

TALLINN ON ENERGY EFFICIENCY





441,364

INHABITANTS

After joining the Covenant of Mayors in 2009, Tallinn established a Sustainble Energy Action Plan 2011-2021 (SEAP) in line with the covenant's obligations and signed up to the Mayors Adapt initiative in 2015. On joining the Covenant of Mayors for Energy & Climate 2030, the city developed a Sustainable Energy and Climate Action Plan 2030+.

20%

INCREASE
IN ENERGY EFFICIENCY
2007-2021

20%

OF ENERGY FROM RENEWABLE SOURCES BY 2021 FROM 2007 40%

CO₂ REDUCTION TARGET BY 2030 COMPARED TO 2007

CONTACT

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A HOLISTIC APPROACH TO SUSTAINABLE ENERGY EFFICIENCY

Tallinn established its Energy Agency in 2013 to coordinate the formulation of energy and climate policies by municipal agencies. It is responsible for fulfilling and accounting for the objectives of the Covenant of Mayors and for promoting the need for climate action by residents and energy-efficient renovation of private buildings.

In the public domain, the city is installing solar panels on 100 municipal buildings and has introduced smart technology to remotely control and time city lights to save energy. It has also worked for nearly a decade with private apartment associations, helping to increase building energy efficiency to at least a C rating - and save significant greenhouse gas emissions from homes.

Tallinn opened its first electric power plant in 2009 and a second in 2018. These heat and power cogeneration plants run on 90% renewable energy sources, mostly wooden chips, and minimise fossil fuel use for city heat. The electricity they generate meets the needs of over 130,000 apartments — which covers all apartments in the Tallinn district heating system.



ADAPTATION

SMART LAND USE

- Including issues such as rainfall, flooding and green infrastructure in planning documents
- Using detailed flood risk maps to inform these documents
- Developing urban storm water management systems

HEAT MANAGEMENT

- Ensuring the design of new municipal buildings is based on energy efficiency best practice
- Using shades in public buildings to reduce cooling costs and improve indoor climate

ACTION PLAN

 Developing a city action plan for adapting to climate change (SECAP 2030+)

CHALLENGES

- Innovating to increase the energy efficiency of buildings through renovations
- Expanding remote heating districts, including the integration of district cooling, and increasing the efficiency of heating networks
- Increasing awareness and usage of solar power in local electricity supply and diversifying renewable energy sources
- Promoting the use of sustainable drainage systems

LESSONS LEARNT

Energy-efficiency driven renovation of buildings is the most effective way of reducing heating-related greenhouse gas emissions — the city reduced emissions from heating from 9.6m MWh in 2007 to 8.4m in 2015.

