

		2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027~
		(NOx or NOx+NMHC / CO / PM (, PN)) or (NOx / HC / CO / PM (, PN)) Unit: g/kWh											
U.S.A	0kW ≤ 8kW	Tier 4 7.5/8.0/0.40[G2+NRTC]											
	8kW ≤ 19kW	Tier 4 7.5/6.6/0.40[G2+NRTC]											
	19kW ≤ 37kW	Tier 4 4.7/5.5/0.03[C1+NRTC]											
	37kW ≤ 56kW	Tier 4 4.7/5.0/0.03[C1+NRTC]											
	56kW ≤ 75kW	Tier 4 0.40/0.19/5.0/0.02[C1+NRTC]											
	75kW ≤ 130kW	Tier 4 0.40/0.19/5.0/0.02[C1+NRTC]											
	130kW ≤ 560kW	Tier 4 0.40/0.19/3.5/0.02[C1+NRTC]											
(EPA APU)		Phase 1 (optional) PM=0.15g / kWh			Phase 1 PM=0.15g/kWh			Phase 2 PM=0.02g / kWh or retrofit DPF					
※APU: Auxiliary Power Unit (not to power truck)													
(CARB TRU) (in-use reg.)7yrs after vehicle MY ULETRU(PM=0.02g/kWh)													
※TRU: Transport Refrigeration Unit													
EU	0kW ≤ 8kW	Stage V 7.50/8.00 /0.40 [G2 or C1]											
	8kW ≤ 19kW	Stage V 7.50/6.60/0.40 [G2 or C1]											
	19kW ≤ 37kW	Stage IIIA 7.5/5.5/0.6 [C1]											
	37kW ≤ 56kW	Stage IIIB 4.7/5.0/0.025 [C1+NRTC]											
	56kW ≤ 75kW	Stage IV 0.4/0.19/5.0/0.025 [C1+NRTC]											
	75kW ≤ 130kW	Stage IV 0.4/0.19/5.0/0.025 [C1+NRTC]											
	130kW ≤ 560kW	Stage IV 0.4/0.19/3.5/0.025 [C1+NRTC]											
● eg. place in market/machine prod limit 18 mon. ← → ● machine sales limit 24 mon. ← →													
Japan	< 19kW	Voluntary emission regulations Tier 2 (LEMA) Tier 3 equivalent											
	8kW < 19kW	Designation System of the Low Emission Construction Machineries Tier 3 7.50/5.00/0.8 [C1]											
	19kW ≤ 37kW	on/off 2014 Regulation 4.0/0.7/5.0/0.03 [C1+NRTC]											
	37kW ≤ 56kW	on/off 2014 Regulation 4.0/0.7/5.0/0.025 [C1+NRTC]											
	56kW ≤ 75kW	on/off 2014 Regulation 0.4/0.19/5.0/0.02 [C1+NRTC]											
	75kW ≤ 130kW	on/off 2014 Regulation 0.4/0.19/5.0/0.02 [C1+NRTC]											
	130kW ≤ 560kW	on/off 2014 Regulation 0.4/0.19/3.5/0.02 [C1+NRTC]											
China	0kW ≤ 8kW	Stage III 7.5/5.5/0.60 [G2]											
	8kW ≤ 19kW	Stage III 7.5/5.5/0.60 [G2]											
	19kW ≤ 37kW	Stage III 7.5/5.5/0.60 [C1]											
	37kW ≤ 56kW	Stage III 4.7/5.0/0.40 [C1]											
	56kW ≤ 75kW	Stage III 4.7/5.0/0.40 [C1]											
	75kW ≤ 130kW	Stage III 4.0/5.0/0.30 [C1]											
	130kW ≤ 560kW	Stage III 4.0/3.5/0.20 [C1]											
● no flexibility period													
Beijing	0kW ≤ 8kW	Stage IV 7.5/5.5/0.6 [(G2 or C1)+NRTC]											
	8kW ≤ 19kW	Stage IV 7.5/5.5/0.6 [(G2 or C1)+NRTC]											
	19kW ≤ 37kW	Stage IV 7.5/5.5/0.6 [C1+NRTC]											
	37kW ≤ 56kW	Stage IV 4.7/5.0/0.025 [C1+NRTC]											
	56kW ≤ 75kW	Stage IV 3.3/0.19/ 5.0/0.025 [C1+NRTC]											
	75kW ≤ 130kW	Stage IV 3.3/0.19/ 5.0/0.025 [C1+NRTC]											
	130kW ≤ 560kW	Stage IV 2.0/0.19/ 3.5/0.025 [C1+NRTC]											
Korea	0kW ≤ 8kW	Stage IV 7.5/8.0/0.4 [G2+NRTC]											
	8kW ≤ 19kW	Stage IV 7.5/6.6/0.4 [G2+NRTC]											
	19kW ≤ 37kW	Stage IV 4.7/5.5/0.03 [C1+NRTC]											
	37kW ≤ 56kW	Stage IV 4.7/5.0/0.03 [C1+NRTC]											
	56kW ≤ 75kW	Stage IV 0.4/0.19/5.0/0.025 [C1+NRTC]											
	75kW ≤ 130kW	Stage IV 0.4/0.19/5.0/0.025 [C1+NRTC]											
	130kW ≤ 560kW	Stage IV 0.4/0.19/3.5/0.025 [C1+NRTC]											
India	0kW ≤ 8kW (Ag.)	Bharat III 8.5/5.5/0.80 [C1]											
