Helsinki

Adaptation to climate change

Green factor tool

The goal of the green factor approach is to mitigate the effects of construction by maintaining a sufficient level of green infrastructure, enhancing the quality of the remaining vegetation and preventing storm water floods.

The significance of green surfaces in adaptation to climate change is highlighted as the city structure becomes denser. The green factor method improves the City's preparedness to adapt to climate change by promoting the green efficiency of the vegetation on plots and the conservation of sufficient green structure. Vegetation mitigates the risk of urban flooding, sequesters carbon, cools down the heat islands of built environments and increases the pleasantness and beneficial health effects of urban spaces.

photo: Seppo Laakso

In the green factor method, the planner sets a green factor target level for the plot, which can be achieved flexibly by the garden designer using various green elements when designing the garden.

The method developed for the City of Helsinki provides different green elements relating to planted and maintained vegetation, various storm water management solutions and permeable surfaces, etc. The green factor is calculated as the ratio of the scored green area to the lot area.

The green factor method has been developed to support the land use planning process. The green factor can, for example, be included in the zoning regulations or used for granting concessions during a construction permit application process. Similar green factor methods have been used with success in, among others, the cities of Berlin, Malmö, Seattle and Toronto, as an important tool for maintaining and increasing the ecological and social advantages of green structures.

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