

Quantities of applied geosynthetics in Finland – results of questionnaire

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Background

- The aim of the thesis was to study
 - the volume of the use of geosynthetics and typical applications in Finland
 - how different environments affect the long-term durability of geosynthetics and
 - their potential microplastic risk
- a questionnaire was carried out for the Geosynthetics Committee of the Finnish Geotechnical Society
- The aim of the questionnaire was to establish the usage of geosynthetics in Finland and how the characteristics of the environment affect the long-term durability of a geosynthetics

The questionnaire

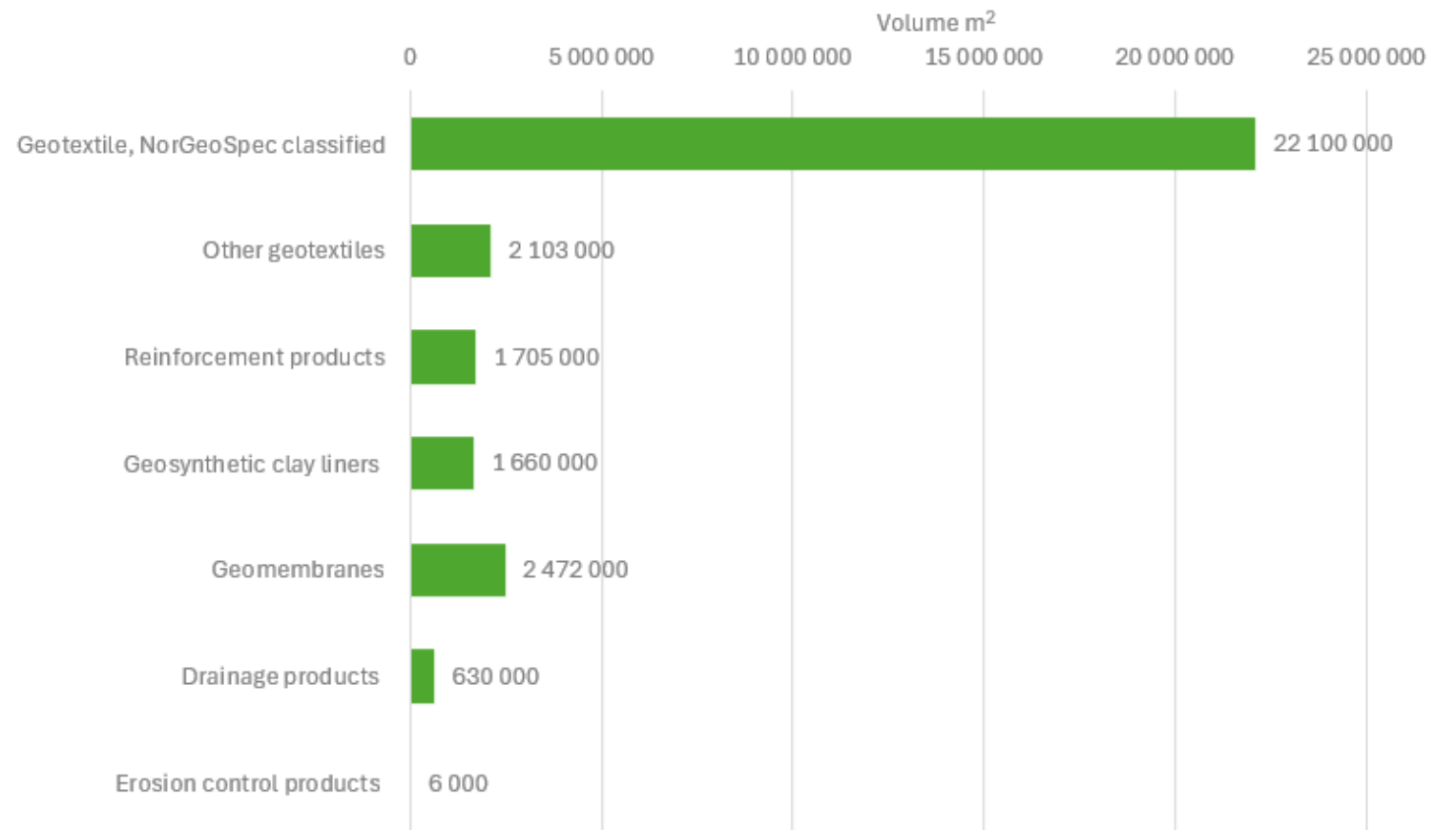
- The questionnaire was sent to manufacturers and importers, as well as the members of the Geosynthetics Committee of the Finnish Geotechnical Society
- Five respondents represented importers or manufacturers, four respondents represented other organizations

