

SUPPLY CHAIN SUSTAINABILITY

SCHOL

May 2022

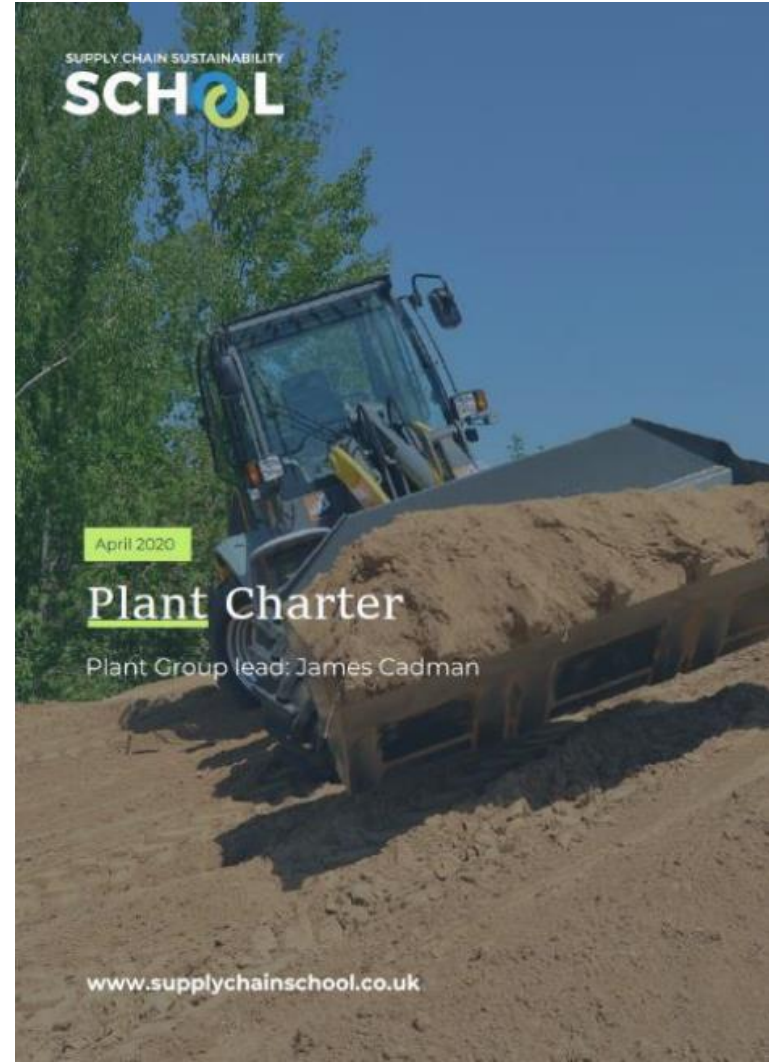
Plant Category Group Minimum Standards 2.1

James Cadman

Table of Contents

Table of Contents	2
Reviewing the Minimum Standards & Charter	3
Background and purpose	4
The Minimum Standards v2.0: 01.11.2021	5
Notes and Guidance	6
Reporting Against the Charter	7
The Charter: Evidence of Adherence	8
The Charter: Information and Evidence	12
Appendix 1 – Previous Minimum Standards: 2019	14

Reviewing the Minimum Standards & Charter



Background and purpose

The v2.1 of the Minimum Standards [builds on v1.0 from 2019](#), which is provided in **Appendix 1**, and as such you should read v2.1 in parallel with that for the wider context.

The Minimum Standards were built on information gained from interviews with eight original equipment manufacturer (OEM) businesses on current and future trends for reducing emissions from their products, covering power technologies, lifetime, and other aspects.

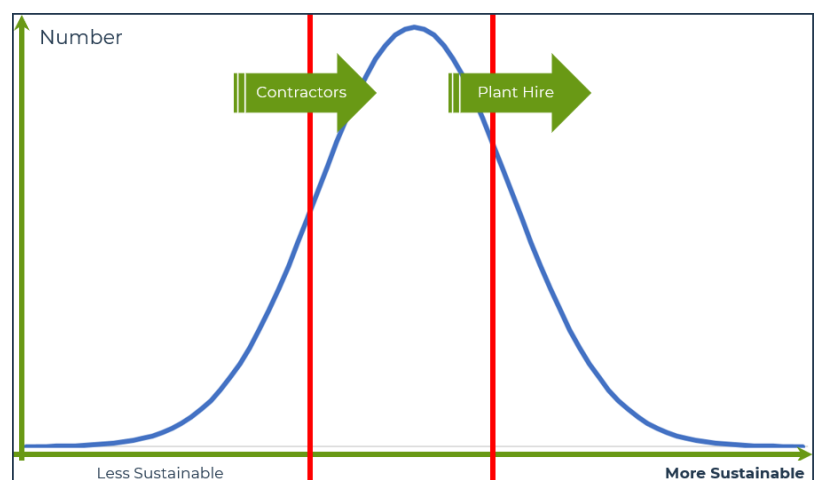
In themselves they indicate the minimum emissions levels that organisations should at least be aiming for when they procure plant. They are predicated on a balance between wanting to move the dial on reducing air quality and greenhouse gas emissions, but understanding the reality of their market availability, price, and fleet lifetime. But, where you can buy ‘cleaner’, you should.

