

Annual Report Of Registry Operations For 2023
 Emissions Trading Regulation, Section 15 (Alberta Regulation 33 /2006)
 Environmental Protection and Enhancement Act (EPEA)

Table 1: Annual Report of Registry Operations in Calendar Year 2023

In respect of the preceding year: (a) the number of emission credits issued;	5,663 NO _x credits and 10,958 of SO ₂ credits. See Appendix A's Table A1 for serial numbers.
(b) the number of emission credits that have been used for compliance purposes, retired, cancelled or otherwise extinguished;	678 NO _x and 0 SO ₂ credits were retired to 2022 retirement accounts. See Appendix C's Attachment 1 for serial numbers.
(c) the number of emission credits discounted and what that discount represents;	The total number of active credits in the Registry that are subject to discount at of the end of 2023 (January 1, 2024) included all credits with a vintage of 2021 or earlier and that number is 88,899 NO _x credits and 46,024 SO ₂ credits. These credits are discounted by 10%. The 10% discount represents 8,889 tonnes of NO _x and 4,602 tonnes of SO ₂ .
(d) the number of transactions recorded by the registry;	There were no inter-firm transactions in 2023.
(e) the aggregate balance of emission credits recorded by the registry;	95,277 NO _x credits and 55,809 SO ₂ credits (balance as of January 1, 2023).
(f) the aggregate mass balance of emission credits after discounting;	On January 1, 2023, 86,387 tonnes of NO _x and 51,206 tonnes of SO ₂ .

Approved June 28, 2024.

Robert Hamaliuk
 Executive Director, Air and Climate Policy
 Emissions Trading Regulation's Section 1(1)(n) Director
 Alberta Environment and Protected Areas

Appendix A: Credits Issued in 2023 and Their Serial Numbers

Table A1: Credits Serial Numbers Issued In 2023

As issued in Emissions Trading Registry February 17, 2023

EPE	Company	Facility	Unit	2019 NOx	2019 SO ₂	2020 NOx	2020 SO ₂	2021 NOx	2021 SO ₂	Base-line	Serial Number Start	Serial Number End	Total
123	Alberta Power	Sheerness	Unit 1	673							n2019-001905	n2019-002577	673
123	Alberta Power	Sheerness	Unit 1		74						s2019-001371	s2019-001444	74
123	Alberta Power	Sheerness	Unit 1			337					n2020-000001	n2020-000337	337
123	Alberta Power	Sheerness	Unit 1				2047				s2020-000001	s2020-002047	2047
123	Alberta Power	Sheerness	Unit 2	672							n2019-002578	n2019-003249	672
123	Alberta Power	Sheerness	Unit 2			327					n2020-000338	n2020-000664	327
123	Alberta Power	Sheerness	Unit 2				2292				s2020-002048	s2020-004339	2292
1512	Alberta Power	Battle River	Unit 5	292							n2019-003250	n2019-003541	292
1512	Alberta Power	Battle River	Unit 5		1099						s2019-001445	s2019-002543	1099
1512	Alberta Power	Battle River	Unit 5			1059					n2020-000665	n2020-001723	1059
1512	Alberta Power	Battle River	Unit 5				4150				s2020-004340	s2020-008489	4150
69209	Heartland	Rainbow Lake	Unit 5	56							n2019-003542	n2019-003597	56
69209	Heartland	Rainbow Lake	Unit 5			28					n2020-001724	n2020-001751	28
73899	Heartland	Muskeg	Unit 1	90							n2019-003598w	n2019-003687w	90
73899	Heartland	Muskeg	Unit 1			103					n2020-001752w	n2020-001854w	103
73899	Heartland	Muskeg	Unit 2	83							n2019-003688w	n2019-003770w	83
73899	Heartland	Muskeg	Unit 2			85					n2020-001855w	n2020-001939w	85
136858	CNOOC	Balzac	Unit 1	16							n2019-003771	n2019-003786	16
136858	CNOOC	Balzac	Unit 1			43					n2020-001940	n2020-001982	43
773	Capital Power	Genesee	Unit 1 (&2)			934					n2020-001983	n2020-002916	934
773	Capital Power	Genesee	Unit 1 (&2)				587				s2020-008490	s2020-009076	587
773	Capital Power	Genesee	Unit 3			202					n2020-002917	n2020-003118	202
773	Capital Power	Genesee	Unit 3				324				s2020-009077	s2020-009400	324
773	Capital Power	Genesee	Unit 3					194			n2021-000001	n2021-000194	194
773	Capital Power	Genesee	Unit 3						385		s2021-000001	s2021-000385	385
262757	Enmax	Shepard	Unit 1			150					n2020-003119	n2020-003268	150
262757	Enmax	Shepard	Unit 1					105			n2021-000195	n2021-000299	105
155746	TC Energy	Mackay River	Unit 1			76					n2020-003269w	n2020-003344w	76
155746	TC Energy	Mackay River	Unit 1					120			n2021-0003000w	n2021-000419w	120
136385	Enmax	Cavalier	Unit 1			4					n2020-003345	n2020-003348	4
136385	Enmax	Cavalier	Unit 1					12			n2021-000420	n2021-000431	12
138365	Enmax	Calgary Energy Centre	Unit 1			2					n2020-003349w	n2020-003350w	2
9814	Milner	Milner	Unit 2							0.2			
			Total NOx Credits Issued	5,663	1,882	3,350		431					
			Total SO2 Credits Issued	10,958		1,173	9,400		385				

