


**Date:** Tuesday 13<sup>th</sup> February 2024

**Attendees:** Imogen Player (Action Sustainability); Sam Walker (Action Sustainability); Lynne Good (Action Sustainability); Gavin Allan (Robertson Group); Paul Allman (MJ Evans Construction); Mark Anderson (GAP Group); Mark Armson (Wacker Neuson); Michael Bandy (Kier); Ronak Bhana (National Highways); Peter Brown (CPA); Sarah Butcher (Welfare Hire); Andy Connor (Speedy Services); Niall Conroy (Wolffkran); Jackie Cuthbert (Sunbelt Rentals); Andrea Davidson (HS2); Kenneth Doran (Careys plc); Craig Downs (EKFB); Henry Duggan-Ralph (Speedy Services); Elizabeth Edgington (NG Bailey); Daniel Evans (Careys); Alison Fulford (National Grid); Martin Gregson (Skanska); James Kaesey (Boss Cabins); Mark Lawton (Skanska); Rob Lowe (Nationwide Platforms); Chris Matthews (Flannery); Aurelien Morel (Bouygues UK); Steve Postlethwaite (Costain); Ben Rowe (Volker Wessels); Sam Ryan Proudfoot (Lynch); Joshua Taylor (Selwood); Raj Terin (MCLH); Gary Todd (BAM); Ian Watt (Scottish Water); Margaux Wibin (HILTI).

### Summary of Actions and Notes from the Plant Category Group Meeting

Plant Category Group – Introductions and outstanding actions		
No	Action/Notes	Owner
1	<p><b>Welcome and Introductions</b></p> <p><b>Focus of Meeting:</b> Innovation in Plant and Equipment</p>	
2	<p><b>Plant Group Updates</b></p> <p>Updates were given on recent work completed within the Plant Group. This included:</p> <p><b>The Plant Charter</b></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 3 new organisations join, bringing the total to 17 signatories. Congratulation to our new signatories:</p> <div data-bbox="164 1384 963 1538">  </div> <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 <a href="#">here</a>.</p>	

2

### Plant Group Webinar

The registration page for the Fuels and Technologies in Plant and Equipment: The Journey is now live. You can register for the event [here](#).

Details for the event including the speakers include:

A dark blue rectangular graphic with white and green text. At the top left, it says 'Plant Group Webinar' in white, followed by a red and white megaphone icon. Below this, 'Fuels and Technologies in Plant and Equipment: The Journey' is written in green. Further down, 'When: 12th March 14:00-15:00' and 'Where: Zoom' are listed in green. To the right, 'Register here' is in white with a green underline. Below this, 'Learning objectives:' is followed by a bulleted list of four points. At the bottom, there is a white bar containing the logos for FLANNERY, HS2, IDE, and ROBERTSON.

**Plant Group Webinar**

**Fuels and Technologies in Plant and Equipment: The Journey**

**When:** 12th March 14:00-15:00

**Where:** Zoom

**Register here**

Learning objectives:

- The progress that has been made towards reducing air quality and carbon emissions by plant and equipment
- The challenges of reducing emissions and improving plant and equipment
- The future of sustainable plant and equipment: technologies; innovation; collaboration
- Speakers:

**FLANNERY** **HS2** **IDE** **ROBERTSON**

Prospective  
Charter  
Signatories

### Plant Learning Pathway

The new *Carbon and Air Quality within Plant and Equipment* Learning Pathway was also promoted. Please share this within your organisations and on your social media platforms where relevant (you can share our most recent LinkedIn post [here](#)). Currently we have 189 assigned to the pathway and 21 completions. The pathway was updated to now include the “Embedding Sustainable Procurement E-Learning Module” at the request of some partners who wanted more procurement-relevant learning within the pathway.

### HVO Guidance Paper

The HVO guidance paper launch and virtual conference will take place on Tuesday 5<sup>th</sup> March from 10:00-12:00. You can register for the conference [here](#).

