Preface

This publication is produced by the Minerals Division, Minerals and Metals Sector, Natural Resources Canada.

Requests for statistical information should be addressed to Frederica Temchuk at tel.: (613) 992-2007, fax: (613) 943-2079, or e-mail: frjohnso@nrcan.gc.ca. Requests for non-statistical information should be addressed to Frank Mourits at tel.: (613) 996-7857, fax: (613) 943-2079, or e-mail: fmourits@nrcan.gc.ca.

Additional copies of this publication are available from:

Publications Distribution Office
Minerals and Metals Sector
Natural Resources Canada
580 Booth Street
Ottawa, Ontario
K1A OE4

Telephone: (613) 943-0555
Facsimile: (613) 952-7501
E-mail: gkingsle@nrcan.gc.ca

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Highlights

The Canadian coal industry enjoyed another strong year in 1997 with record production and exports. Nearly half of Canada's production was exported.

PRODUCTION

In 1997, Canada produced a record 78.7 million tonnes (Mt) of coal, up 3% from 1996. Of this amount, 41.3 Mt (52%) was bituminous coal, mainly of metallurgical grades; 25.8 Mt (33%) was sub-bituminous coal used exclusively for domestic electricity generation; and 11.7 Mt (15%) was lignite, also used for domestic power generation. About 61% (47.9 Mt) of the 1997 production was thermal coal; the rest was metallurgical.

Nearly 96% of the coal was produced in the three westernmost provinces. In 1997, Alberta produced 36.3 Mt of sub-bituminous and bituminous coal. British Columbia was next with 27.9 Mt of bituminous coal. Saskatchewan followed with 11.7 Mt of lignite. The remainder of Canada's coal production (2.8 Mt of bituminous coal) came from the Atlantic provinces of Nova Scotia and New Brunswick. Close to 95% of Canada's coal production is by surface (open-pit and strip) mining methods.

The value of Canada's 1997 coal production remained unchanged at $1.9 billion.

EXPORTS

In 1997, Canada's coal exports increased 6% to a record 36.5 Mt valued at $2.6 billion. Canada is primarily a metallurgical coal exporter with this type of coal accounting for 82% of 1997 exports.

Canadian coal was sold to 21 countries, with the single largest market being Japan (18.7 Mt), followed by the Republic of Korea (6.1 Mt). The single largest coal-exporting province was British Columbia, which accounted for 76% of exports.

CONSUMPTION

The use of coal in Canada is affected by the vast size of the country and the fact that Canadian coal mines are located far from some of their largest consumers. As a result, domestic coal provided 76% (42.1 Mt) of all coal consumed in Canada in 1997, while imports supplied the remainder.

Canada's 1997 coal consumption was 55.1 Mt, up 3% from the previous year. As in past years, most of the coal consumed in Canada in 1997 (49.5 Mt, or 90%) was used to generate electricity. For the most part, this coal is used in the parts of the country where the coal is mined with power plants located near the mines. The steel industry used nearly 4.5 Mt (8% of consumption) and general industrial users accounted for 1.1 Mt (2% of consumption).

By rank, 0.5 Mt (nearly 1%) of the coal consumed was anthracite, 17.1 Mt (31%) was bituminous, 25.9 Mt (47%) was sub-bituminous, and nearly 11.6 Mt (21%) was lignite.

In 1997, Alberta, which is the country's largest coal consumer, used 26.3 Mt of bituminous and sub-bituminous coal to generate electricity. Saskatchewan consumed 9.8 Mt of lignite for the same purpose. Manitoba used a small amount of lignite sourced from neighbouring Saskatchewan, as well as some imported bituminous coal.

Ontario, with no coal mines of its own, used about 9 Mt of coal to generate electricity, up significantly from the previous year due to less-than-forecast nuclear generation. About one quarter of this coal came from western Canada, with the rest being imported from nearby U.S. mines. The steel industry consumed nearly 4.5 Mt of coal, almost all imported from the United States. Industrial users in Quebec consumed about 0.4 Mt of imported coal.

Nova Scotia consumed about 3 Mt, virtually all for the generation of electricity and most from mines in the province. New Brunswick's consumption, at 1.3 Mt, consisted mostly of imported coal from the United States and Colombia.

Although the major domestic use of coal is the generation of electricity, coal accounted for only an estimated 16% of Canadian electricity generation in 1996. This is because of the abundance of other energy resources in Canada, and the location of major population centres vis-à-vis Canadian energy resources. Data for 1996 show that, as usual, hydro accounted for most of the electricity produced in Canada (64%). Other fuel sources for electricity generation were nuclear (16%), natural gas (2%), oil (1%) and other sources (1%).