The Standards form the core of the [Plant Commitment Charter](#), the purpose of which is to raise awareness in the sector of the need to drive down air quality (AQ) and greenhouse gas (GHG) emissions from the plant we buy, hire and use. Since then, we have gained 21 signatories to the Charter with plans to grow this further.

The Group agreed in 2020 that it was time to update the Minimum Standards due to the availability and types of technology having moved on. We therefore arranged to revisit the OEMs.

Between December 2020 and March 2021, Partners from the Group spoke with 25 OEMs across the sector, from small handheld tools up to large construction equipment, via lighting, generators, and access.

The outcomes of this research and consultation and what it means for the Minimum Standards are provided below.



The Minimum Standards v2.1: 12.05.2022

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 lumieres	<75% Stage V hybrid ≥25% battery & PV	<50% Stage V hybrid ≥50% battery & PV	<20% Stage V hybrid ≥80% battery & PV
Small Plant <5t	Mini excavators, micro dumpers, mini skip loaders	Stage IIIB	Stage V Company purchasing profile will assess the availability and client uptake of low and zero emissions plant	Stage V Increasing levels of zero emission plant
Medium Plant 8t – 13t	Excavators, dumpers, telehandlers	Stage IV	Stage V Company purchasing profile will assess the availability and client uptake of low and zero emissions plant	Stage V Increasing levels of zero emission plant
Large Plant >13t	ADTs, Excavators, Wheeled Loaders	Stage IV	Stage V Company purchasing profile will assess the availability and client uptake of low and zero emissions plant	Stage V Increasing levels of zero emission plant
Generators <20kVA	Mobile and stationary	Stage IIIA	Stage V + battery (hybrid) 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
Generators >20kVA	Mobile and stationary	Stage IIIA	Stage V + battery (hybrid) Welfare: Design EPC rating C or better, with sensors/timers	Stage V + battery (hybrid) Increasing levels of renewable power, plus power management
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

Notes and Guidance

- Where a percentage is given, this should be taken as absolute numbers of plant/ vehicles in the fleet, not in terms of operational hours.
- Where diesel is used, the use of hydrotreated vegetable oil (HVO) or other biodiesel meeting EN 15940 and ASTM D 975 is encouraged as a drop-in alternative to, and steppingstone from, conventional diesel due to reduction on carbon dioxide (CO₂), particulate matter (PM), and nitrogen oxides (NO_x) emissions. However, ensure that the engine is warranted by OEM for this and the HVO is sustainably sourced.
- Stage III and IV engines with after treatment – diesel particulate filter (DPF), selective catalytic reduction (SCR) – to make them Stage V compliant, are acceptable (with reference to the derogation ‘til June 2021)
- Appropriate advice and guidance will be provided for all equipment to the operator and site manager on fuel-efficient operation. This will be supported, where relevant, through the provision of “eco-modes”, “auto-off” functions and telematics that are pre-enabled before delivery.
- On site, there should be sufficient infrastructure to enable all electric equipment to be charged up from sources that don’t consume diesel or other fossil fuel, i.e., from the grid or renewable power sources.
- Where generators and stationary accommodation are on a larger site, power management and distribution should be deployed.
- The updated Minimum Standards v2.0 will start on **1st November 2021**, giving three months from that date for existing Signatories to reconfirm their pledge (by 4th February 2022), especially for those recently joined, and allowing others time to decide if they too want to commit.
- We propose aligning this to the point from which Signatories collect and submit data for the preceding 12 months against the Charter’s Commitments, see further below

