aggreko

GREENER UPGRADES™

Tier 4 Final generators

Low-emission temporary power solutions for your business

Our energy transition journey

At Aggreko, we recognize that everyone has a role to play in reducing emissions. Therefore we strive to invest in the latest technology to help our customers along their own paths and pace to Net Zero.

The Tier 4 Final (4F) fleet is the latest in our product line developed with our customers' sustainability goals in mind. We seek to be an enabler of the energy transition via our new solutions and product innovation.

Introducing

GREENER UPGRADES™

We are introducing Greener Upgrades™, an initiative developed to support our customers in making choices that are kinder to the environment. These small shifts make a big difference in lowering regulated emissions like NOx, particulate matter (PM) and CO. Also, CO_2 emissions can be reduced by minimizing fuel consumption and utilizing environmentally friendly biofuels.

Our investment in new technology, delivers solutions that improve efficiencies and lower costs.

Product Innovation

Tier 4F, is the final phase regulating emissions from new and in-use non-road compression-ignition diesel engines. It aims to reduce emitted harmful substances and is an evolution of previous standards.

We have made a multi-million dollar investment in this new fleet to enable businesses to operate with greater efficiencies, low noise levels, and lessen the impact on global and local emissions. We're excited to introduce you to this technology offered as part of our services!

Tier 4F generators

Specifically designed to cut down on harmful pollutants, our Tier 4F generators comply with the most stringent requirements set out by the United States Environmental Protection Agency (EPA) for diesel engines. They operate in the same way as the cleanest car engines limiting carbon monoxide, nitrogen oxides and particulate matter to provide efficient low carbon temporary power.

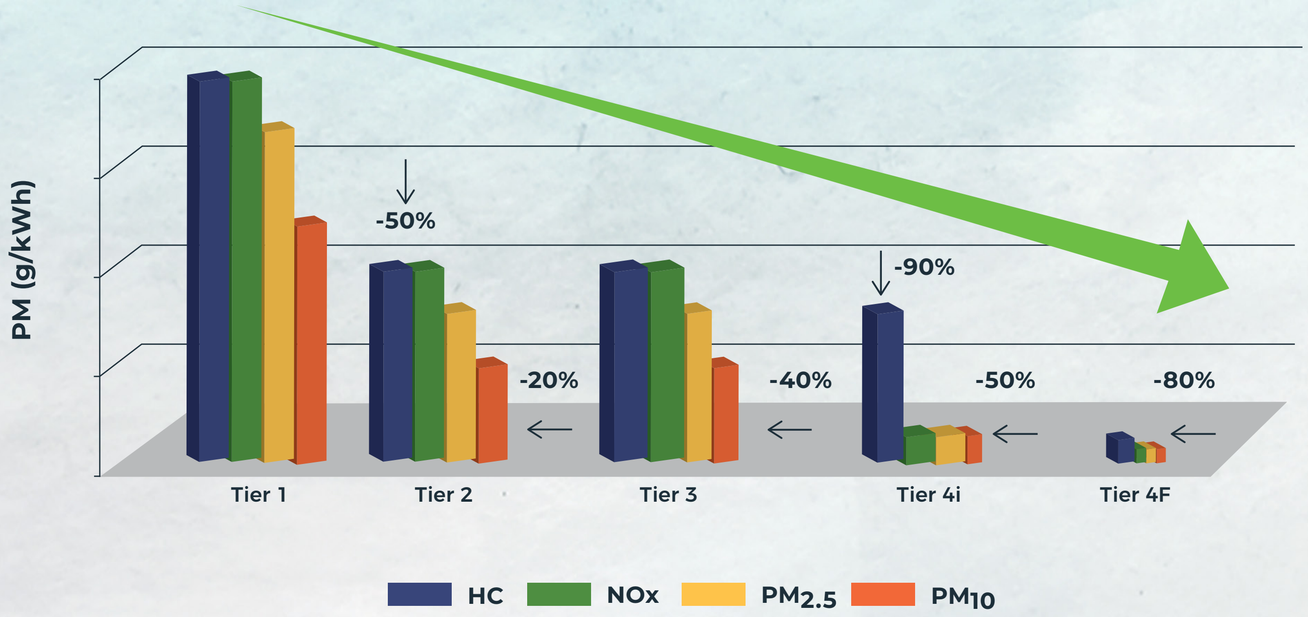
The new innovative fleet will deliver a 98% reduction in the volume of particulates and 96% of the NOx gases expelled compared to the basic engines in older generators.