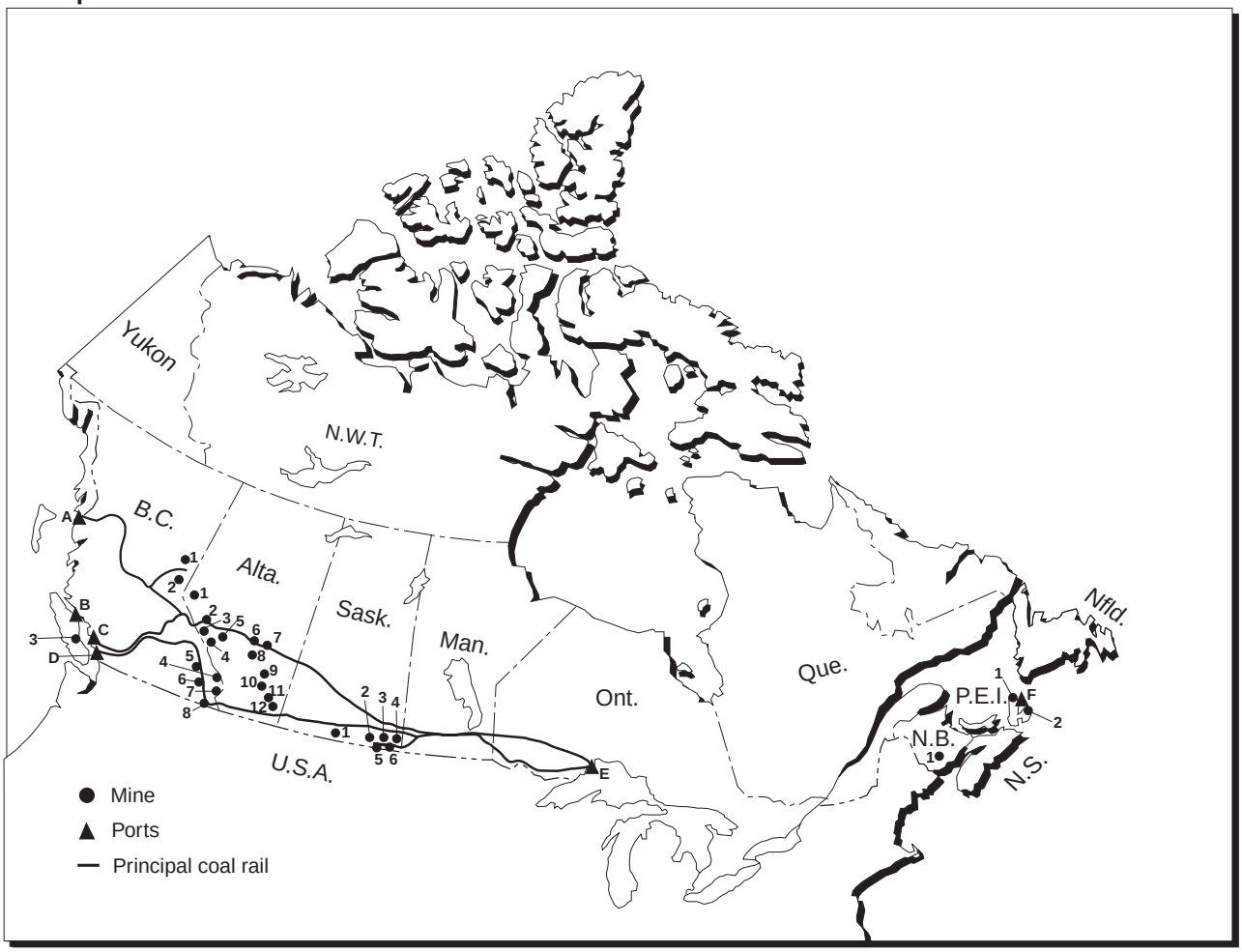
Primary energy demand in Canada for 1995 was dominated by petroleum, which accounted for approximately 36%. Next was natural gas (27%), followed by coal (11%), nuclear electricity and hydro-electricity (each at 10%), and others, primarily biomass (4%).

IMPORTS

In 1997, imports increased to 13.5 Mt. With the exception of less than 1 Mt from Colombia, all imports came from the United States.

The electric power industry imported about 8 Mt. Ontario Hydro, the single largest importer of coal, bought 6.9 Mt of U.S. coal in 1997, up 2.4 Mt from the previous year. New Brunswick Power Corporation bought about 1 Mt, mostly from Colombia. Imports by the steel industry in Ontario were 4.5 Mt. As well, industrial consumers, located mostly in Quebec and Ontario, imported about 1 Mt of bituminous and anthracite coal.

Figure 1
Principal Canadian Coal Mines and Ports



● MINES

British Columbia
1. Bullmoose
2. Quintette
3. Quinsam
4. Fording River
5. Greenhills
6. Elkview
7. Line Creek
8. Coal Mountain

Alberta
1. Smoky River
2. Obed
3. Gregg River
4. Luscar
5. Coal Valley
6. Highvale
7. Whitewood
8. Genesee
9. Paintearth
10. Vesta
11. Sheerness
12. Montgomery

Saskatchewan
1. Poplar River
2. Utility
3. Boundary Dam
4. Costello
5. Shand
6. Bienfait

New Brunswick
1. Minto

Nova Scotia
1. Prince
2. Phalen

▲ PORTS

British Columbia
A. Ridley Island
B. Texada Island Facility
C. Neptune
D. Roberts Bank

Ontario
E. Thunder Bay

Nova Scotia
F. International Pier

SUMMARY. COAL SUPPLY AND DEMAND, 1985-97

Year	Production	Imports	Total Supply	Domestic Consumption	Exports	Total Demand	Stock Change and Adjustment
				(000 tonnes)			
1985	60 738	14 867	75 605	48 656	27 378	76 034	(429)
1986	57 811	13 125	70 936	64 925	25 943	70 501	435
1987	61 207	14 719	75 926	50 144	26 740	76 884	(958)
1988	70 644	17 248	87 892	54 390	31 848	86 238	1 654
1989	70 512	14 660	85 172	53 881	32 744	86 625	(1 453)
1990	68 357	14 204	82 561	49 036	31 008	80 044	2 517
1991	71 129	12 415	83 544	50 282	34 112	84 394	(850)
1992	65 285	12 224	77 509	51 011	27 410	78 421	(912)
1993	69 061	8 451	77 512	48 979	28 312	77 291	221
1994	72 823	9 176	81 999	52 349	31 746	84 095	(2 096)
1995	74 980	9 665	84 646	52 771	33 994	86 765	(2 119)
1996	75 809	11 682	87 491	53 509	34 459	87 968	(477)
1997	78 687	13 480	92 167	55 098	36 510	91 608	560

Source: Statistics Canada, catalogue no. 45-002.
Note: Data may not add due to rounding.