A screenshot of a LinkedIn event page. At the top is a photo of two people in orange high-visibility vests. Below the photo, the text reads 'ENERGY AND CARBON', 'HVO Procurement Guidance: Virtual Conference', and 'EVENT OR WORKSHOP'. A paragraph of text describes the event as a virtual conference examining HVO procurement. Below this, it says 'Tuesday, 5 March 2024, 10:00 AM - 12:00 PM', 'BEGINNER', and '120 mins'. At the bottom is a 'LEARN MORE' button with a right-pointing arrow.

ENERGY AND CARBON

HVO Procurement Guidance: Virtual Conference

EVENT OR WORKSHOP

Join our virtual conference examining HVO procurement, a critical step in our energy transition. Fossil fuels currently dominate 82% of our global energy consumption, impacting various sectors. Shifting away from our dependence on fossil fuels is more complex than flipping a single switch; it's a global challenge.

Tuesday, 5 March 2024, 10:00 AM - 12:00 PM

BEGINNER 120 mins

LEARN MORE

### Update on Minimum Standards

The first draft of the revised Minimum Standards V3 was shared, based on the discussions held with OEMs late 2023.

A discussion was had on the minimum standard updates (See **Appendix A**) with many different comments made on:

- The different categories used in the minimum standards and changing these.
- Adding in additional categories to broaden the relevance of the minimum standards.
- Removing some categories, including Tools.
- The different standards within each category and the relevance of this.

Specific feedback that was mentioned during the session:

- Add in a new category for accommodation (modular/cabins)
- Add in new category for pumps
- Look at the National Highways minimum standards to see how they compare/align
- Identify whether hybrid generators should also be a separate category
- Identify whether solar hybrid should also be split out
- Add green energy tariff as a requirement
- Identify whether battery storage units should be split out
- Discussion around removing tools entirely as a category, or alternatively giving them a lower weighting in the plant charter. Rationale for this is that they have a 3-5 year lifespan, it could be viewed as a broad category and greater impact could be had across the larger equipment. However, must remember that when so many tools are being used, we can't underplay the impact they can have.
- Consider changing the generator split from under and over 20kVA to under and over 60 kVA.
- Zero emission plant for MEWPs unrealistic so change this to be relevant to the size of the machine.
- Include another category that looks at the transportation of the equipment to site

Wider feedback on the minimum standards and the charter was also shared:

- Request to develop a graphic that demonstrates carbon savings through the plant charter – 'if we were to have done nothing, this is what it would've looked like', however must be considerate of where the plant charter is pushing industry forwards vs. where improving legislation would've already done this and therefore cannot assume that the plant charter has saved those emissions, as it would've happened anyway
- Consider including an aspect in the innovation section of the plant charter of the social impact of the end-of-life disposal
- Must better communicate the value organisations can get from the charter, namely: 1) how it benefits the organisation directly and 2) how it supports their clients and work-winning.

Follow-on discussions will be organised with those partners who offered additional feedback and insights.

Individual partners who will discuss will be contacted by Sam to arrange a discussion

