

<b>Title of the measure:</b>	EST13 Preliminary surveys regarding modernisation of street lighting and analysis of respective financing options
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### General description

The measure is included in the 2<sup>nd</sup> NEEAP as a planned measure. The 3<sup>rd</sup> NEEAP assesses the energy savings which can be obtained by this measure. Later, in the process of preparation of the new long term development plan for Estonia's energy sector (ENMAK 2030+; currently not yet approved by the Parliament) a survey for modernization of street lighting was carried out. The survey indicated that in Estonia there were ca 183 thousand street lighting points with the capacity of ca 29.1 MW consuming ca 108 GWh/a. Approximately 40–45% of street lighting lamps are more than 20 years old.

In 2013, ÄF-Consulting AS carried out a pre-feasibility study that analyzed potential energy savings that can be achieved in Estonia during the period 2014–2020. The potential measures analyzed included street lighting modernization. The Table 1 indicates the annual energy savings from different measures and the total cumulative energy savings. The cumulative energy savings from the measures have been calculated on the basis of the target levels of the measures which are divided proportionally between all years. The calculations are also based on the assumption that the lifetime of the measures is longer than seven years, and thus the energy savings to be achieved from the measures implemented in 2014 will be the same in 2015, 2016 as well as in 2019.

Table 1. Cumulative average potential energy savings from the renovation of street lighting during 2014–2020

Annual energy savings							Total* (GWh)
2014	2015	2016	2017	2018	2019	2020	
7	15	22	30	37	44	56	211

\* Total cumulative energy savings

The first renovation project, as a pilot, was planned to be undertaken in cities and towns with population between 8 000 and 15 000 located all over the territory of Estonia. The savings – energy, emissions and money – was estimated to be 66% as the average.

Regarding financing (approximately 15 M€), it was decided to use sources in frames of Estonia's *Green Investment Scheme* from the AAU quota deal with Austria.

The SA *Keskkonnainvesteeringute Keskus* (KIK; Environmental Investment Centre) was appointed as the project management entity.

The details and results of the pilot project, based on the survey, are described in the measure TER EST 31.

### NEEAP

The measure is included as a planned measure for the public sector in the 2<sup>nd</sup> NEEAP (as the measure P.3) and indicated also in the 3<sup>rd</sup> NEEAP.

### Interaction of measures

TER EST 31 – Modernisation of street lighting (2012–2015)

TER EST 32 – Modernisation of street lighting (2015–2020)

### References

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