TABLE 1. COAL SUPPLY, 1985-97

Year	Metallurgical			Thermal			Total Supply
	Production	Imports	Total Supply	Production	Imports	Total Supply	All Coals
	(000 tonnes)						
1985	24 256	6 360	30 616	36 482	8 507	44 989	75 605
1986	22 439	5 843	28 282	35 372	7 282	42 654	70 936
1987	22 602	5 818	28 420	38 605	8 901	47 506	75 926
1988	28 227	6 255	34 482	42 417	10 993	53 410	87 892
1989	28 123	5 796	33 919	42 389	8 864	51 253	85 172
1990	27 659	4 491	32 150	40 698	9 713	50 411	82 561
1991	29 073	4 747	33 820	42 056	7 668	49 724	83 544
1992	21 789	4 848	26 637	43 496	7 376	50 872	77 509
1993	25 779	4 684	30 463	43 282	3 767	47 049	77 512
1994	27 264	4 122	31 387	45 559	5 053	50 613	81 999
1995	29 055	4 130	33 186	45 925	5 535	51 460	84 646
1996	29 542	4 833	34 376	46 267	6 849	53 116	87 491
1997	30 796	4 303	35 099	47 891	9 176	57 067	92 166

Source: Statistics Canada, catalogue no. 45-002.
Note: Data may not add due to rounding.

TABLE 2. COAL DEMAND, 1985-97

Year	Metallurgical			Thermal			Total Demand
	Domestic Consumption	Exports	Total Demand	Domestic Consumption	Exports	Total Demand	All Coals
	(000 tonnes)						
1985	6 262	22 483	28 745	42 394	4 895	47 289	76 034
1986	6 134	21 460	27 594	38 424	4 483	42 907	70 501
1987	6 309	22 436	28 745	43 835	4 304	48 139	76 884
1988	6 263	27 629	33 892	48 127	4 219	52 346	86 238
1989	5 917	28 593	34 510	47 964	4 151	52 115	86 625
1990	4 996	26 859	31 855	44 040	4 149	48 189	80 044
1991	4 906	28 786	33 692	45 376	5 326	50 702	84 394
1992	4 885	22 364	27 249	46 126	5 046	51 172	78 421
1993	4 665	23 949	28 614	44 314	4 363	48 677	77 291
1994	4 779	26 997	31 776	47 570	4 750	52 320	84 095
1995	4 189	30 071	34 260	48 582	6 439	55 021	89 281
1996	4 446	28 733	33 179	49 063	5 727	54 790	87 968
1997	4 490	30 071	34 561	50 608	6 439	57 047	91 608

Source: Statistics Canada, catalogue no. 45-002.
Note: Data may not add due to rounding.

TABLE 3. VALUE AND VOLUME OF COAL SUPPLY BY PROVINCE,[1] 1985-97

Year	Nova Scotia Bituminous		New Brunswick Bituminous		Saskatchewan Lignite	
	(000 tonnes)	($ millions)	(000 tonnes)	($ millions)	(000 tonnes)	($ millions)
1985	2 800	168	560	32	9 672	108
1986	2 955	178	485	28	8 281	101
1987	2 925	179	533	33	10 020	92
1988	3 545	216	542	34	12 148	122
1989	3 512	199	520	34	10 816	100
1990	3 416	191	548	37	9 407	99
1991	4 134	242	498	34	8 981	94
1992	4 486	273	399	32	10 029	100
1993	3 691	232	389	34	10 045	95
1994	3 509	217	332	28	10 685	104
1995	2 483	162	263	24	10 740	116
1996	3 110	184	273	24	10 854	116
1997	2 633	154	173	18	11 653	122

	Alberta Bituminous		Alberta Sub-Bituminous		British Columbia Bituminous	
1985	7 841	311	16 871	137	22 994	1 090
1986	7 619	297	17 331	143	21 140	974
1987	7 202	239	18 537	150	21 990	948
1988	9 558	299	19 910	160	24 941	974
1989	9 906	309	20 918	156	24 840	944
1990	9 153	296	21 252	165	24 581	1 002
1991	10 311	355	22 242	178	24 963	986
1992	10 508	352	23 020	187	16 843	676
1993	10 658	348	23 671	197	20 607	849
1994	10 196	319	25 494	228	22 608	894
1995	11 523	334	25 622	232	24 350	967
1996	11 164	350	24 986	232	25 422	1 027
1997	10 561	277	25 783	239	27 885	1 111

	Canada All Coals		Imported Bituminous and Anthracite[2]		Total Supply All Coals	
1985	60 738	1 846	14 867	1 124	75 605	2 970
1986	57 811	1 721	13 125	999	70 936	2 720
1987	61 207	1 641	14 719	899	75 926	2 540
1988	70 644	1 805	17 248	974	87 892	2 779
1989	70 512	1 742	14 660	808	85 172	2 550
1990	68 357	1 790	14 204	616	82 561	2 406
1991	71 129	1 889	12 415	567	83 544	2 456
1992	65 285	1 620	12 224	557	77 509	2 177
1993	69 061	1 755	8 451	416	77 512	2 171
1994	72 823	1 790	9 176	642	81 999	2 432
1995	74 980	1 835	9 665	698	84 646	2 533
1996	75 809	1 933	11 682	786	87 491	2 719
1997	78 687	1 921	13 480	628	92 167	2 549

Source: Statistics Canada.
[1] F.o.b. mine. [2] Canadian dollars, U.S. port of exit.
Note: Data may not add due to rounding.

