

The development from year to year of Canada's water-power resources is a good index of the country's industrial growth and of the change in its economic life since the beginning of the present century. In 1900, prior to the inception of long-distance transmission of electricity, Canada's economy was based largely on agriculture and the total of hydraulic installations, mostly small mills, was only 173,000 h.p. After the successful solution of the problems of transmission of electric energy for use in distant communities, the development of large hydraulic projects became practicable and, by 1910, total installation had risen to 977,000 h.p. In ensuing decades, the growth in installed capacity, partly speeded by war demands, proceeded at an accelerated rate.

The figures in Table 2, and the graph on p. 544, show clearly the consistent growth in the total capacity of hydraulic installations since the beginning of the century. In the period 1900-05, the average annual increase was about 56,000 h.p., a rate that was stepped up sharply in subsequent years because of improvements in the transmission of electricity and the building of large central electric stations. During the period 1906-22, development proceeded at a fairly uniform rate of 150,000 h.p. per annum. The heavier demand for electricity during the prosperous 1920's increased the rate of installation sharply in 1923 and it continued at about 377,000 h.p. per annum for the period 1923-35. As an aftermath to the economic depression, the rate of installation was low during the years 1936-39, whereas the power required for war purposes accounted for the high average rate of increase of 481,000 h.p. per annum during the period 1940-43. Few developments were undertaken in the later war years or in the immediate post-war period, so that only a small amount of new capacity came into operation in the 1944-47 period. However, the results of the later post-war program of construction are apparent in the large growth in the years 1948-53 when the average rate was about 740,000 h.p. per annum. Present programs of expansion indicate a continuation of this rate of growth for some years.

**2.—Hydraulic Turbine Horse-Power Installed, by Province, as at Dec. 31, Decennially 1900-50 and Annually 1951-53**

NOTE.—Figures for each year 1900-30 are given in the 1939 Year Book, p. 362, for 1931-39 in the 1946 edition, p. 362, and for 1940-49 in the 1954 edition, pp. 556-557.

Year	Newfoundland	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario
	h.p.	h.p.	h.p.	h.p.	h.p.	h.p.
1900	—	1,521	19,810	4,601	82,864	53,876
1910	—	1,760	31,476	11,197	334,763	490,821
1920	—	2,233	37,623	21,976	955,090	1,057,422
1930	—	2,439	114,224	133,681	2,718,130	2,088,055
1940	—	2,617	139,217	133,347	4,320,943	2,597,595
1950	262,810	2,299	150,960	133,111	6,372,812	3,513,840
1951	279,160	2,299	150,960	132,911	6,755,351	3,718,505
1952	292,660	2,299	162,455	135,511	7,263,621	3,948,466
1953	311,150	1,900	162,433	164,130	7,719,122	4,006,686
	Manitoba	Saskatchewan	Alberta	British Columbia	Yukon and N.W.T.	Canada
	h.p.	h.p.	h.p.	h.p.	h.p.	h.p.
1900	1,000	—	280	9,366	5	173,323
1910	38,800	30	655	64,474	3,195	977,171
1920	85,325	35	33,122	309,534	13,199	2,515,559
1930	311,925	42,035	70,532	630,792	13,199	6,125,012
1940	420,925	90,835	71,997	788,763	18,199	8,584,438
1950	595,200	111,835	107,225	1,284,208	28,450	12,562,750
1951	596,400	111,835	207,825	1,358,808	28,450	13,342,504
1952	716,900	111,835	207,825	1,432,858	31,450	14,305,880
1953	716,900	109,835	207,960	1,496,518	32,440	14,929,074