Questions concerning the use and quantities of geosynthetics

- What geosynthetic products your company imports or manufactures?
- Estimate the quantities of geosynthetic products used by the company or organisation you represent in 2024
- Estimate the quantities of different geosynthetic products that were used in Finland in 2024
- Tell your opinion whether the use of the geosynthetic product in question is increasing, remaining the same or decreasing

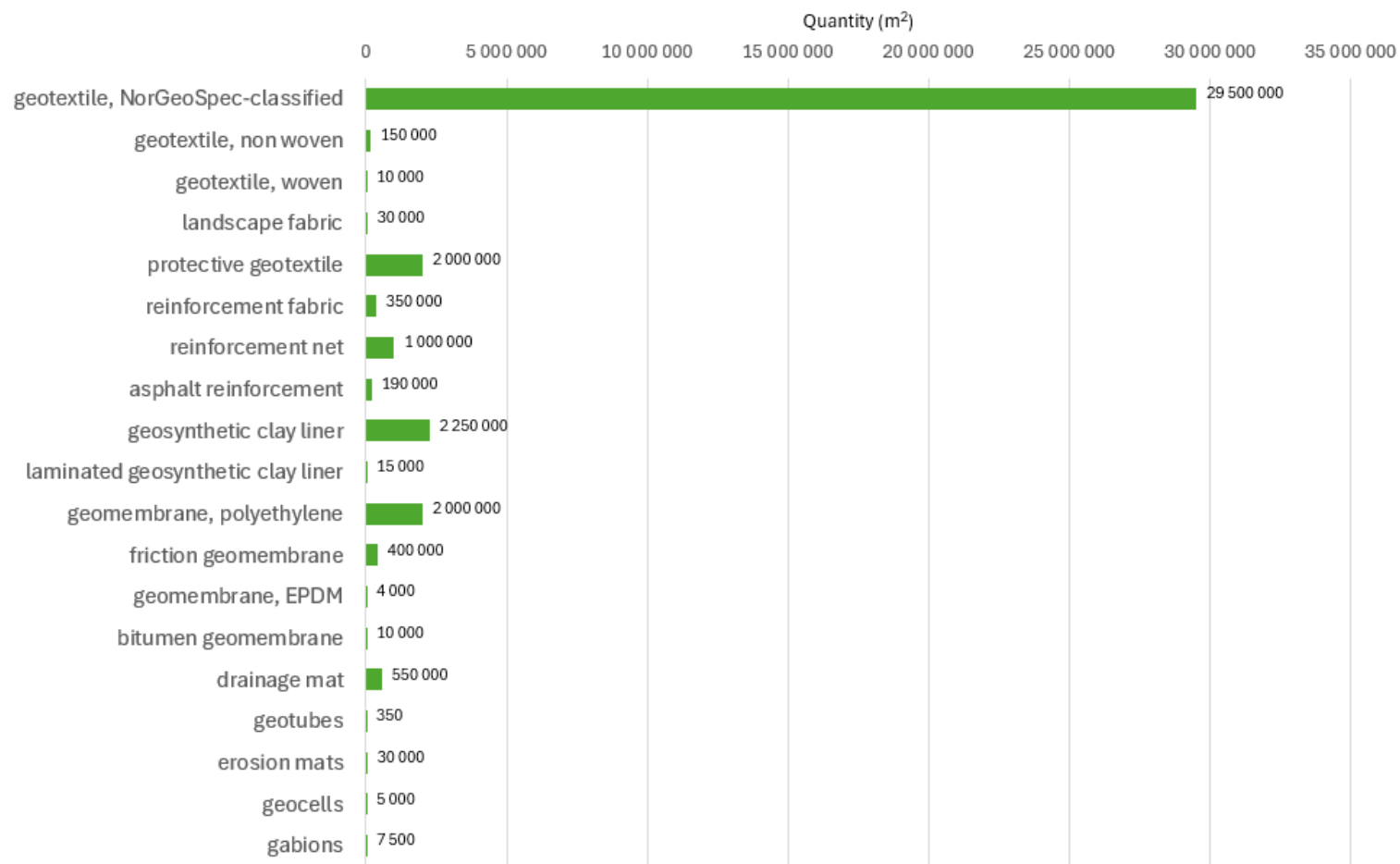
Import and manufacturing quantities in Finland in 2024