TABLE 4. COAL PRODUCTION BY CLASS, 1985-97

Year	Unit	Bituminous		Sub-Bituminous	Lignite	Total
		Metallurgical	Thermal			
1985	000 tonnes	24 256	9 939	16 871	9 672	60 738
	percent	39.9	16.4	27.8	15.9	100.0
1986	000 tonnes	22 439	9 760	17 331	8 281	57 811
	percent	38.8	16.9	30.0	14.3	100.0
1987	000 tonnes	22 602	10 048	18 537	10 020	61 207
	percent	36.9	16.4	30.3	16.4	100.0
1988	000 tonnes	28 227	10 359	19 910	12 148	70 644
	percent	40.0	14.7	28.2	17.2	100.0
1989	000 tonnes	28 123	10 655	20 918	10 816	70 512
	percent	39.9	15.1	29.7	15.3	100.0
1990	000 tonnes	27 659	10 039	21 252	9 407	68 357
	percent	40.5	14.7	31.1	13.8	100.0
1991	000 tonnes	29 073	10 833	22 242	8 981	71 129
	percent	40.9	15.2	31.3	12.6	100.0
1992	000 tonnes	21 789	10 447	23 020	10 029	65 285
	percent	33.4	16.0	35.3	15.4	100.0
1993	000 tonnes	25 779	9 566	23 671	10 045	69 061
	percent	37.3	13.9	34.3	14.5	100.0
1994	000 tonnes	27 264	9 380	25 494	10 685	72 823
	percent	37.4	12.9	35.0	14.7	100.0
1995	000 tonnes	29 055	9 564	25 622	10 740	74 980
	percent	38.8	12.8	34.2	14.3	100.0
1996	000 tonnes	29 542	10 427	24 986	10 854	75 809
	percent	39.0	13.8	33.0	14.3	100.0
1997	000 tonnes	30 932	10 320	25 783	11 653	78 687
	percent	39.3	13.1	32.8	14.8	100.0

Source: Statistics Canada.
Note: Data may not add due to rounding.

TABLE 5. COAL PRODUCTION BY PROVINCE, 1985-97

Year	Nova Scotia			New Brunswick	Alberta		
	Bituminous			Bituminous	Bituminous		
	Metallurgical	Thermal	Total	Thermal	Metallurgical	Thermal	Total
				(000 tonnes)			
1985	415	2 385	2 800	560	4 472	3 369	7 841
1986	505	2 450	2 955	485	4 594	3 025	7 619
1987	654	2 271	2 925	533	4 157	3 045	7 202
1988	662	2 883	3 545	542	5 765	3 793	9 558
1989	757	2 755	3 512	520	5 666	4 240	9 906
1990	514	2 902	3 416	548	5 454	3 699	9 153
1991	918	3 216	4 134	498	6 116	4 195	10 311
1992	962	3 524	4 486	399	6 395	4 113	10 508
1993	536	3 155	3 691	389	6 483	4 175	10 658
1994	582	2 927	3 509	332	5 796	4 400	10 196
1995	68	2 415	2 483	263	6 783	4 740	11 523
1996	134	2 976	3 110	273	6 518	4 647	11 164
1997	70	2 563	2 633	173	5 832	4 729	10 561

	British Columbia			Alberta	Saskatchewan	Canada
	Bituminous			Sub-Bituminous	Lignite	
	Metallurgical	Thermal	Total	Thermal	Thermal	Total
1985	19 369	3 625	22 994	16 871	9 672	60 738
1986	17 340	3 800	21 140	17 331	8 281	57 811
1987	17 791	4 199	21 990	18 537	10 020	61 207
1988	21 800	3 141	24 941	19 910	12 148	70 644
1989	21 700	3 140	24 840	20 918	10 816	70 512
1990	21 691	2 890	24 581	21 252	9 407	68 357
1991	22 039	2 924	24 963	22 242	8 981	71 129
1992	14 432	2 411	16 843	23 020	10 029	65 285
1993	18 760	1 847	20 607	23 671	10 045	69 061
1994	20 886	1 721	22 608	25 494	10 685	72 823
1995	22 204	2 146	24 350	25 622	10 740	74 980
1996	22 890	2 532	25 422	24 986	10 854	75 809
1997	25 030	2 855	27 885	25 783	11 653	78 687

Source: Statistics Canada, catalogue no. 45-002.
Note: Data may not add due to rounding.

