

Evaluation de la quantité de Nox dégagé sur le site de Data4 en 2021

	Equipement	Compteur horaire début premier essai 2021	Compteur horaire fin dernier essai 2021	Nombre d'Heures de fonctionnement	Type de groupe	Nox kg/h	Nox total / Ge	Total Nox kg/an	Total Data 4 Nox kg/an	Equivalent en CO2 (kg/an)	Equivalent en CO2 (TCO2/an)	Prix TCO2	Prix Total
DC01	GE1	546	562	16	3516B	56,880	910,080	3014,64	24476,49	977517,49	977,52	30,00 €	29 325,52 €
	GE2	561	579	18	3516B	56,880	1023,840		7138,80	285102,26	285,10	30,00 €	8 553,07 €
	GE3	567	586	19	3516B	56,880	1080,720						
DC02	GE1	458	474	16	3516B	56,880	910,080	2844,00					
	GE2	447	467	20	3516B	56,880	1137,600						
	GE3	453	467	14	3516B	56,880	796,320						
DC03	GE1	420	438	18	3516B	56,880	1023,840	3185,28					
	GE2	430	448	18	3516B	56,880	1023,840						
	GE3	416	436	20	3516B	56,880	1137,600						
DC04	GE1	407	427	20	3516B	56,880	1137,600	3981,60					
	GE2	420	442	22	3516B	56,880	1251,360						
	GE3	408	421	13	3516B	56,880	739,440						
	GE4	88	103	15	3516B	56,880	853,200						
DC05	GE1	88	96	8	3516B	51,570	412,562	1598,68					
	GE2	94	98	4	3516B	51,570	206,281						
	GE3	95	107	12	3516B	51,570	618,843						
	GE4	92	99	7	3516B	51,570	360,992						
DC06	GE1	56	64	8	3516B	53,333	426,662	1386,65					
	GE2	51	58	7	3516B	53,333	373,329						
	GE3	56	63	7	3516B	53,333	373,329						
	GE4	61	65	4	3516B	53,333	213,331						
DC07	GE1	115	131	16	3516B	51,570	825,124	2630,08					
	GE2	108	124	16	3516B	51,570	825,124						
	GE3	101	111	10	3516B	51,570	515,703						
	GE4	109	118	9	3516B	51,570	464,132						
DC08	GE1	278	298	20	3516B	51,570	1031,405	2269,09					
	GE2	277	291	14	3516B	51,570	721,984						
	GE3	275	285	10	3516B	51,570	515,703						
DC09	GE1	43	50	7	3516B	53,333	373,329	1493,32					
	GE2	40	50	10	3516B	53,333	533,328						
	GE3	42	50	8	3516B	53,333	426,662						
	GE4	32	35	3	3516B	53,333	159,998						
DC10	GE1	24	32	8	3516B	53,333	426,662	1333,32					
	GE2	26	34	8	3516B	53,333	426,662						
	GE3	25	31	6	3516B	53,333	319,997						
	GE4	19	22	3	3516B	53,333	159,998						
DC11	GE1				3516B	53,333	0,000						
	GE2				3516B	53,333	0,000						
	GE3				3516B	53,333	0,000						
	GE4				3516B	53,333	0,000						
DC12	GE1				3516B	53,333	0,000						
	GE2				3516B	53,333	0,000						
	GE3				3516B	53,333	0,000						
	GE4				3516B	53,333	0,000						
DC14	GE1				3516B	61,630	0,000						
	GE2				3516B	61,630	0,000						
	GE3				3516B	61,630	0,000						
	GE4				3516B	61,630	0,000						
D3	GE1	154	162	8	3516B	46,23915	369,913	739,83					
	GE2	154	162	8	3516B	46,23915	369,913						

Legende

Cas n°01	Evaluation sur la base des données brutes issues de la fiche technique d'un GE 3516B, 2500 kVA 2000 ekW à puissance nominale
Cas n°02	Evaluation sur la base de la valeur de 15864g/hr pour le GE 2500 kVA / 2000 ekW à puissance nominale (donnée communiquée par ENERIA)