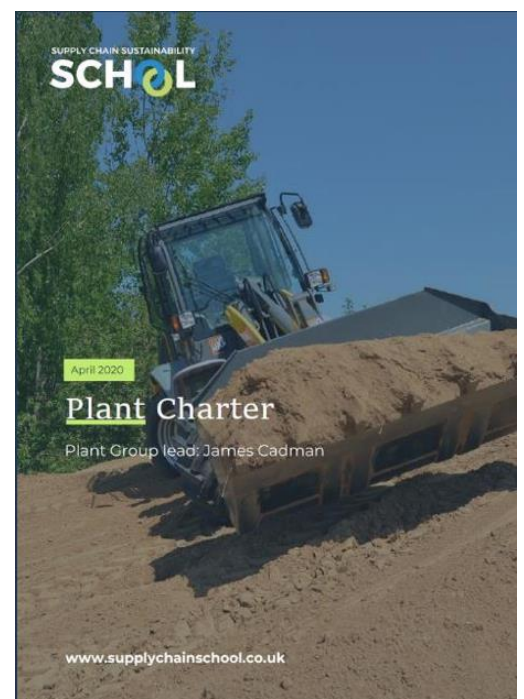
Reporting Against the Charter

Our commitment

Signatories to this [Charter](#) come from across the value chain and commit to reduce the air quality and greenhouse emissions and the negative impacts they cause from the construction plant and equipment (CPE) that we, as an industry, buy, hire, and use.

We will do this by adhering to the following commitments. They apply to anyone in the value chain, from client through contractors and hire companies, out to subcontractors:

- **Minimum standards in procurement:** We will buy or hire CPE that meets or exceeds the minimum standards for AQ and GHG emissions, as laid out in the latest version of accompanying technical pages.
- **Engagement:** We will engage suppliers and contractors up and down the value chain to actively participate in meeting the same minimum standards to contribute towards our aims.
- **Awareness raising and education:** We commit to providing our supply chain with the skills, knowledge, and confidence they need to achieve our aims.
- **Measurement and reporting:** We will measure progress in reducing our emissions and report them to relevant stakeholders
- **Innovation:** We will investigate, trial, and implement new technologies that will help us on the route to zero emissions onsite.



The Charter: Evidence of Adherence

Why

A useful but straightforward process for Signatories to the Charter to demonstrate their adherence with its Commitments and maintain their Signatory status.

What

A data request to all organisations who are Signatories to the Charter to provide information demonstrating they are responding to the Charter's commitments.

When

Data will be requested and provided annually for the preceding 12 months, from the point they signed to the Charter.

Who

Data provided by the Signatory to the School, confidentially. If any data is published it will be in aggregate, anonymised.

How

Criteria against the five Commitments, below, will give the Signatories towards being awarded Bronze, Silver or Gold Status.

Information will be reported by the Signatories in confidence to the School for collation and analysis. Suitable accompanying evidence will be provided to support the data entries. The following describes the 'template' of information that is required against each of the five Commitments.

1. Minimum Standards

- Broken down by the categories of Plant relevant to the Signatory, as given in the Minimum Standards, the Signatory will provide information on the make-up of their fleet for the preceding 12 months to demonstrate that it meets or exceeds the latest version of the Minimum Standards.
- Data will be provided in terms of the number of plant bought or hired, for each relevant plant category individually, during the reporting year:
 - if the Signatory is a **Contractor**, it is the number of plant hired in for projects, as a % of the total hired in
 - if the Signatory is a **Plant Hire Company**, it is the number of new plant bought in, or existing plant upgraded to cleaner tailpipe emissions (and to extend asset life), as a % of all new fleet bought in.
- The information will be for the whole company, and not relatable to any particular client.
- Points towards gaining Bronze, Silver or Gold status will be allocated after assessment of information and evidence on the number and % of the Signatory's plant that meets or exceeds the Minimum Standards, as follows:
 - **3 points for 70% or more that meets or exceeds the Minimum Standards**
 - **4 points for 80% or more**
 - **5 points for 90% or more**

2. Engagement

- The Signatory will provide verifiable information of activities that they have undertaken in preceding 12 months with key stakeholders such as customers and suppliers on actively reducing GHG and AQ emissions and using the Minimum Standards and changing their procurement/hire behaviours as a consequence.
- This could include, for example, demonstration days and speaking at events about new technology and equipment that has lower emissions, published case studies demonstrating improvements to

emissions, equipment trials on a client project looking to reduce emissions, supporting OEM innovation, and communications about the School's Plant Charter.