TABLE 6. CANADIAN COAL EXPORTS BY DESTINATION, 1987-97

Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
						(000 tonnes)					
Japan	17 065	19 997	19 739	18 502	19 192	15 720	16 250	17 409	17 978	18 457	18 699
Korea, Republic of	3 949	4 546	5 164	5 153	6 355	4 507	6 013	5 797	6 100	5 584	6 054
United Kingdom	334	519	769	664	886	771	687	941	1 487	1 442	1 582
Brazil	1 233	1 727	1 653	1 206	1 307	1 139	857	1 530	1 213	1 325	1 391
Italy	43	25	51	159	284	229	317	758	1 223	1 244	1 261
Taiwan	565	1 215	1 107	1 059	764	522	397	824	1 264	1 049	1 070
United States	865	1 025	1 199	1 177	824	922	925	1 245	1 326	1 229	966
Germany	211	132	137	135	412	210	29	10	140	173	854
Chile	153	186	192	352	319	220	285	254	424	541	776
France	600	558	626	397	449	302	57	54	533	708	638
Turkey	53	96	–	51	157	52	–	218	257	503	597
Belgium	–	47	6	6	16	131	239	189	274	212	498
Netherlands	278	457	567	369	406	330	56	281	459	402	442
Mexico	–	55	–	–	101	417	454	417	517	264	406
Spain	–	–	–	–	169	379	446	497	337	375	405
Romania	–	–	–	–	–	–	–	–	–	154	305
Portugal	207	273	336	519	1 079	201	209	300	161	233	168
Pakistan	217	166	286	208	201	44	–	144	148	219	153
Egypt	–	87	–	–	–	46	90	229	45	172	139
Sweden	352	158	134	102	67	65	118	155	–	51	56
Denmark	302	463	619	479	830	1 100	284	309	–	–	50
Philippines	–	–	–	–	–	–	–	–	–	123	–
Finland	–	–	–	41	–	–	–	–	58	–	–
South Africa	–	–	–	–	–	–	–	49	50	–	–
Yugoslavia	–	–	–	–	–	–	–	91	–	–	–
Algeria	–	–	–	–	–	–	98	45	–	–	–
China	–	–	96	300	115	–	501	–	–	–	–
Iran	–	–	–	129	101	72	–	–	–	–	–
Dominican Republic	–	–	–	–	–	24	–	–	–	–	–
Iceland	–	–	–	–	21	7	–	–	–	–	–
Argentina	–	–	–	–	56	–	–	–	–	–	–
Australia	–	–	63	–	–	–	–	–	–	–	–
Greece	–	–	–	–	–	–	–	–	–	–	–
Hong Kong	313	–	–	–	–	–	–	–	–	–	–
India	–	–	–	–	–	–	–	–	–	–	–
Total	26 740	31 732	32 744	31 008	34 111	27 410	28 312	31 746	33 994	34 459	36 510

Source: Statistics Canada, catalogue no. 45-002.
– Nil.
Note: Data may not add due to rounding.

TABLE 7. EXPORTS OF CANADIAN COAL BY TYPE AND DESTINATION, 1997

Country	Metallurgical	Thermal	Total
		(000 tonnes)	
Japan	16 041	2 658	18 699
Korea, Republic of	4 061	1 994	6 054
United Kingdom	1 306	276	1 582
Brazil	1 207	184	1 391
Italy	1 261	–	1 261
Taiwan	1 070	–	1 070
United States	917	49	966
Germany	490	364	854
Chile	293	483	776
France	547	91	638
Turkey	597	–	597
Belgium	209	290	498
Netherlands	442	–	442
Mexico	406	–	406
Spain	405	–	405
Romania	305	–	305
Portugal	168	–	168
Pakistan	153	–	153
Egypt	139	–	139
Sweden	56	–	56
Denmark	–	50	50
Total	30 071	6 439	36 510

Source: Statistics Canada, catalogue no. 45-002.
– Nil.
Note: Data may not add due to rounding.

TABLE 8. COAL CONSUMPTION BY PROVINCE, 1985-97

Year	Newfoundland	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia	Canada
					(000 tonnes)					
1985	. .	2 275	530	638	18 121	430	8 479	18 112	71	48 656
1986	. .	2 329	469	642	15 972	297	6 976	17 721	152	64 925
1987	. .	2 294	526	692	18 941	646	7 894	19 077	74	50 144
1988	. .	2 315	678	748	20 165	972	8 861	20 538	113	54 390
1989	. .	2 143	705	753	19 496	515	8 744	21 410	115	53 881
1990	1	2 196	496	715	16 076	460	7 644	21 340	108	49 036
1991	19	2 315	426	753	16 375	343	7 738	22 486	125	50 282
1992	36	2 367	472	480	15 344	355	8 007	23 751	200	51 011
1993	21	2 441	506	525	12 124	292	8 678	24 194	198	48 979
1994	. .	2 701	1 208	611	10 492	301	8 666	28 207	158	52 349
1995	. .	2 613	1 304	735	11 695	234	9 777	26 209	204	52 771
1996	. .	2 899	1 371	737	12 060	517	9 919	25 807	199	53 509
1997	. .	3 051	1 327	395	13 546	243	10 018	26 317	201	55 098

Source: Statistics Canada, catalogue no. 45-002.
. . Not available or zero.
Note: Data may not add due to rounding.