Road to a cleaner power

What emissions are regulated?

- The EPA set forth a 5-stage schedule for emissions reductions on all engines, each of which drove higher levels of technology and therefore, more complex engines.
- NOx (Nitrous Oxide) will stay in the air for much longer than CO_2 and causes acid rain.
- PM (Particulate Matter) is soot, small carbon particles created by incomplete combustion of fossil fuels.

Tier 4F Engines Produce 99% Less NOx and PM Emissions than Tier 1 Engines



HC: Hydrocarbon

NOx: Nitrous Oxide

$PM_{2.5}$: Particulate Matter smaller than 2.5 microns

PM_{10}: Particulate Matter smaller than 10 microns

Setting the standard

Aggreko is proud to manufacture and offer the largest fleet of Tier 4F compliant generators in the U.S. and Canada. They are developed to high specifications, with models ranging from 25 kW – 1200 kW.

Robust and fuel efficient, our low noise generators can deliver on your temporary power needs without sacrificing performance. Not simply following the standard but setting it.

Installed and monitored by experts, our Tier 4F generators deliver low-emission power generation through improved technology with the following features across the range:

- Diesel Particulate Filter to reduce particulate matter (PM)
- Selective catalytic reduction system to reduce NOx emissions
- Diesel Oxidation Catalysts to reduce CO emissions through oxidization
- Low noise, with variable speed fans drastically reducing sound at lower loads and in lighter ambient conditions to allow for use in urban areas
- Arc Flash detection and physical safety barriers to provide safety to the operators
- Internal Diesel Exhaust Fluid (DEF)/AdBlue tank matched to internal fuel capacity to ensure that DEF only requires filling at the same frequency as the fuel tank refills
- External DEF/AdBlue tank options to extend on-site refill intervals, supply multiple generators and reduce the required site installation footprint

Our Tier 4F fleet

25 kW Tier 4F	
Standby rating (kW)	22 kW (3 phase) 14.4 (single phase)
Prime rating (kW)	22 kW (3 phase) 14.4 (single phase)
Continuous rating (kW)	20 kW (3 phase) 14.4 (single phase)
Voltage options	**3 PHASE**: 208Y/120, 220Y/127, 240Y/139 416Y/240,440Y/254, 480Y/277 **SINGLE PHASE:** 240/120
Fuel consumption	0.0745 gall/kW-hr
DEF consumption	N/A
Length	8.69 ft
Width	4.66 ft
Height	5.54 ft
Weight (gross with fuel)	2544 lbs
Fuel capacity/DEF capacity	42 gall/ (N/A)
Run hrs @ Prime	18 hrs (fuel)
Noise level	65 dB @ 21 ft
Emissions (NOx)	5.6 g/bhp-hr
Emissions (CO)	4.1 g/bhp-hr
Emissions (PM)	0.45 g/bhp-hr

40 kW Tier 4F	
Standby rating (kW)	40 kW (3 phase) 28.8 (single phase)
Prime rating (kW)	36 kW (3 phase) 26 (single phase)
Continuous rating (kW)	36 kW (3 phase) 26 (single phase)
Voltage options	**3 PHASE**: 208, 220, 240, 416, 440 and 480 **SINGLE PHASE:** 240/120
Fuel consumption	0.0814 gall/kW-hr
DEF consumption	N/A
Length	12.3 ft
Width	5.41 ft
Height	6.99 ft
Weight (gross with fuel)	4032.25 lbs
Fuel capacity/DEF capacity	79.25 gall/ (N/A)
Run hrs @ Prime	27 hrs (fuel)
Noise level	66 dB @ 21 ft 78.5 dB @ 3 ft
Emissions (NOx)	2.38 g/bhp-hr
Emissions (CO)	0.02 g/bhp-hr
Emissions (PM)	0.022 g/bhp-hr