Import and manufacturing quantities

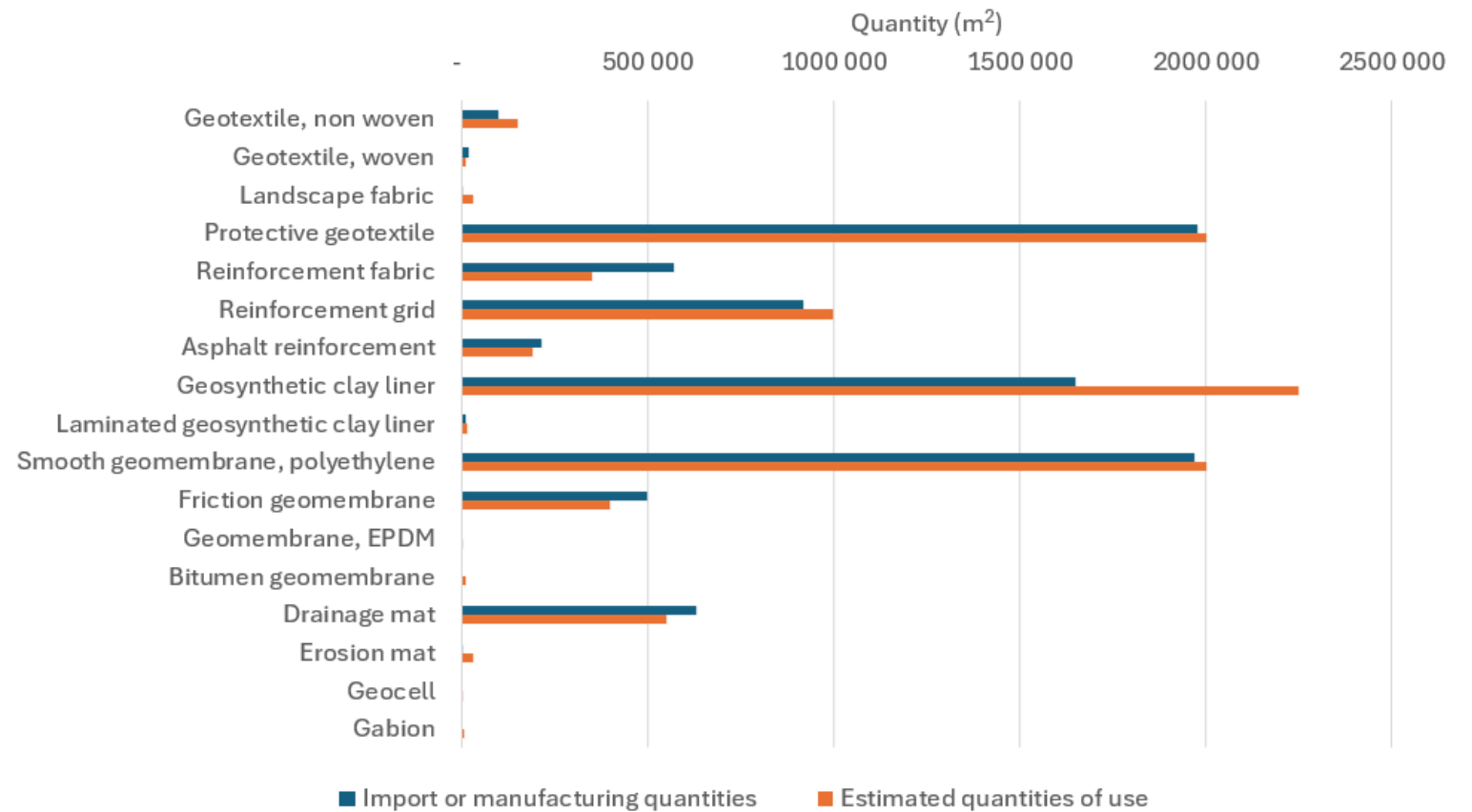


Estimated annual quantities used in Finland

Estimated annual quantities of geosynthetic products

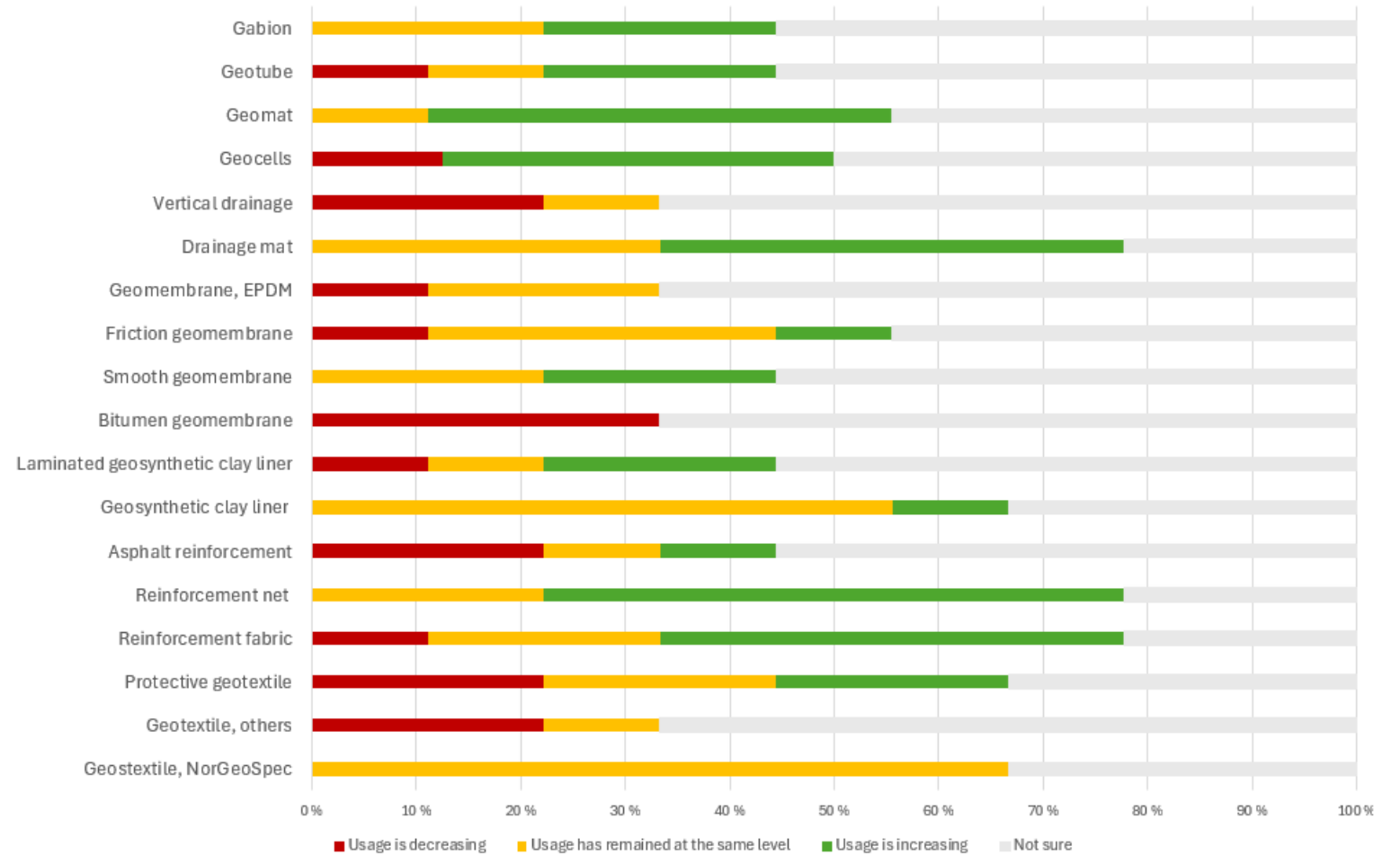


Manufactured or imported vs. estimated use



Change of the use of geosynthetic products

Has the use of the geosynthetic product increased, remained unchanged, or decreased?



Results

- The most used product in Finland is NorGeoSpec –classified geotextile 22 million m²
- The other most used products are
 - geomembranes (2,4 million m²),
 - protective geotextiles (2,0 million m²),
 - reinforcement products (1,7 million m²)
 - geosynthetic clay liners (1,7 million m²)
- The use of the NorGeoSpec –classified geotextile has remained at the same level, whereas the use of reinforcement products is increasing and the use of bitumen geomembrane is decreasing

Results

- Since there were only 9 respondents in the questionnaire, the results can't be generalised and should be considered only indicative
- Not all the importers responded to the questionnaire; therefore, the actual import quantities are likely higher than reported
- The aim of the Geosynthetic committee is to implement the questionnaire on a regular basis. Therefore, more reliable results are expected in the future