TABLE 9. COAL CONSUMPTION BY MARKET, 1985-97

Year	Power Generation				Steel Industry	Other	Total Consumption
	Bituminous	Sub-Bituminous	Lignite	Total			
				(000 tonnes)			
1985	13 328	17 697	9 371	40 396	6 262	1 998	48 656
1986	11 064	17 288	8 042	36 394	6 134	2 030	64 925
1987	13 646	18 470	9 709	41 825	6 309	2 010	50 144
1988	14 640	19 849	11 489	45 978	6 263	2 149	54 390
1989	14 642	20 844	10 440	45 926	5 917	2 038	53 881
1990	12 192	20 862	9 088	42 141	4 996	1 899	49 036
1991	12 926	22 071	8 849	43 846	4 906	1 530	50 282
1992	12 463	23 156	8 951	44 570	4 885	1 556	51 011
1993	9 614	23 652	9 460	42 726	4 665	1 588	48 979
1994	9 355	27 154	9 415	45 924	4 779	1 646	52 349
1995	10 190	25 796	10 516	46 502	4 189	2 080	52 771
1996	10 534	25 413	10 959	46 906	4 446	2 157	53 509
1997	12 381	25 856	11 290	49 527	4 490	1 081	55 098

Source: Statistics Canada, catalogue no. 45-002.
Note: Data may add due to rounding.

TABLE 10. COAL CONSUMPTION BY ORIGIN, 1985-97

Year	Power Generation			Steel Industry		
	Canadian	Imported	Total	Canadian	Imported	Total
	(000 tonnes)					
1985	32 563	7 833	40 396	52	6 210	6 262
1986	30 035	6 359	36 394	243	5 891	6 134
1987	33 932	7 893	41 825	290	6 019	6 309
1988	37 451	8 527	45 978	16	6 247	6 263
1989	37 449	8 477	45 926	–	5 917	5 917
1990	35 770	6 371	42 141	–	4 996	4 996
1991	36 420	7 426	43 846	–	4 906	4 906
1992	38 172	6 398	44 570	–	4 885	4 885
1993	38 470	4 256	42 726	–	4 665	4 665
1994	42 018	3 906	45 924	227	4 552	4 779
1995	41 287	5 215	46 502	288	3 901	4 189
1996	41 260	5 646	46 906	101	4 345	4 446
1997	41 511	8 016	49 527	–	4 490	4 490

	Other			Total Consumption		
	Canadian	Imported	Total	Canadian	Imported	Total
1985	582	1 416	1 998	33 197	15 459	48 656
1986	655	1 375	2 030	30 933	33 992	64 925
1987	594	1 416	2 010	34 816	15 328	50 144
1988	672	1 477	2 149	38 139	16 251	54 390
1989	608	1 430	2 038	38 057	15 824	53 881
1990	551	1 348	1 899	36 321	12 715	49 036
1991	488	1 042	1 530	36 908	13 374	50 282
1992	602	954	1 556	38 774	12 237	51 011
1993	664	924	1 588	39 134	9 845	48 979
1994	540	1 106	1 646	42 785	9 564	52 349
1995	768	1 312	2 080	42 343	10 428	52 771
1996	770	1 387	2 157	42 131	11 378	53 509
1997	578	503	1 081	42 089	13 009	55 098

Source: Statistics Canada, catalogue no. 45-002.
– Nil.
Note: Data may not add due to rounding.

TABLE 11. COAL CONSUMED FOR POWER GENERATION, BY PROVINCE, 1985-97

Year	Nova Scotia	New Brunswick	Ontario	Manitoba	Saskat-chewan	Alberta	Total Canada
			(000 tonnes)				
1985	2 235	521	10 985	253	8 290	18 112	40 396
1986	2 135	469	9 172	111	6 786	17 719	36 392
1987	2 077	526	12 016	457	7 672	19 077	41 825
1988	2 266	678	13 079	780	8 637	20 538	45 978
1989	2 141	705	12 809	327	8 534	21 410	45 926
1990	2 184	496	10 362	298	7 462	21 340	42 142
1991	2 291	426	10 862	231	7 549	22 486	43 845
1992	2 352	472	9 938	233	7 824	23 751	44 570
1993	2 416	506	7 004	178	8 428	24 194	42 726
1994	2 672	1 208	5 171	164	8 502	28 207	45 924
1995	2 578	1 304	6 706	117	9 597	26 200	46 502
1996	2 864	1 370	6 983	176	9 719	25 794	46 906
1997	2 975	1 327	9 009	86	9 820	26 310	49 527

Source: Statistics Canada, catalogue no. 45-002.
Note: Data may not add due to rounding.

TABLE 12. PERCENTAGE OF ELECTRICAL ENERGY PRODUCTION BY PRINCIPAL FUEL TYPE, 1996

	Canada	Newfound-land	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskat-chewan	Alberta	British Columbia	Northwest Territories and Yukon
Hydro	60.9	97.7	–	10.7	17.3	96.5	25.9	99.0	21.9	3.5	88.5	52.5
Thermal												
Coal	15.2	–	–	73.4	33.2	–	10.0	0.7	72.5	81.2	–	–
Oil	1.1	2.3	100.0	14.3	13.1	0.2	0.1	–	0.3	0.2	1.3	36.9
Natural gas	2.9	–	–	–	–	–	2.3	–	4.1	12.7	7.8	10.6
Total thermal	19.3	2.3	100.0	87.7	46.3	0.2	12.4	0.7	76.9	94.1	9.1	47.5
Nuclear	19.1	–	–	–	33.0	3.3	61.4	–	–	–	–	–
Other	0.8	–	–	1.6	3.4	–	0.4	0.2	1.2	2.5	2.4	–
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total TWh	533.5	38.4	–	9.8	15.9	162.9	148.4	28.4	15.5	52.3	61.0	0.9

Sources: Natural Resources Canada; Utility Survey, Statistics Canada.
– Nil or less than 0.1 percent; TWh Terawatt-hours.
TWh = Watt hour x 10^{12}
Notes: The thermal production of coal, oil and natural gas is estimated. Data may not add due to rounding.