Pour le type de groupe utilisé: 1kg de Nox correspond à 39.937kg de CO2

Extrait de la fiche technique d'un GE 3516B 2000 ekW du DC14

Exhaust System						
Exhaust stack gas temperature – °C (°F)	535.3 (995.5)	535.3 (995.5)	506.3 (943.3)	476.8 (890.2)		
Exhaust gas flow rate – m³/min (cfm)	490.2 (17309.3)	490.2 (17309.3)	453.7 (16020.3)	410.6 (14498.8)		
Exhaust system backpressure (maximum allowable) – kPa (in. water)	6.7 (27.0)	6.7 (27.0)	6.7 (27.0)	6.7 (27.0)		
Heat Rejection						
Heat rejection to jacket water – kW (Btu/min)	724 (41173)	724 (41173)	674 (38329)	616 (35032)		
Heat rejection to exhaust (total) – kW (Btu/min)	2301 (130856)	2301 (130856)	2052 (116695)	1789 (101741)		
Heat rejection to aftercooler – kW (Btu/min)	549 (31221)	549 (31221)	480 (27296)	397 (22578)		
Heat rejection to atmosphere from engine – kW (Btu/min)	167 (9497)	167 (9497)	154 (8757)	143 (8132)		
Heat rejection from alternator – kW (Btu/min)	94 (5362)	94 (5362)	83 (4713)	72 (4093)		
Emissions* (Nominal)						
NOx mg/Nm³ (g/hp-h)	2095.4 (4.64)	2095.4 (4.64)	1969.6 (4.35)	1796.7 (3.98)		
CO mg/Nm³ (g/hp-h)	560.9 (4.24)	560.9 (4.24)	400.7 (0.89)	294.2 (0.65)		
HC mg/Nm³ (g/hp-h)	40.9 (0.09)	40.9 (0.09)	50.3 (0.11)	65.9 (0.15)		
PM mg/Nm³ (g/hp-h)	64.4 (0.14)	64.4 (0.14)	50.9 (0.11)	19.4 (0.04)		

Extrait de la fiche technique d'un GE 3516B 2000 ekW du DC6

Exhaust System						
Exhaust stack gas temperature – °C (°F)	535.3 (995.5)	535.3 (995.5)	473.5 (884.3)	451.0 (843.8)		
Exhaust gas flow rate – m³/min (cfm)	490.2 (17309.3)	490.2 (17309.3)	444.0 (15677.8)	410.4 (14491.8)		
Exhaust system backpressure (maximum allowable) – kPa (in. water)	6.7 (27.0)	6.7 (27.0)	6.7 (27.0)	6.7 (27.0)		
Heat Rejection						
Heat rejection to jacket water – kW (Btu/min)	724 (41173)	724 (41173)	617 (35088)	563 (32018)		
Heat rejection to exhaust (total) – kW (Btu/min)	2301 (130856)	2301 (130856)	1984 (112626)	1726 (98158)		
Heat rejection to aftercooler – kW (Btu/min)	549 (31221)	549 (31221)	560 (31846)	474 (26957)		
Heat rejection to atmosphere from engine – kW (Btu/min)	167 (9497)	167 (9497)	141 (8018)	131 (7450)		
Heat rejection from alternator – kW (Btu/min)	94 (5362)	94 (5362)	84 (4770)	72 (4092)		
Emissions (Nominal)						
NOx mg/Nm³ (g/hp-h)	1813.3 (3.97)	1813.3 (3.97)	1742.2 (3.77)	1488.4 (3.28)		
CO mg/Nm³ (g/hp-h)	462.8 (1.01)	462.8 (1.01)	222.2 (0.48)	261.4 (0.58)		
HC mg/Nm³ (g/hp-h)	48.7 (0.11)	48.7 (0.11)	60.9 (0.13)	65.4 (0.14)		
PM mg/Nm³ (g/hp-h)	42.3 (0.09)	42.3 (0.09)	35.5 (0.08)	29.5 (0.07)		