**All partners** invited to share comment and feedback on V3 Minimum Standards by Friday 1<sup>st</sup> March.

	<p><b>All partners are invited to share their comment and feedback by Friday 1<sup>st</sup> March.</b> After which, the changes will be made and V3 will be published.</p> <p><b><u>Updates to the Plant Charter</u></b> A discussion was had on how the Plant Charter could be taken to the next level. Thoughts from the discussion were capture via a Jamboard; the results of which can be seen in the <b>Appendix B</b> below. The School will now draft a V2 charter, and share with the group for comment.</p> <p><b><u>Updates to the Plant Charter Overlay with the CLC Route Map</u></b> As part of the group's proposed outputs for this year, we would like to develop an overlay for the plant charter to the Construction Leadership Council's <i>Zero Diesel Sites Route Map</i>. This has been developed and is now being shared with the group.</p> <p><b>All partners are invited to share comment and feedback by Friday 1<sup>st</sup> March.</b></p>	<p><b>All partners</b> invited to share comment and feedback on Plant Charter overlay by Friday 1<sup>st</sup> March.</p>
3	<p><b><u>Update: Business Planning</u></b> During our last meeting, the group brainstormed ideas for what the group would like to achieve in FY 24/25. Since that meeting, the School have identified which of those ideas are high impact, most meaningful and also opportunities for quick wins.</p> <p>An update was provided, as seen in the following screenshot.</p> <div data-bbox="164 1102 1316 1736"> <p><b>Thank you for your contributions and thoughts from our last Business Planning session.</b></p> <p><b>1) What you asked for....</b></p> <ul style="list-style-type: none"> <li>o Easier to digest school resources; short videos and 1 page summary documents.</li> <li>o Better collaboration between the clients, contractors and plant rental companies.</li> <li>o Guidance and knowledge on alternative fuels and greener equipment; HVO, hydrogen, electric batteries.</li> <li>o Better knowledge of minimum standards amongst the supply chain.</li> <li>o Guidance on how to develop and deliver net zero strategies.</li> <li>o Guidance on how to collect and use telematic data.</li> <li>o Case studies/resources/webinars/f2f events on innovative new technologies, fuels, plant and equipment.</li> </ul> <p><b>2) What we can do as quick wins that require no budget...</b></p> <ul style="list-style-type: none"> <li>o Partner newsletter with focus on plant and equipment.</li> <li>o Share updates on HVO report.</li> <li>o Webinar: Fuels and Technologies in Plant and Equipment: The Journey.</li> <li>o Wider collaborative webinars with the HVO and carbon groups.</li> <li>o Promote existing resources on net zero strategies and other topics.</li> </ul> <p><b>3) Where we can collaborate with other groups...</b></p> <ul style="list-style-type: none"> <li>o On webinars, with the Carbon, HVO, Technology groups.</li> <li>o On a report exploring the feasibility of Hydrogen as an alternative fuel (see AOB).</li> </ul> <p><b>4) What we suggest we spend our budget on....</b></p> <ul style="list-style-type: none"> <li>o Developing a *NEW* e-learning focused on sustainable site setup.</li> <li>o Charter signatory reviews, marketing campaign.</li> </ul> </div> <p>Based on the discussions, the Plant Groups focus for 2024 was outlined:</p>	<p><b>Partners</b></p>

## Focus 2024

To educate more people in the industry about reducing air quality and greenhouse gas emissions from plant and equipment

### 1. Upskill the industry on air quality and carbon in plant and equipment

- Promote the content we have developed through a dedicated Plant marketing campaign and through Partner News.
- Support the School's HVO group and Climate Action Group and share findings related to alternative fuels (facts, benefits, risks, certifications etc): hydrogen, grid connection, hybrid, solar, electric, HVO
- Deliver webinars throughout the year on air quality and carbon emissions related to plant and equipment.

### 2. Developing new learning content

- Develop a new e-learning focused on 'Sustainable Site Setup' – to cover best practice for low carbon and air quality for plant and equipment, along with wider aspects such as wellbeing.
- Researching, collating and analysing data from innovative plant trials and telematic data and developing a summary report.

### 3. Progress and Measurement

- Review evidence and award signatory status to the Plant Charter to 12 NEW signatories (aim) (30 in total by end of year, as all signatories *have to re-apply annually*)

### 4. Industry Engagement

- Engage with and attend partner events where relevant, to promote the Plant Group and the Charter.

The group agreed that they are happy to progress with this business plan for FY24/25. A key focus for the group for the next FY will be developing a new e-learning focused on sustainable site setup. Partners within the group will be invited to engage and provide content for the e-learning when it is in development. There was an initial suggestion to split the e-learning into job-specific sections e.g. for procurement, operations etc.