TABLE 13a. COAL CONSUMPTION BY MAJOR MARKET, 1997

	Newfound-land	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskat-chewan	Alberta	British Columbia	Canada
					(000 tonnes)					
POWER GENERATION										
Canadian coals										
Bituminous	–	2 975	265	–	671	–	–	454	–	4 365
Sub-bituminous	–	–	–	–	–	–	–	25 856	–	25 856
Lignite	–	–	–	–	1 452	18	9 820	–	–	11 290
Subtotal	–	2 975	265	–	2 123	18	9 820	26 310	–	41 511
Imported bituminous	–	–	1 062	–	6 886	68	–	–	–	8 016
Total thermal	–	2 975	1 327	–	9 009	86	9 820	26 310	–	49 527
STEEL INDUSTRY										
Canadian bituminous	–	–	–	–	–	–	–	–	–	–
Imported bituminous	–	–	–	–	4 490	–	–	–	–	4 490
Total steel	–	–	–	–	4 490	–	–	–	–	4 490
OTHER										
Canadian coals										
Bituminous	–	21	–	–	2	23	–	–	201	247
Sub-bituminous	–	–	–	–	–	–	–	–	–	–
Lignite	–	–	–	–	–	133	198	–	–	331
Subtotal	–	21	–	–	2	156	198	–	201	578
Imported coals										
Bituminous	–	6	–	–	–	–	–	–	–	6
Anthracite	–	49	–	395	45	1	–	7	–	497
Subtotal	–	55	–	395	45	1	–	7	–	503
Total	–	76	–	395	47	157	198	7	201	1 081
TOTAL CONSUMPTION										
Canadian coals	–	2 996	265	–	2 125	174	10 018	26 310	201	42 089
Imported coals	–	55	1 062	395	11 421	69	–	7	–	13 009
Grand total	–	3 051	1 327	395	13 546	243	10 018	26 317	201	55 098

Source: Statistics Canada, catalogue no. 45-005.
– Nil.
Note: Data may not add due to rounding.

TABLE 13b. COAL CONSUMPTION BY MAJOR MARKET, 1996

	Newfound-land	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskat-chewan	Alberta	British Columbia	Canada
					(000 tonnes)					
POWER GENERATION										
Canadian coals										
Bituminous	–	2 864	310	–	1 284	–	–	430	–	4 888
Sub-bituminous	–	–	–	–	49	–	–	25 364	–	25 413
Lignite	–	–	–	–	1 116	124	9 719	–	–	10 959
Subtotal	–	2 864	310	–	2 449	124	9 719	25 794	–	41 260
Imported bituminous	–	–	1 060	–	4 534	52	–	–	–	5 646
Total thermal	–	2 864	1 370	–	6 983	176	9 719	25 794	–	46 906
STEEL INDUSTRY										
Canadian bituminous	–	–	–	–	101	–	–	–	–	101
Imported bituminous	–	–	–	–	4 345	–	–	–	–	4 345
Total steel	–	–	–	–	4 446	–	–	–	–	4 446
OTHER										
Canadian coals										
Bituminous	–	14	1	–	8	26	–	8	199	256
Sub-bituminous	–	–	–	–	–	–	–	–	–	–
Lignite	–	–	–	–	–	314	200	–	–	514
Subtotal	–	14	1	–	8	340	200	8	199	770
Imported coals										
Bituminous	–	21	–	327	578	–	–	–	–	926
Anthracite	–	–	–	410	45	1	–	5	–	461
Subtotal	–	21	–	737	623	1	–	5	–	1 387
Total	–	35	1	737	631	341	200	13	199	2 157
TOTAL CONSUMPTION										
Canadian coals	–	2 878	311	–	2 558	464	9 919	25 802	199	42 131
Imported coals	–	21	1 060	737	9 502	53	–	5	–	11 378
Grand total	–	2 899	1 371	737	12 060	517	9 919	25 807	199	53 509

Source: Statistics Canada, catalogue no. 45-005.
– Nil.
Note: Data may not add due to rounding.

