

SUPPLY CHAIN SUSTAINABILITY

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Plant Category Group Minimum Standards Version 3

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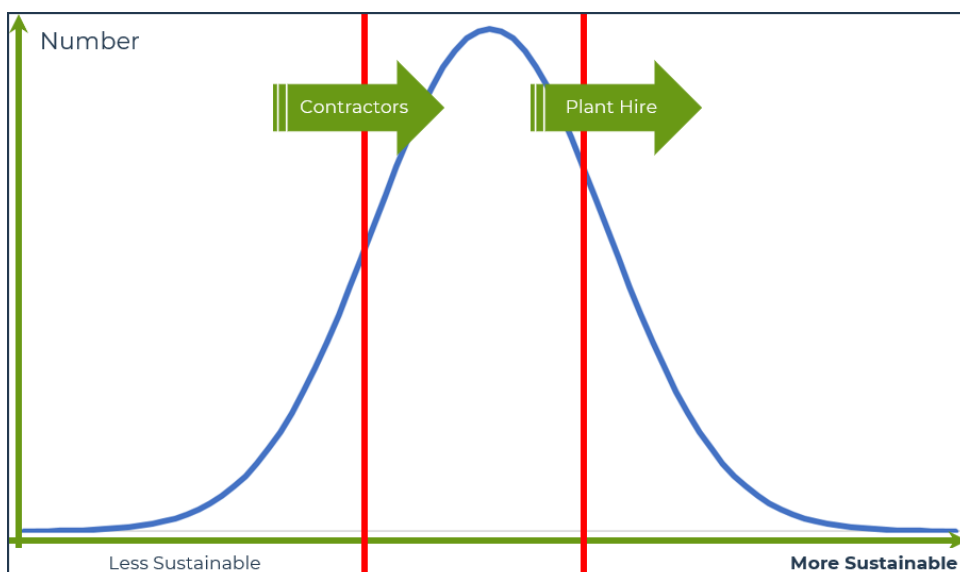
Background and purpose

This Version 3 of the Minimum Standards builds on v1.0 from 2019, and v2.1 from 2022, which are provided in the Appendices. It is useful to see the progression of the Minimum Standards, as defined by the Plant Category Group, and we encourage you to take a look. The Group agree that a review and update is required on a regular basis to ensure that the Minimum Standards align with a realistic industry outlook.

The Minimum Standards were built on information gained from interviews with original equipment manufacturer (OEM) businesses on current and future trends for reducing emissions from their products, covering power technologies, lifetime, and other aspects. We have continually re-engaged with OEMs over the course of the Minimum Standards lifetime so far, to inform the version updates.

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](#), and the two go hand in hand. The purpose of the Plant Charter 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.



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 stepping stone 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 the 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.
- Onsite, there should be sufficient infrastructure to enable all electric equipment to be charged 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.

Minimum Standards: v3: 2024

Plant Category	Examples	Min Std from 2024 for Contractors hiring plant in for use	Min Std from 2024 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, including but not limited to full electric, battery driven and hydrogen
Medium Plant 8t – 13t	ADTs, Excavators, wheeled loaders, dumpers, cranes, bulldozers, telehandlers	Stage IV (rest of UK) Stage V (London)	Stage V Company purchasing profile will assess the availability and client uptake of low and zero emissions plant such as electric and hybrid	Stage V Increasing levels of zero emission, including but not limited to full electric, battery driven and hydrogen; Increasing levels of hybrid plant
Large Plant >13t	ADTs, Excavators, Wheeled Loaders, dumpers, cranes, bulldozers, telehandlers	Stage IV (rest of UK) Stage V (London)	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, including but not limited to full electric, battery driven and hydrogen Increasing levels of hybrid plant; <10 years autonomous

Generators	Mobile and stationary	Stage IIIA (rest of UK) Stage V (London)	Stage V + battery (hybrid) Company purchasing profile will assess the availability and client uptake of low and zero emissions plant	Stage V + battery (hybrid) Increasing levels of renewable power, plus power management >10 years - Hydrogen
Accommodation	Modular	EPC rating C, PIR-sensor controlled lighting, double glazing	EPC rating C, PIR-sensor controlled lighting, double glazing,	Powered by renewables, building management system (BMS)
	Welfare	12V/24V USB charging and PIR-sensor controlled LED lighting; assisted by renewables	12V/24V USB charging and PIR-sensor controlled LED lighting; assisted by renewables; inverter-powered 230V appliances	Electrical appliances in welfare powered 100% by renewables
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
Pumps	Diesel & electric suction pump		Stage V	Stage V + battery (hybrid)
	Diesel & electric hydraulic submersibles	Stage IIIA (rest of UK) Stage IV (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 renewable power, plus power management >10 years - Hydrogen
	Submersible electric			
In-Use		Eco-operator training	Eco-operator training	Data and telematic training

* Where non-compliant plant and equipment but with an exemption meets the minimum standards

Appendix 2: Previous Minimum Standards v2.1: 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

Appendix 1: Previous Minimum Standards: v1: 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