

HIGH REDUCTION POTENTIAL

Energy

The realisation of emission reductions in procurements is affected by

- Giving up fossil energy and/or replacing its use with renewable energy
- Energy-efficient procurement alternatives and low-carbon solutions on the market as well as procurement models
- Existing criteria, tools and means to determine and verify low-carbon solutions
- The know-how of the procurer as well as other existing objectives and boundary conditions of the procurement

Emissions of energy procurement arise from the use of fossil energy sources. The carbon footprint of energy procurements is more than a quarter of the carbon footprint of public procurements. In total, the energy used by buildings accounts for about 40% of the energy consumed in Finland and causes about 30% of Finland's greenhouse gas emissions.

Energy procurement can be influenced:

- At the procurement stage, it is best to influence the procurement of electricity and, in some respects, the selection of alternative fuels.
- Especially in the case of heating energy, decisions affecting energy procurement are made at the planning stage, in which case the production of renewable energy and energy efficiency should be favoured as part of the design criteria of buildings (see the construction product card).
- The amount of energy to be procured is influenced by both the reduction of energy use during the use phase and local production of energy, which reduces the need for purchased energy.
- A more energy-efficient solution allows for lower consumption peaks, more clean energy for other uses and lower costs. Thus, energy efficiency is currently also a metric for measuring these indirect benefits.
- At the procurement stage, it is possible to determine how the energy to be procured is produced. At the moment, a clear criterion in energy procurement is the green electricity requirement/certificates. The low-carbon potential of renewable and fossil-free electricity procurement is determined by emission factors, and for these forms of electricity production, an emission factor of 0 kgCO₂/kWh has been determined. When procuring renewable or fossil-free electricity instead of any form of electricity with an emission factor greater than 0 kgCO₂/kWh, the low-carbon potential is 100%.
- From the point of view of the electricity system, solutions that integrate the building stock and electricity consumption solutions into a flexible whole are essential.
- As electricity production moves in a more emission-free direction, it might be relevant to consider whether attention in procurement should be focused on demand side management and the levelling of demand peaks, i.e., the reduction of the need for additional production required by the demand peak.