Inspections
- Noise and Air Quality monitoring as standard especially in built up areas.
- EMS
- Eco operator training - SCS**
- Materials and soils management to save carbon
- Low Carbon concrete
- Water reuse/ water efficiency
- Waste segregation, waste recycling facilities
- Demolition sites - reuse / recycling of materials
- Active Community / neighbour engagement

What common challenges have you identified when implementing sustainable practices on-site?

- Cost
- Run-time (Battery capacity/tank capacity)
- Getting connected to mains is a major hurdle/headache
- Amount of power (electricity) available to a site
- Time/programme
- Use of hydrogen cylinders to power equipment (deliveries mainly)
- Temporary green site infrastructure

What environmental regulations and standards should we be aware of when working on a sustainable site?

- Caution reference refueling with hydrogen
- Water Resource Act 1991
- Control of Pollution Act 1989
- Noise management through the use of s61 consent COPA'74 aids the process
- Landfill Tax
- EPA 1990 - Nositie and Dust management Enforced by LAs
- NRMM requirement in London if conditioned under planning regime
- Town and Country Planning Act 1990
- The Hedgerows Regulations 1997
- IAQM guidance on Dust Management - very good

Do you have any existing resources, materials, or case studies that could be incorporated into the module?

- Many - Flannery Plant
- Refer to the RDRS projects
- NRMM Registers
- Piling method using vacuum excavation reduces pile trimming to virtually zero. (Costain (SCS))
- On site re-use of concrete (Costain)
- Flywheel technology (Flybrid) energy savings
- Robotics for hydro demolition to reduce noise and dust exposure (Costain)
- early engagement with stakeholders can help with carbon reduction measure (Costain)