Appendix B: Registry Errata

Table B.1: Credits Created in Error. All errors from 2006 to 2024

Emissions Trading Registry: ERRATA for credits created in error.

Emissions Trading Regulation (Alberta Regulation 33/2006)

As of June 11, 2019

No Change As of June 17, 2024

Start Serial Number	End Serial Number	Total	EPEA	Erroneously created by Alberta Environment to credit of this unit.	Year the error occurred.	Erroneously created credits retired to this account: "Alberta Environment – Retire" for year:
N2010-006131	N2010-006279	-149	9830	Sundance 3	2013	2013
N2006-000108	N2006-000112	-5	1512	Battle River 3	2010	2010
N2007-000047	N2007-000084	-38	1512	Battle River 3	2010	2010
N2008-000407	N2008-000526	-120	138365	Calgary Energy Centre	2010	2010
S2006-000001	S2006-000002	-2	1512	Battle 3	2010	2010
S2007-000001	S2007-000011	-11	1512	Battle 3	2010	2010
S2015-000001	S2015-000963	-963	773	Genesee 2	2017	2017
NS015-004410	N2015-004506	-97	9830	Sundance 4	2017	2017
S2015-003257	S2015-003407	-151	773	Genesee 3	2017	2017
N2015-007904w	N2015-007941w	-38	73899	Muskeg 2	2018	2018

Table B.2: Credits Retired For Correct Unit's Obligation But Wrong Compliance Year - All errors from 2006 to 2024

Emissions Trading Registry: ERRATA for credits retired for compliance purposes.

Emissions Trading Regulation (Alberta Regulation 33/2006)

As of 2024 June 17

Start of Credit Series	End of Credit Series	Number of Credits	Incorrect Retirement Year In Registry	Correct Retirement Year	In This Unit's Retirement Account
N2012-004109	N2012-004289	181	2013	2014	ATCO - 001512 Battle River - 3
N2013-002919	N2013-002956	38	2013	2014	ATCO - 001512 Battle River - 3
S2006-000003	S2006-000181	179	2007	2014	ATCO - 001512 Battle River - 3
S2006-000363	S2006-000999	637	2007	2014	ATCO - 001512 Battle River - 3
S2006-001000	S2006-001349	350	2007	2014	ATCO - 001512 Battle River - 3
S2007-000303	S2007-000999	697	2013	2014	ATCO - 001512 Battle River - 3
S2007-001000	S2007-001999	1000	2013	2014	ATCO - 001512 Battle River - 3
S2007-002000	S2007-002156	157	2013	2014	ATCO - 001512 Battle River - 3
S2008-002465	S2008-002704	240	2013	2014	ATCO - 001512 Battle River - 3
S2012-001582	S2012-002001	420	2013	2014	ATCO - 001512 Battle River - 3
S2010-000001	S2010-000027	27	2016	2017	ATCO - 001512 Battle River - 4
N2018-000684	N2018-000699	16	2021	2022	TransAlta – 009830 Sundance - 4

Start of Credit Series	End of Credit Series	Number of Credits	Retirement Year	Nominally Retired To Credit of This Unit	Correct Unit
s2006-005119	s2006-5129	11	2018	ATCO - 001512 Battle River - 3	ATCO - 001512 Battle River - 4

Appendix C: Provisional Compliance Report Issued In 2023



Air And Climate Policy Branch
 12th Floor
 Baker Centre
 10025 106 Street NW
 T5J 1G4 Canada
www.alberta.ca

June 28, 2023

**Re: Provisional Compliance Report For Calendar Year 2022
 Emissions Trading Regulation, Section 55 (Alberta Regulation 33 /2006)**

Table 1: Section 55 Reporting – Summary Compiled by Registry Operator for 2022

This provisional report indicates EPEA approval holders retired credits towards the requirements of their approval in regard of annual NO_x and SO₂ limits.

