

Proposed Changes to the CHPQA X and Y Factors

Current and proposed X and Y values for the CHPQA Standard - Fossil Fuels

Size Range	Current Standard		Proposed Standard	
	X	Y	X	Y
Natural gas (incl. Reciprocating Engines)				
≤1 MWe	249	115	249	113
>1 to ≤10 MWe	195	115	194	113
>10 to ≤25 MWe	191	115	189	113
>25 to ≤50 MWe	186	115	186	113
>50 to ≤100 MWe	179	115	179	113
>100 to ≤200 MWe	176	115	176	113
>200 to ≤500MWe	173	115	173	113
>500 MWe	172	115	172	113
Oil				
≤1 MWe	249	115	249	115
>1 to ≤25 MWe	191	115	191	115
>25 MWe	176	115	176	115
Coal				
≤1 MWe	249	115	249	115
>1 to ≤25 MWe	191	115	191	115
>25 MWe	176	115	176	115

Current and proposed X and Y values for the CHPQA Standard - Alternative Fuels

Size Range	Current Standard		Proposed Standard	
	X	Y	X	Y
Category A (e.g. AD gas, sewage gas, landfill gas)				
≤1 MWe	238	120	238	120
>1 to ≤25MWe	225	120	225	120
>25 MWe	193	120	182	120
Category B (e.g. synthesis gas)				
≤1 MWe	275	120	275	120
>1 to ≤25 MWe	251	120	218	120
>25 MWe	193	120	191	120
Category C e.g. Fatty Acid Methyl Ester, Pyrolysis oil etc.)				
≤1 MWe	245	120	226	120
>1 to ≤25MWe	191	120	191	120
>25 MWe	176	120	171	120
Category D (e.g. Tallow, Used Cooking Oil)				
≤1 MWe	245	120	226	120
>1 to ≤25MWe	226	120	226	120
>25 MWe	176	120	171	120
Category E (e.g. Municipal waste, sewage sludge, paper sludge etc.)				
≤ 1MWe	370	120	370	120
>1 to ≤10 MWe	370	120	370	120
>10 to ≤25 MWe	370	120	364	120
>25 MWe	220	120	220	120
Category F (e.g. Logs, Energy crops, Agricultural residues etc.)				
≤1 MWe	348	130	346	120
>1 to ≤10 MWe	348	130	339	120
>10 to ≤25 MWe	348	130	303	120
>25 to ≤100 MWe	220	120	201	120
>100 MWe	220	120	181	120
Category G (e.g. Contaminated waste wood)				
≤1 MWe	352	120	346	120
>1 to ≤10 MWe	338	120	331	120
>10 to ≤25 MWe	338	120	303	120
>25 to ≤100 MWe	220	120	201	120
>100 MWe	220	120	181	120
Category H (e.g. Wood pellets, straw, clean waste wood etc.)				
≤1 MWe	329	120	329	120
>1 to ≤10 MWe	293	120	257	120
>10 to ≤25 MWe	286	120	250	120
>25 to ≤100 MWe	220	120	196	120
>100 MWe	220	120	181	120
Category I: By-product gases (e.g. blast furnace gas, coke oven gas, refinery fuel gas, hydrogen, ethane, propane etc.)				
≤1 MWe	294	120	294	120
>1 to ≤25MWe	221	120	221	120
>25 MWe	193	120	193	120
Category J: Waste gases (e.g.CO, VOCs) and Waste heat (e.g. from high temperature processes or exothermic chemical reactions).				
≤1 MWe	329	120	329	120
>1 to ≤25 MWe	299	120	299	120
>25MWe	193	120	193	120
Category K: (liquid waste-non-renewable)				
≤1 MWe	275	120	275	120
>1 to ≤25 MWe	260	120	260	120
>25 MWe	176	120	171	120