TABLE 14. DOMESTIC DEMAND FOR PRIMARY ENERGY BY TYPE, 1935-95

Year	Petroleum[1]	Natural Gas	Coal	Electricity		Others[3]	Total Peta-joules	Giga-joules Per Capita
				Hydro	Nuclear[2]			
				(percentages)				
1935	17.9	2.2	57.2	6.7	0.0	16.0	1 244	114.7
1940	20.1	2.7	57.5	6.5	0.0	13.2	1 681	147.7
1945	21.1	2.7	57.4	7.0	0.0	11.8	2 001	165.8
1950	32.6	3.1	49.2	7.2	0.0	7.9	2 546	185.7
1955	49.2	5.8	31.5	8.5	0.0	5.0	3 058	190.2
1960	54.4	13.2	16.9	10.8	0.0	4.7	3 350	187.5
1965	57.4	15.2	15.1	9.8	0.0	2.5	4 369	222.4
1970	54.1	18.0	11.6	9.1	0.2	7.0	6 106	285.3
1971	53.3	18.7	10.6	8.8	0.7	7.9	6 410	290.0
1972	53.5	20.2	9.7	9.1	1.1	6.3	6 770	302.8
1973	52.8	20.3	9.3	9.0	2.3	6.2	7 143	315.5
1974	52.5	20.5	9.1	9.6	2.2	6.0	7 383	321.4
1975	52.8	21.4	9.2	9.8	1.9	5.0	7 179	308.0
1976	52.0	21.1	9.6	9.9	2.6	4.9	7 441	315.3
1977	50.8	21.2	10.1	9.5	3.7	4.7	7 734	324.0
1978	50.1	20.9	10.0	9.7	4.3	5.1	7 977	331.0
1979	49.9	20.8	10.4	9.2	4.6	5.1	8 346	342.7
1980	48.5	20.7	11.1	9.5	4.9	5.3	8 442	342.0
1981	46.8	20.8	11.7	10.1	5.3	5.3	8 204	328.1
1982	44.0	21.8	12.9	10.2	5.3	5.7	7 873	311.4
1983	41.1	22.2	13.5	10.3	6.8	6.1	7 897	309.4
1984	39.2	22.9	14.4	10.7	7.0	5.8	8 200	318.2
1985	37.9	23.7	13.5	11.2	7.9	5.8	8 402	323.0
1986	37.9	22.5	12.5	11.7	9.2	6.2	8 428	320.5
1987	38.0	21.9	13.0	11.3	9.8	6.1	8 639	324.2
1988	37.5	23.0	13.2	10.8	9.8	5.6	9 188	339.8
1989	38.0	24.0	12.8	10.6	9.2	5.4	9 456	343.8
1990	38.1	24.0	11.9	11.7	8.8	5.4	9 046	324.2
1991	36.0	24.3	12.4	11.4	10.2	5.6	9 037	320.1
1992	36.2	25.2	12.5	11.3	9.5	5.4	9 225	321.8
1993	36.6	25.5	11.0	11.0	10.7	5.2	9 578	329.6
1994	36.3	25.4	10.8	10.2	11.8	5.4	9 957	339.0
1995	36.4	25.9	11.0	10.4	10.5	5.8	10 203	343.0

Source: *Energy Statistics Handbook,* prepared by Natural Resources Canada and Statistics Canada.
1 Includes liquefied petroleum gases. **2** In conformity with the International Energy Agency, a conversion factor of 11.564 MJ/KWh is used to calculate nuclear-based electricity. **3** Waste wood and spent pulping liquor and other unspecified fuels.

TABLE 15. SUMMARY OF CANADA'S COAL RESOURCES OF IMMEDIATE INTEREST BY PROVINCE[1]

Province	General Rank Class	Assurance [2]		
		Measured	Indicated	Inferred
		(million tonnes)		
British Columbia	lvb-an	100	500	1 010
	mvb-lvb	1 015	2 285	5 970
	hvb-mvb	1 435	1 445	4 310
	sub-hvb	45	160	430
	lig-sub	450	320	320
Alberta	lvb-an	240	120	455
	mvb-lvb	1 000	560	1 955
	hvb-mvb	500	265	945
	sub-hvb	2 185	1 345	3 890
	lig-sub	11 860	4 960	13 175
Saskatchewan	lig-sub	1 445	2 960	3 460
Ontario	lig-sub	170	10	–
New Brunswick	hvb-mvb	45	10	20
Nova Scotia	hvb-mvb	300	355	750
Yukon and District of Mackenzie	lvb-an	–	–	90
	hvb-mvb	–	–	150
	sub-hvb	–	–	350
	lib-sub	–	–	2 290
Totals	lvb-an	340	620	1 555
	mvb-lvb	2 015	2 845	7 925
	hvb-mvb	2 280	2 075	6 175
	sub-hvb	2 230	1 505	4 670
	lig-sub	13 925	7 980	22 745

Source: *Coal Resources of Canada,* Geological Survey of Canada, Paper 89-4, 1989.
Coal rank: an = anthracite; lvb = low volatile bituminous; mvb = medium volatile bituminous; hvb = high volatile bituminous; sub = sub-bituminous; lig = lignite.
– Nil.
1 Although coal resource quantity estimates have been synthesized mainly from information compiled by provincial government agencies, they may differ from those of the respective provincial governments because of different criteria and parameters applied in making estimates conform to unified national standards. **2** Refer to following page for definitions of resource terms.

Definition of Resource Terms[1] for Table 15

Coal Resources

The term “coal resources” is defined as the coal that is contained in seams occurring within specified limits of thickness and depth from the surface.

Assurance of Existence

The terms “measured,” “indicated,” and “inferred” denote the level of confidence with which given quantities of resources have been determined or estimated.

Measured Resources

Resources for which tonnages are computed from information revealed in outcrops, trenches, mine workings and boreholes, and which have a high degree of geological assurance.

Indicated Resources

Resources for which tonnages are computed from lesser amounts of geological data than available for measured resources, and which have a moderate degree of geological assurance.

Inferred Resources

Resources for which tonnage estimates are based mainly on broad knowledge of the geological character of the bed or region and for which few measurements of seam thickness are available and, therefore, have a low degree of geological assurance.

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1 From Report ER: 79-9 *Coal Resources and Reserves of Canada*, Natural Resources Canada, 1979, and *A Standardized Coal Resource/Reserve Reporting System for Canada*, by the Geological Survey of Canada and The Coal Association of Canada.