EPEA Approval	1512		1512		9820	
Facility	Battle River		Battle River		Sundance	
EPEA Approval Holder	ATCO		ATCO		TransAlta	
Unit	4		5		4	
Generation (MWh)	293877		1,116,833		19,132	
Substance	SO2	NOx	SO2	NOx	SO2	NOx
Emission Limit (kg/MWh)	0.65	0.47	0.65	0.47	0.65	0.47
Emissions (kilograms)	0	157,380	0	1,187,431	0	22,890
Actual Intensity (kg/MWh)	0	0.5355	0	1.0220	0	1.1964
Credits Needed (tonnes)	0	19.3	0	641.4	0	13.9
Credits Retired Against 2022 Compliance Obligation (credits)	0	20	0	642	0	16
Mass Value of Retired Credits if Discounting Applies (tonnes)	0	20	0	642	0	14.4

Approved June 28, 2023.

Robert Hamaliuk
 Executive Director, Air and Climate Policy Branch
 Emissions Trading Regulation’s Section 1(1)(n) Director
 Alberta Environment and Protected Areas

Attachment 1: Serial numbers retired.
 Attachment 2: Extract from regulation.

Attachment 1: Serial Numbers Retired

Table 1A: Heartland

Transaction ID	Data Received	Logged By	Transaction Part	Of this number of parts	Substance	Type	Requested By	From Account	From Account Type	To Account	To Account Type	First Credit	Last Credit	Total
2023-RN001	2023-03-27	Dobson	1	3	nox	Discountable	Heartland	1512 unit 5	Holding	BR 1512 Unit 4	Holding	n2020-000665	n2020-000684	20
2023-RN001	2023-03-27	Dobson	2	3	nox	Discountable	Heartland	1512 unit 4	Holding	BR 1512 Unit 4	Retiring 2022	n2020-000665	n2020-000684	20
2023-RN001	2023-03-27	Dobson	3	3	nox	Discountable	Heartland	1512 unit 5	Holding	BR 1512 Unit 5	Retiring 2022	n2020-000685	n2020-001326	642

Table 1B: TransAlta

Transaction ID	Data Received	Logged By	Transaction Part	Of this number of parts	Substance	From Account	From Account Type	To Account	To Account Type	Registry Error or Note	First Credit	Last Credit	Total
2022-RB0001	20220429	Dobson	5	6	NOx	9830-4	Holding	9830-4	Retire2021	Retired to RETIRE2021. Public ERRATA sheet credits this retirement to RETIRE2022 as TransAlta requested.	n2018-000684	n2018-000699	16

Note: Tables 1A and 1B are extracts from the tracking ledger for transactions. The comment in red text in Table 1B refers to the retirement of 16 of TransAlta's credits to a 2021 retirement account rather than a 2022 retirement account for Unit 9830-4. The registry software does not allow credits to be moved once retired. An ERRATA document tracks these errors on the Registry website and this compliance report notes the use of the credits against Unit 9830-4's 2022 retirement obligation.

Attachment 2: Excerpts From Regulation

How emission credits are used for compliance purposes

45 An emission credit may be used by a unit operator for compliance purposes in respect of a generating unit if the unit operator

- (a) has authority under its approval to use emission credits for compliance purposes, and
- (b) provides to the registry operator by April 30 of the year following the year in which the emission credits are used
 - (i) confirmation of their use, and
 - (ii) the serial number of each emission credit used.

Annual Reports

55(1) On or before March 31 of each year, in respect of the preceding year, a unit operator who has an emissions trading account must submit to the registry operator a report showing

- (a) the annualized air emissions data for NO_x and, if applicable, for SO₂ for each of the unit operator's generating units, and
- (b) the annual MWh output for each of the unit operator's generating units.

(2) On or before May 31 of each year, a unit operator who has used emission credits for compliance purposes in respect of the generating unit for the previous year must submit to the registry operator a report

- (a) containing a notification from the registry operator that the emission credits have been retired, and
- (b) that includes the following calculation for NO_x and, if applicable, for SO₂ indicating the number of NO_x and SO₂ emission credits retired for compliance purposes for the previous year:

$$\frac{A - (B \times C)}{1000}$$

Where

- A is the actual emissions in kilograms;
- B is the annual MWh output for the generating unit for the year;
- C is the current emissions standards.

Appendix D: Requirements for the Annual Report of Registry Operations

Excerpt from Emissions Trading Regulation (AR 33 / 2006)

Annual report of registry operations

15 The registry operator must, on or before June 30 of each year, or any other date specified by the Minister, prepare and publish a report containing at least the following information in respect of the preceding year:

- (a) the number of emission credits issued;
- (b) the number of emission credits that have been used for compliance purposes, retired, cancelled or otherwise extinguished;
- (c) the number of emission credits discounted and what that discount represents;
- (d) the number of transactions recorded by the registry;
- (e) the aggregate balance of emission credits recorded in the registry.