

FCCUs

Cost Analysis for SCR – 2 ppmv

	Fac ID	Emission (tpd)	NOx (ppmv)	% Control	Emission Reduction (tpd)	PWV (\$M)	CE (\$/ton)
for reference	1	0.02	<2	95%	-	41	(10,181)
Approach 1	5	0.16	15	87%	0.14	33	< 25,259 *
	6	0.20	6	64%	0.13	57	< 49,408*
	7	0.14	13	84%	0.12	27	25,455
Approach 2	4	0.22	21 - 23	91%	0.20	16	8,961
	9	0.34	34 - 52	95%	0.32	19	6,537
Summary for Ref 4, 9, 5, 6, and 7					0.91	152	< 18,422 *

Note: * Because of the inclusion of SCR costs that already have been installed.

Cost Analysis for LoTOx – 2 ppmv

Fac ID	Emission (tpd)	NOx (ppmv)	% Control	Emission Reduction (tpd)	PWV (\$M)	CE (\$/ton)
4	0.22	21 - 23	91%	0.20	19	10,767
7	0.14	13	84%	0.12	16	15,199
9	0.34	34 - 52	95%	0.32	32	10,631
5	0.16	15	87%	0.14	24	18,590
6	0.20	6	64%	0.13	34	29,502
Summary for Ref 4, 7, 9, 5 and 6				0.91	125	15,124

Incremental Cost Analysis

	PWV (\$ million)	Emission Reduction (tpd)
SCRs for 85% Control	139	0.48
SCR for 2 ppmv	152	0.91
LoTOx for 2 ppmv	125	0.91
Incremental Cost Effectiveness SCR - SCR	$(13/0.43/25/365) = 3,444 \text{ \$/ton}$	
Incremental Cost Effectiveness SCR - LoTOx	$(-14/0.43/25/365) = -3,521 \text{ \$/ton}$	