

Industrial Water Survey, 2021

Released at 8:30 a.m. Eastern time in *The Daily*, Monday, March 18, 2024

Thermal-electric power producers continued to be Canada's largest industrial user of water in 2021, a trend observed since 2005, the first year the survey was collected.

Estimates produced by the Industrial Water Survey indicate that the three main groups of industries covered by the survey had a total water intake of 27.4 billion cubic metres in 2021, up 0.42% from 2020. Thermal-electric power producers accounted for 83.7% of this total, followed by the manufacturing (14.8%) and mining (1.5%) industries.

Among manufacturers, five industries accounted for almost 95% of this industry group's water intake in 2021. These industries are the paper, primary metals, chemicals, food and petroleum and coal product industries.

For industrial water users, self-supplied surface water continues to be the main intake water source, accounting for almost 83.7% of all intake water in 2021. The majority of water intake was returned to surface water after being used for industrial processes. Total water discharge for the three main groups of industries in 2021 was 25.7 billion cubic metres. Thermal-electric power producers accounted for 84.7% of the discharge total, while the manufacturing industries comprised 13.2%, and the mining industries produced 2.1% of total discharge.

Prior to discharge, these same industry groups recirculated 13.3 billion cubic metres of water in 2021, a decrease of 15.9% compared with 2020. The thermal-electric power producers accounted for 78.2% of this total in 2021, the manufacturing industries for 18.6%, and the mining industries for the remaining 3.1%.

From 2011 to 2021, in both the manufacturing and the thermal-electric power industry groups, there has been no notable change in intake, recirculation, or discharge volumes. However there has been a gradual decrease in intake and discharge volumes in the mining industry group since 2017. This is mainly due to mine closures.

Did you know we have a mobile app?

Get timely access to data right at your fingertips by downloading the [StatsCAN app](#), available for free on the [App Store](#) and on [Google Play](#).

Note to readers

The 2021 Industrial Water Survey was conducted under the umbrella of the Canadian Environmental Sustainability Indicators project, a joint initiative of Statistics Canada, Environment Canada and Health Canada. The survey gathered information on the intake and discharge of water by three groups of industries: manufacturing, mining and thermal-electric power generating industries. It collected information on sources of water, purposes for which the water was used, whether water was recirculated or reused, where the water was discharged and what treatments were used. It also collected information on water acquisition costs, treatment costs and operating and maintenance expenses related to water intake and discharge. Statistics Canada will be redesigning the Industrial Water Survey for the next cycle year in 2025.



Available tables: [38-10-0037-01](#) to [38-10-0041-01](#) and [38-10-0055-01](#) to [38-10-0085-01](#) .

Definitions, data sources and methods: survey number [5120](#).

For more information, or to enquire about the concepts, methods or data quality of this release, contact us (toll-free 1-800-263-1136; 514-283-8300; infostats@statcan.gc.ca) or Media Relations (statcan.mediahotline-ligneinfomedias.statcan@statcan.gc.ca).