DISTRICT ENERGY DIGEST No. 9

SUMMARY

DISTRICT ENERGY DIGESTS are produced every four months by the **Boltzmann Institute** (see below). This page describes items in October 2024's 11-page issue. The full version of all issues of the *Digest* can be downloaded from www.bi-ib.ca/publications. To subscribe, please write to rgilbert@bi-ib.ca

- **Early notice of an event on municipal heating planning, March 20, 2025,** at the University of Toronto's downtown campus. Write to march20@bi-ib.ca for a personal invitation. [Pages 1-2]
- **A problem with the way home electricity use is now being planned for Ontario.** This item indicates how a May 9 government announcement may reflect inadequate energy planning. [3]
- **A grid-scale battery system planned for Ontario has a relatively low cost,** but still much above the cost of storing the same amount of energy as hot water that can be used for space heating. [3]
- **Added air-source heat pumps can increase emissions of greenhouse gases.** This happens because electricity demand is being met increasingly by inefficient, natural-gas-fuelled generation. [4]
- **More news from the Greater Toronto and Hamilton Area, Ontario, and Canada:**
  - On extraction of heat from wastewater in Markham and elsewhere. [5]
  - Notice of the November 5, one-day district-energy event in Brampton. [5]
  - An astonishingly low official projection of market penetration by heat pumps by 2050. [5]
  - Plans to serve a northern Ontario community with wood-fuelled district energy. [6]
  - A report of a major bank (RBC) says costs in cities can be reduced with district energy. [6]
  - Decommissioning of a world-renowned solar system that heated a community in Alberta. [7]
- **Items from outside Canada**
  - Hot|Cool: a no-cost, informative, on-line, monthly magazine on district energy technology. [7]
  - Several district-energy items concerning Finland – most are about nuclear heat. [7]
  - On enormous heat pumps planned or being used for district-energy in several countries. [8]
  - Data centres seek to meet cooling challenges by offering heat to thermal networks. [8]
  - A Canadian firm is helping Hanover, Germany, use heat from 3 km below ground. [8]
  - District heating can be used for greenhouses, concrete mixing, and grain drying. [8]
- **Report now available on the 2024 study tour of northern European district-energy facilities.** [8]
- **A 3-page ANNEX concerning the Boltzmann Institute's Two Pathways project.** [9-11]

About the Boltzmann Institute

We're a federally incorporated, not-for-profit think tank established in 2022, seeking to help eliminate harmful emissions from human energy use. (Ludwig Boltzmann was a 19th-century Austrian founder of the science of thermodynamics.)

We aim to contribute research and education towards securing carbon neutrality by 2050, initially focusing on thermal energy use in buildings (heating and cooling).

Our website at www.bi-ib.ca is a growing resource – now partially bilingual – on district energy and related matters including electricity generation.

Our early funding came from generous private contributions. The Government of Canada is now contributing $750,000 to the work of the Boltzmann Institute described in the annex to this *Digest*.

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See our website at www.bi-ib.ca for more information about the Boltzmann Institute.