

# IMPROVING ENERGY EFFICIENCY OF HOUSES

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The energy efficiency of old houses should be improved. New houses should be built to be energy efficient. The energy efficiency of houses should be a national concern.

In Estonia, a large number of houses are from the Soviet era. Those houses were not built to be energy efficient. To improve energy efficiency of houses in Estonia, it is necessary to focus on these buildings.

When building new houses, energy efficiency should be considered. Existing knowledge of energy efficient building should be utilized.

Strengths	Weaknesses
<ul style="list-style-type: none"> <li>** Low labor costs</li> <li>** Labor availability (unemployment)</li> <li>* Availability of energy efficient raw materials like wood</li> </ul>	<ul style="list-style-type: none"> <li>*** Many houses from the Soviet era</li> <li>** Living standards</li> <li>* Bigger environmental issues exist</li> <li>* Some disregard towards environmental issues</li> </ul>
Opportunities	Threats
<ul style="list-style-type: none"> <li>*** Existing knowledge of energy efficient building</li> <li>* Economic growth</li> <li>* Building new houses</li> </ul>	<ul style="list-style-type: none"> <li>** Low durability of houses built in the Soviet era</li> <li>* Unequal incomes</li> </ul>

Table 1. SWOT for energy efficiency of houses in Estonia

The Soviet era houses cannot be modified much, but new energy efficient windows and doors can be installed. The option of insulating house walls houses also exists.

In the case of building new houses, the energy efficiency could be improved in many ways. Energy efficient building material, the location of houses, the orientation and size of windows affect on the energy efficiency of houses.

In the future, there is a great possibility of positive changes. New generations are increasingly aware about the climate change and may thus be more interested in increasing the energy efficiency of buildings.