### **Focus of the Session: Innovation**

The focus of the session was on Innovation within Plant and Equipment, and the Plant industry in general. As a result, the group was broken into smaller breakout rooms to discuss:

1. What does 'innovation' mean to the plant group?
2. What are the challenges when it comes to innovation in our sector?
3. What innovation good practice exists in our sector?
4. What could we as a group/ as the school be doing to push innovation forward?

The results from each of the groups can be seen in the **Appendix C**.

## 7 **Announcements**

### **DESNZ NRMM Decarbonisation**

We would recommend that Partners submit their views for the call for evidence to [DESNZ NRMM Decarbonisation](#) to CPA, CEA or CLC for joint submission. However during the discussion there was considerable request from many group members that the School's plant group submit evidence. The School will investigate the feasibility of this and report back to the group. The deadline is Tuesday 26<sup>th</sup> March 2024.

### **Infrastructure Group**

The infrastructure Group have identified a desire for an in-depth study into the market for hydrogen as a low-carbon fuel, similar to the HVO group. In their upcoming meeting (on the

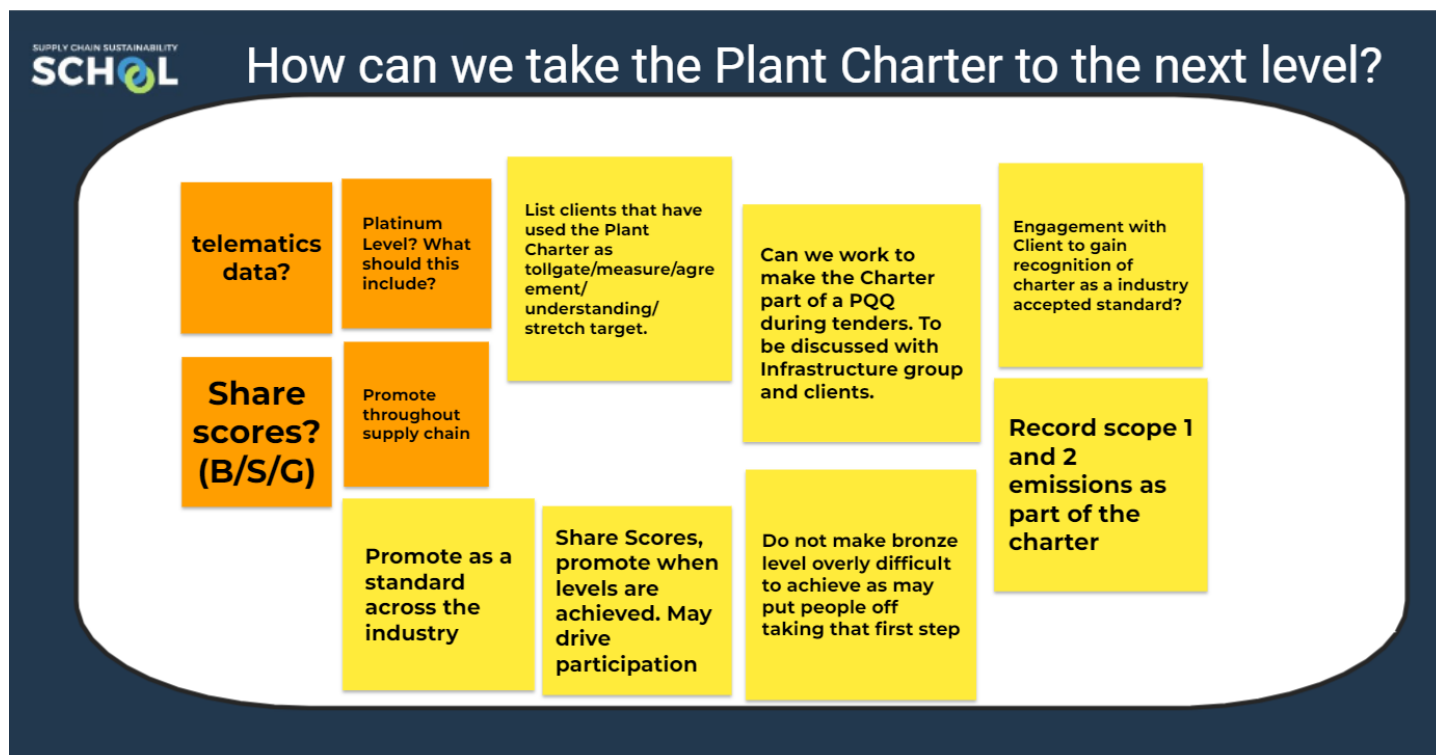
	27th Feb, at 10am) a cohort of speakers will discuss this in more detail. If anyone would like to join to discuss their experience/ ambition, please let Jenny@supplychainschool.co.uk know.	
8	<b><u>Next Meetings</u></b>  Next meeting will take place on <b>Tuesday 11th June 2am-4pm</b>  Dates for next year include: <ul style="list-style-type: none"><li>• <b>Tuesday 10th September 10am-12pm</b></li><li>• <b>Tuesday 10th December 10am-12pm</b></li></ul>	