- This is not an exhaustive list and as such the Signatory can provide suitable evidence to meet this criterion.
- Points towards gaining Bronze, Silver or Gold status will be allocated after assessment of information and evidence on the number and type of engagement activities that the Signatory has undertaken, as follows:
 - **1 point for up to and including 2 engagement activities**
 - **2 points for up to and including 4 engagement activities that lead to at least 1 tangible change in a procurement/hire decision to move to lower emission plant**
 - **3 points for 5 or more engagement activities that lead to at least 2 tangible changes in a procurement/hire decision to move to lower emission plant**

3. Awareness and education

- The Signatory will provide verifiable examples of training and skills development they have provided in the last 12 months on actively reducing GHG and AQ emissions to groups such as customers, colleagues, and contractors, across roles such as operatives, site managers, as well as hiring and procurement teams. This can be provided directly by the Signatory, or indirectly via a third party
- The Signatory will also provide information on how the training was relevant, useful and will be implemented. For example, a post-training survey and any other information on how behaviours have changed as a consequence of the training
- Points towards gaining Bronze, Silver or Gold status will be allocated after assessment of information and evidence on the number and type of training activities that the Signatory has undertaken, as follows:
 - **1 point for up to and including 2 training activities**
 - **2 points for up to and including 4 training activities that demonstrate good engagement and uptake of the learning**

- **3 points for 5 or more training activities that demonstrate good engagement and uptake of the learning**

4. Innovation

- The Signatory will provide verifiable information on their plans for the next 12 months for fleet hire or investment in respect of lower emissions and alternative power sources
- The information will include, but is not limited to:
 - The % level of replacement during the next 12 months of existing fleet to lower emission plant
 - A summary of the overall, longer term strategy for reducing emissions including an explanation of what the change will mean in terms of reduced emissions
 - A description of what will happen with old fleet, how it will be disposed in a sustainable manner.
 - A description of the organisation's plans to also address embodied carbon, beyond direct operational emissions, working collaboratively across the value chain
- Points towards gaining Bronze, Silver or Gold status will be allocated after assessment of information and evidence on the number and type of training activities that the Signatory has undertaken, as follows:
 - **1 point for describing the % replacement for the coming 12 months to lower emission plant.**
 - **2 points for also providing the longer-term strategy for reducing emissions**
 - **3 points for also providing information on end of life disposal**
 - **4 points for also providing information on reducing embodied carbon.**

The Charter: Information and Evidence

Process for Assessing Charter Status

- On approaching the School to sign the Charter, the School will ask the yet-to-be-Signatory to provide evidence against the Commitments within 8 weeks to confirm their Charter status. If they do not, they will not proceed to Charter Status.
- The School will assess the information and then allocate points. A Signatory needs to get points from each Commitment. These points, a possible total of 15, are combined and the School determines if the Signatory is awarded Bronze, Silver or Gold, as per the table, right.
- The outcome is communicated to the Signatory and if awarded Bronze, Silver or Gold, the Signatory's logo will be added to the School webpage. If the applicant doesn't meet at least Bronze, they will be informed as to why and what they can do to reach it. The applicant must reach at least Bronze and cannot be a signatory to the Charter if Bronze is not achieved.
- Thereafter, on the anniversary of becoming a Signatory, the School will contact the Signatory to request updated information for the intervening 12 months for assessment. The School will confirm if the Signatory stays at the same Status or moves up or down. If they fail to produce the information within 8 weeks, their Status will be removed from the School webpage.
- The updated Minimum Standards v2.0 will come into effect on 1st November 2021. Existing Signatories to the Charter will have until 4th February 2022 to provide information for the preceding 12 months using the new, updated minimum standards, to reconfirm their Pledge.

Charter Status		Points
Bronze		6 - 9
Silver		10 - 12
Gold		13 - 15

Communications

- The School plans to communicate anonymised information coming from this, such as trends in power sources and emissions, how the sector is meeting or exceeding the Charter's Commitments and for describing best practice, etc

James Cadman

Lead Consultant at Action Sustainability

Plant Group

james@actionsustainability.com



Appendix 1 – Previous Minimum Standards: 2019

Plant	Examples	Minimum standard for 2019	Proposed minimum standard for 2022* / 2025†
Small Plant and Tools*	Saws, whacker plates, etc	≤50% petrol / diesel motor ≥50% cordless / battery	100% cordless / battery
Lighting Towers*		Eco-engine (≤0.55 L / hr) & LED lumieres **	≤67% Eco-engine (≤0.55 L / hr) & LED lumieres ≥33% Eco-engine (≤0.55 L / hr) & LED lumieres plus battery hybrid & / or PV **
Small Plant <3t ‡	Mini excavators, micro dumpers, mini skip loaders	Stage III B	Stage V or electric
Medium Plant 3t – 13t ‡	Excavators, dumpers	Stage III B	≤33% Stage III B ≥67% Stage V
	Telehandlers	Stage IV	Stage V
Large Plant >13t ‡	ADTs, Excavators, Wheel Loaders	Stage IV	≤33% Stage IV ≥67% Stage V
Generators*		Stage III A	Hybrid generator for welfare cabins / accommodation Stage III A with cleaner fuels elsewhere