60 kW Tier 4F	
Standby rating (kW)	62 kW (3 phase) 44 (single phase)
Prime rating (kW)	56 kW (3 phase) 40 (single phase)
Continuous rating (kW)	56 kW (3 phase) 40 (single phase)
Voltage options	**3 PHASE**: 480Y/277V, 240Y/139V, 208Y/120V **SINGLE PHASE:** 240/120
Fuel consumption	0.0786 gall/kW-hr
DEF consumption	0.0055 gall/kW-hr
Length	14.11 ft
Width	6.04 ft
Height	7.39 ft
Weight (gross with fuel)	5169.84 lbs
Fuel capacity/DEF capacity	118 gall/ 7.2 gal
Run hrs @ Prime	23.4 hrs (fuel) 24 hrs (DEF)
Noise level	65 dB @ 21 ft
Emissions (NOx)	0.119 g/bhp-hr
Emissions (CO)	0.223 g/bhp-hr
Emissions (PM)	0.007 g/bhp-hr

100 kW Tier 4F	
Standby rating (kW)	100 kW (3 phase) 53 (single phase)
Prime rating (kW)	90 kW (3 phase) 53 (single phase)
Continuous rating (kW)	90 kW (3 phase) 42 (single phase)
Voltage options	**3 PHASE**: 480/240/408 **SINGLE PHASE:** 240/120
Fuel consumption	0.0800 gall/kW-hr
DEF consumption	0.0057 gall/kW-hr
Length	10.08 ft
Width	4.17 ft
Height	6.41 ft
Weight (gross with fuel)	6560 lbs
Fuel capacity/DEF capacity	130 gall/ 15 gall
Run hrs @ Prime	20 hrs (fuel) 32 hrs (DEF)
Noise level	68 dB @ 21 ft
Emissions (NOx)	0.13 g/bhp-hr
Emissions (CO)	0.00 g/bhp-hr
Emissions (PM)	0.01 g/bhp-hr

200 kW Tier 4F	
Standby rating (kW)	200 kW (3 phase) 135 (single phase)
Prime rating (kW)	180 kW (3 phase) 135 (single phase)
Continuous rating (kW)	180 kW (3 phase) 133 (single phase)
Voltage options	**3 PHASE**: 480/208/240 **SINGLE PHASE:** 240/120
Fuel consumption	0.0761 gall/kW-hr
DEF consumption	0.0056 gall/kW-hr
Length	12.17 ft
Width	4.75 ft
Height	5.58 ft
Weight (gross with fuel)	9598 lbs
Fuel capacity/DEF capacity	255 gall/ 15 gall
Run hrs @ Prime	16 hrs (fuel) 16 hrs (DEF)
Noise level	77 dB @ 21 ft
Emissions (NOx)	0.1 g/bhp-hr
Emissions (CO)	0.00 g/bhp-hr
Emissions (PM)	0.01 g/bhp-hr

Our Tier 4F fleet

300 kW Tier 4F	
Standby rating (kW)	275 kW (3 phase) 188 (single phase)
Prime rating (kW)	275 kW (3 phase) 188 (single phase)
Continuous rating (kW)	250 kW (3 phase) 178 (single phase)
Voltage options	**3 PHASE**: 480/208/240 **SINGLE PHASE:** 240/120
Fuel consumption	0.0651 gall/kW-hr
DEF consumption	0.0046 gall/kW-hr
Length	13.66 ft
Width	5.16 ft
Height	7.92 ft
Weight (gross with fuel)	14000 lbs
Fuel capacity/DEF capacity	370 gall/ 15 gall
Run hrs @ Prime	16 hrs (fuel) 12 hrs (DEF)
Noise level	77 dB @ 21 ft
Emissions (NOx)	0.15 g/bhp-hr
Emissions (CO)	0.01 g/bhp-hr
Emissions (PM)	0.01 g/bhp-hr

