The carbon footprint of libraries has been calculated for the first time

The largest contributor to the carbon footprint of libraries is energy consumption. Approximately two thirds of emissions by libraries are caused by heating the premises and electricity consumption, meaning that the carbon footprint is the larger the larger the library is. Libraries do not, however, have a say in what kind of energy they consume. These decisions are made by municipalities.

Thirteen pilot libraries throughout Finland participated in the study conducted in autumn 2020. Kallio Library from Helsinki was among them.

**The buck stops with municipal decision-makers**

The study examined the size of the carbon footprint of libraries, what the footprint consists of and what kind of differences there are between libraries of different sizes, among other things. In addition to energy consumption, the life cycle, circulation and plastic coating of the material also influence the carbon footprint.

“Each library can impact the number of volumes acquired, whether to their material in plastic and how they process discarded books, but the study shows that these actions will not have a considerable effect on the carbon footprint of the library. Indeed, the responsibility for the environmental impact of public libraries lies with property management, premises centres and municipal decision-makers to a great degree,” says **Harri Sahavirta,** project director for the ‘Yleisten kirjastojen ympäristötietoisuus 2020-luvulle’ (Bringing environmental awareness of public libraries to the 2020s) project, from Helsinki City Library.

“We have a timely and clear message for municipal decision-makers ahead of the municipal elections: if you want to reduce the environmental impact of municipal services and reach the national carbon neutrality goals, you must look at the consumption and condition of municipal real estate and utilities. They play a significant role in achieving carbon neutrality.”

The total carbon footprint of public libraries in 2019 was 32,000 tonnes of CO2 equivalent. This figure was calculated by primarily using the average values provided by libraries involved in the project and utilising statistical information and emission factors (books and e-books). The average carbon footprint of the libraries involved ranged from 30–420 tonnes of CO2 equivalent depending on the size of the library.

Carbon footprint studies are part of the ‘Yleisten kirjastojen ympäristötietoisuus 2020-luvulle’ project, which aims at promoting environmental awareness in libraries, carbon neutrality and the sharing economy.  The carbon footprint calculations were carried out by Positive Impact, an expert partner to the project.

More information about the project (in Finnish): www.kirjastot.fi/vihreakirjasto.

The ‘Kirjastot matkalla hiilineutraaliin jakamistalouteen’ (Libraries on the way to carbon-neutral sharing economy) report is available in Finnish at https://www.kirjastot.fi/vihreakirjasto/kirjastojen-hiilijalanjalkilaskenta

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