Main features of NE3W (Nexus of Energy Efficiency, Environment and Water)

Recover heat losses through exhaust gases and convert it into electricity.

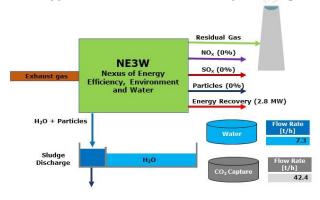
Condensation of vapor content of exhaust gases and convert the vapor within the exhaust gases into clean water.

Utilization of the concept of cryogenic adsorption and complete removal of local pollutants (NO_x and SO_x) with the help of low temperature adsorption and convert them into byproducts.

Capture major part of the CO_2 and cleaning the exhaust gases to enable capturing of pure CO_2 through physical adsorption.

Industries: Cement, steel, ceramic, glass and fossil power plants

Application of NE3W in a cement plant using natural gas; Capacity: 1,500 tons per day



	BEFORE NE3W	AFTER NE3W
Flue gas source	Exhaust gas	Residual gas
Temp [°C]	350	40
Flow Rate [t/h]	146	82
CO ₂	44.7%	22.9%
Vapour	5.2%	0.1%
SO _x	80 ppm	0
NO _x	308 ppm	0
02	3.3%	5.6%
N ₂	41.9%	71.5%
Dust	7,1 t/h	0