	8kW ≤ 19kW(Ag.)	Bharat III 8.5/5.5/0.80 [C1]											
	19kW ≤ 37kW(Ag.)	Bharat III 7.5/5.5/0.60 [C1]											
	37kW ≤ 56kW(Ag.)	Bharat III 4.7/5.0/0.40 [C1]											
	56kW ≤ 75kW(Ag.)	Bharat III 4.7/5.0/0.40 [C1]											
	75kW ≤ 130kW(Ag.)	Bharat III 4.0/5.0/0.30 [C1]											
	130kW ≤ 560kW(Ag.)	Bharat III 4.0/3.5/0.20 [C1]											
	0kW ≤ 8kW (Const.)	Bharat III 7.5/8.0/0.80 [C1]											
	8kW ≤ 19kW(Const.)	Bharat III 7.5/6.6/0.80 [C1]											
	19kW ≤ 37kW(Const.)	Bharat III 7.5/5.5/0.60 [C1]											
37kW ≤ 56kW(Const.)	Bharat III 4.7/5.0/0.40 [C1]												
56kW ≤ 75kW(Const.)	Bharat III 4.7/5.0/0.40 [C1]												
75kW ≤ 130kW(Const.)	Bharat III 4.0/5.0/0.30 [C1]												
130kW ≤ 560kW(Const.)	Bharat III 4.0/3.5/0.20 [C1]												
0kW ≤ 19kW(Gen set)	Bharat III 7.5/3.5/0.3 [D2]												
19kW ≤ 75kW(Gen set)	Bharat III 4.7/3.5/0.3 [D2]												
75kW ≤ 800kW(Gen set)	Bharat III 4.7/3.5/0.2 [D2]												
Brazil	19kW ≤ 37kW(Ag.)	Proconve MAR-I 7.5 /5.5 /0.6 [C1]											
	37kW ≤ 56kW(Ag.)	Proconve MAR-I 4.7/5.0/0.4 [C1]											
	56kW ≤ 75kW(Ag.)	Proconve MAR-I 4.7/5.0/0.4 [C1]											
	75kW ≤ 130kW(Ag.)	Proconve MAR-I 4.0/5.0/0.3 [C1]											
	130kW ≤ 560kW(Ag.)	Proconve MAR-I 4.0/3.5/0.2 [C1]											
	19kW ≤ 37kW(Const.)	Proconve MAR-I 7.5 /5.5 /0.6 [C1]											
	37kW ≤ 56kW(Const.)	Proconve MAR-I 4.7/5.0/0.4 [C1]											
56kW ≤ 75kW(Const.)	Proconve MAR-I 4.7/5.0/0.4 [C1]												
75kW ≤ 130kW(Const.)	Proconve MAR-I 4.0/5.0/0.3 [C1]												
130kW ≤ 560kW(Const.)	Proconve MAR-I 4.0/3.5/0.2 [C1]												
Chile	19kW ≤ 37kW	Stage IIIA equivalent											
	37kW ≤ 56kW	Stage IIIA equivalent											
	56kW ≤ 75kW	Stage IIIA equivalent											
	75kW ≤ 130kW	Stage IIIA equivalent											
	130kW ≤ 560kW	Stage IIIA equivalent											
Australia NSW	19kW ≤ 37kW	Tier 3 equivalent											
	37kW ≤ 56kW	Tier 3 equivalent											
	56kW ≤ 75kW	Tier 3 equivalent											
	75kW ≤ 130kW	Tier 3 equivalent											
	130kW ≤ 560kW	Tier 3 equivalent											
※items purchased by government of NSW(New South Wales State)													
Turkey	19kW ≤ 37kW	Stage IIIA equivalent											
	37kW ≤ 56kW	Stage IIIA equivalent											
	56kW ≤ 75kW	Stage IIIA equivalent											
	75kW ≤ 130kW	Stage IIIA equivalent											
	130kW ≤ 560kW	Stage IIIA equivalent											
Indonesia	18kW ≤ 37kW	Stage IIIA equivalent											
	37kW ≤ 75kW	Stage IIIA equivalent											
	75kW ≤ 130kW	Stage IIIA equivalent											
	130kW ≤ 560kW	Stage IIIA equivalent											
South Africa	19kW ≤ 37kW	Stage IIIA equivalent											
	37kW ≤ 75kW	Stage IIIA equivalent											
	75kW ≤ 130kW	Stage IIIA equivalent											
	130kW ≤ 560kW	Stage IIIA equivalent											
Morocco	18kW ≤ 37kW	Stage II equivalent											
	37kW ≤ 75kW	Stage II equivalent											
	75kW ≤ 130kW	Stage II equivalent											
	130kW ≤ 560kW	Stage II equivalent											
		2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027~
		(NOx or NOx+NMHC / CO / PM (, PN)) or (NOx / HC / CO / PM (, PN)) Unit: g/kWh											

NOTE: Depending on regulation, smoke requirement and/or D2 cycle for Gen.set may be applied.