## Appendix

### Appendix A - Minimum Standards V2 – suggested updates

The Minimum Standards v2.1: 12.05.2022				For comment and discussion
Plant Category	Examples	Min' Standards from 01.11.2021 for Contractors hiring plant in for use	Min' Standards from 01.11.2021 for Plant Hire Companies buying new equipment in to then hire out	Market Potential for next 5 years
Tools	Saws, whacker plates,	Cord/flex or battery	Cordless/battery	Cordless/battery
Lighting Towers	All LED <del>lamps</del>	<75% Stage V hybrid ≥25% battery & PV	<50% Stage V hybrid ≥50% battery & PV Stage V	<20% Stage V hybrid ≥80% battery & PV Stage V
Small Plant <5t	Mini excavators, micro dumpers, mini skip loaders	Stage IIIB	Company purchasing profile will assess the availability and client uptake of low and zero emissions plant	Increasing levels of zero emission, including but not limited to full electric, battery driven and hydrogen Stage V
Medium Plant 8t – 13t	ADTs, Excavators, wheeled loaders, dumpers, cranes, bulldozers, telehandlers	Stage IV (rest of UK) Stage V (London)	Company purchasing profile will assess the availability and client uptake of low and zero emissions plant such as electric and hybrid	Increasing levels of zero emission, including but not limited to full electric, battery driven and hydrogen Increasing levels of hybrid plant Stage V
Large Plant >13t	ADTs, Excavators, Wheeled Loaders, dumpers, cranes, bulldozers, telehandlers	Stage IV (rest of UK) Stage V (London)	Company purchasing profile will assess the availability and client uptake of low and zero emissions plant	Increasing levels of zero emission, including but not limited to full electric, battery driven and hydrogen Increasing levels of hybrid plant <10 years autonomous Stage V + battery (hybrid)
Generators <20kVA	Mobile and stationary	Stage IIIA (rest of UK) Stage V (London)	Company purchasing profile will assess the availability and client uptake of low and zero emissions plant Welfare: Design EPC rating C for a fixed location, or better, with sensors/timers Stage V + battery (hybrid)	Increasing levels of renewable power, plus power management, and greater use if EC ratings >10 years - Hydrogen Stage V + battery (hybrid)
Generators >20kVA	Mobile and stationary	Stage IIIA (rest of UK) Stage V (London)	Company purchasing profile will assess the availability and client uptake of low and zero emissions plant Welfare: Design EPC rating C or better, with sensors/timers	Increasing levels of renewable power, plus power management >10 years – Hydrogen
Access	MEWPs and van-mounted access	MEWPs used outdoors: Stage IIIB or hybrid; MEWPs used indoors: electric, bi-energy (range extender), or hybrid Vehicle-mounted: Euro 5-compliant engine	MEWPs: electric, bi-energy (range extender), or hybrid. If hybrid or electric unavailable at larger end, engine to be Stage V Vehicle-mounted: Euro 6 engine; Company purchasing profile will assess the availability and client uptake of low and zero emissions plant	MEWPs: Zero emission plant Vehicle-mounted: hybrid engine + increasing battery/ electric lift availability
by law		Eco-operator training	Eco-operator training	Data and telematic training