600 kW Tier 4F	
Standby rating (kW)	606 kW (3 phase) (single phase)
Prime rating (kW)	573 kW (3 phase) (single phase)
Continuous rating (kW)	427 kW (3 phase) (single phase)
Voltage options	**3 PHASE**: 415 (50 Hz) 480V (60Hz) **SINGLE PHASE:** 230 V (50Hz) 277 (60 Hz)
Fuel consumption	0.0659 gall/kW-hr
DEF consumption	0.0046 gall/kW-hr
Length	16.93 ft
Width	6.23 ft
Height	9.58 ft
Weight (gross with fuel)	23537 lbs
Fuel capacity/DEF capacity	468 gall/ 42 gall
Run hrs @ Prime	11.2 hrs (fuel) 15 hrs (DEF)
Noise level	72.4 dB @ 21 ft 81.6 dB @ 3 ft
Emissions (NOx)	0.4 g/bhp-hr
Emissions (CO)	0.066 g/bhp-hr
Emissions (PM)	0.0137 g/bhp-hr

1200 kW Tier 4F	
Standby rating (kW)	1198 kW (3 phase) (single phase)
Prime rating (kW)	1089 kW (3 phase) (single phase)
Continuous rating (kW)	883 kW (3 phase) (single phase)
Voltage options	**3 PHASE**: 415 (50Hz) 480V (60Hz) **SINGLE PHASE:** 230V (50Hz) 277 (60Hz)
Fuel consumption	0.0659 gall/kW-hr
DEF consumption	0.0046 gall/kW-hr
Length	19.88 ft
Width	8.01 ft
Height	9.48 ft
Weight (gross with fuel)	43530 lbs
Fuel capacity/DEF capacity	453 gall/ 84 gall
Run hrs @ Prime	5.6 hrs (fuel) 15 hrs (DEF)
Noise level	72.4 dB @ 21 ft 81.6 dB @ 3 ft
Emissions (NOx)	0.4 g/bhp-hr
Emissions (CO)	0.066 g/bhp-hr
Emissions (PM)	0.0137 g/bhp-hr

100 gallon DEF tank	
Capacity (gross)	100 gallons
Capacity (usable)	94 gallons
Power supply	12
Power consumption (controls)	10 amps
Power consumption (heater pad)	12.5 amps (120v)
Max distance from tank to generator	25 ft hose
Weight (full)	1450 lbs
Generators connected/ tank	2
Max/min ambient temp	114° F/ 17° F
Max/min ambient temp	114° F/ -20° F

We have the largest Tier 4F fleet available nationwide, with models ranging from 25 kW – 1200 kW.

The Aggreko approach

Our team delivers a full service to our customers, from cables to kit, fuel to software. In addition, we work in partnerships to help guide businesses through the energy transition delivering power solutions that lower harmful emissions and reduce fuel costs.

With the right technology, we are committed to innovation and continue testing our equipment to maximize efficiencies. This insight, along with experience and industry knowledge, allows us to deliver the right solutions with optimum operating capabilities.

Right sizing

Generators that are oversized or poorly matched for their chosen application will lead to inefficiencies and strain on your processes. Aggreko applies innovative thinking to right-sizing equipment to its application to ensure greater efficiency and further reduce carbon emissions.

Load-on-demand

Load-on-demand power solutions replace a large, constantly operating generator with a group of smaller generators that can power up or down automatically according to demand. If your site requires a total peak output of 1500 kW, it is possible to use three smaller 500 kW generators together to achieve this when the site is operating at full capacity. As power demand fluctuates and reduces to 500 kW, two of the generators can power down – minimizing emissions and fuel usage.

Talk to Aggreko today to see how we can support your business and deliver the following benefits:

- **Lower emissions** - helping you reach your carbon reduction targets.
- **Reduces regulated emissions (NOx, CO, VOCs**) to near zero levels.
- **Further neutralizes** harmful particulates.
- **Reduced fuel usage and costs** - saving money on your bottom line.
- **Low noise** - ideal for projects when sound needs to be kept to a minimum.
- **Fast installation and commissioning** - plug and play with the entire Aggreko eco-system, saving you time and hassle.
- **Faster and more secure** site set up with extending external fuel and DEF fill intervals.
- **Actionable insights** - Aggreko Remote Monitoring (ARM) to optimize, control and manage your on-hire fleet. Providing proactive maintenance and fuel service, backed by our Remote Operations Center (ROC) available round the clock.

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