

Selected references in Carbon Capture



CCS References, Post-combustion Alfa Laval is largest player by far

Year	Orders	Country
2008	5 Pilot Plants	US, Sweden Canada
2009	7 Pilot Plants	Australia, China, Norway, Scotland, Austria, Japan
2010	4 Pilot Plants	Spain, UK, France, Germany
2010	(1) 120 MW demo plant	Canada
2012	(1) 250 MW demo plant	Netherland (delayed)

CCS References, Pre-combustion (IGCC)

Owner	Location	Country
Confidential (2008)	600 MW, Mid West	USA
Confidential (2010)	600 MW, South	USA

Position	Total number of units sold	Exchanger type(s)
Lean / Rich Interchanger	4	Packinox (fully welded)
Trim Cooler/Grey Water Treatment	2	Gasketed PHE
Closed Loop Coolers	2	Gasketed PHE
Pump Around Coolers	6	Gasketed PHE

Post-combustion 2008

Owner	Location	Country	Status
EPRI/ We Energy	Pleasant Prairie	US	Shut down
AEP	Mountaineer, WV	US	Shut down
EON	Karlshamn	Sweden	Shut down
Sask Power		Canada	In operation
	S.Charleston, WV	US	Shut down
University of Texas	Austin, Texas	US	In operation

Owner	Location	Country	Status
International Power, Hazelwood	Victoria	Australia	In operation
CSIRO	Queensland	Australia	In operation
Shidongkou Power Plant	Shanghai	China	In operation
Doosan Babcock	Renfrew	Scotland	In operation
Austria Energy&Environment	Dürnrohr	Austria	In operation
Kansai Electric	Kansai region	Japan	In operation
Statoil	Mongstad	Norway	In operation

Owner	Location	Country	Status
SASK Power	Saskatchewan	Canada	Under construction
University of Sevilla	University of Sevilla	Spain	In operation
Scottish and Southern Energy	Ferrybridge	UK	In operation
EDF	Le Havre	France	In operation
E.ON	Wilhelmshaven	Germany	In operation

Owner	Location	Country	Status
ENDESA	Compostilla	Spain	In operation
Sigma Power	Mikawa	Japan	In operation
Aioi		Japan	In operation
Akitsu		Japan	In operation

Owner	Location	Country	Status
KEPCO	Boryung	Korea	In operation

Post-combustion, per position

Position	Total number of units sold	Exchanger type(s)
Lean / rich interchanger	30	Gasketed PHE
	4	AlfaNova
	2	Compabloc (fully welded)
Stripper Tower Reboiler	8	Compabloc (fully welded)
	1	AlfaVap (semi welded)
	4	Gasketed PHE
	1	Spiral
Overhead Stripper Condenser	8	Gasketed PHE
	1	AlfaNova
	3	Spiral
Others (Coolers mostly)	48	Gasketed PHE
	2	Semi-welded PHE
	3	Compabloc
	1	Spiral
	7	AlfaNova
	5	Air coolers
Flue Gas Conditioning	-	Ziepack