## Appendix B – Suggested Updates to the Plant Charter



## Appendix C – Innovation



## Innovation

### Group 1

**What does Innovation mean to the Plant Group?**

- awareness & training - innovation
- new products, engines, battery, hydrogen etc. - specific people within manufacturing
- bringing new products to market - but for OEMs that's not necessarily innovation, that's just BAU
- product & process
- encourage supply chain to come to us & present to market
- new way of doing something that achieves a benefit - e.g. cost saving, carbon emissions
- frameworks etc.
- joining technologies together - not massive innovation but it's still innovation
- 'innovation' as a word puts people off. use 'adoption' instead? emphasise that things already exist, processes already exist
- << OEMs not 'innovating', they're 'evolving', hence use 'adopt' rather than 'innovate'
- one person's innovation might be something that has already existed for a while

**What are the main challenges when it comes to Innovation within our sector?**

- identify why plant idles - data & innovation link.
- innovation often classed as USP - so don't want to share
- 'innovation' hasn't really changed in last 40 years
- public procurement issue with innovation
- < no way for innovation to fit into the tender
- public procurement - not entirely sure of the benefits of innovation & so gets misused, not in tenders etc.
- unrealistic goals & innovation not being used quickly enough to achieve it
- public procurement attitude 'what's the point?'
- innovation needs to move faster in our industry?
- manufacturers prevent innovation?... don't tell customers all info
- always 'waiting' for next biggest product, but actually can be focusing more on the training now to make an impact
- price for certain innovation - link to products mostly
- past trends stopping future innovation from being adopted

**What innovation good practice exists in our sector?**

- bigger centralised investment in skills - training in new techniques
- digital tools, digital twins, control
- driven by tier 1 contractors
- appreciate difference between using less and doing same as what peers do - sustainability - integrated into normal practice
- on or offsite construction, prefab - some aspects not necessarily seen as innovation
- training - making efficiency savings - hand in hand cost savings & sustainability

**What could we as a group/school be doing to push innovation forward?**

- NRMM DesNZ call for evidence response
- needs to be more lobbying
- school to highlight public procurement issues & how we can overcome them

## Innovation

### Group 2

**What does Innovation mean to the Plant Group?**

- What is available and what is available in the future
- Evolution vs Revolution
- Commercially available innovation (concepts that have been proved)
- Reliability and availability while improving performance
- Something tangible that improves the in the realm of H&S, environmental and/or operationally

**What are the main challenges when it comes to Innovation within our sector?**

- Commercial aspects of innovation outweighing the objective benefits of innovation
- Top down vs bottom up (demand vs bringing innovation to market)
- The cost vs the improvement of the innovation
- Innovative products as box ticking vs the norm
- The weighting of product sustainability aspects vs their cost
- Green washing legislation creating fear
- Never let the truth get in the way of a good story
- Not enough data to evaluate performance effectively (data also difficult to get)
- Availability of innovative plant (high lead times from manufacturing perspective, as well as innovation moves so fast)
- Matching legitimate demand for innovative plant with legitimate production
- Changing legislation for short term vision disrupting the strategic planning of partners

**What innovation good practice exists in our sector?**

- Consumption reduction
- On large sites with multiple contractors collaborating, the risk is mitigated

**What could we as a group/school be doing to push innovation forward?**

- Lobbying to include sustainable procurement in government contracts
- Facilitate more collaboration regarding case studies produced (objective and without bias)
- Provide standards for case studies to ensure transparency
- Set up working groups to peer review innovations
- Perhaps helping to facilitate more pilots between partners

