

ENERGY CONSERVATION AGREEMENTS AND ENERGY AUDITS

Voluntary agreements on energy conservation have led to significant energy savings in Finland. New possibilities for further savings are charted through State-subsidised energy audits. These voluntary agreements and audits benefit the economy as well as the environment.

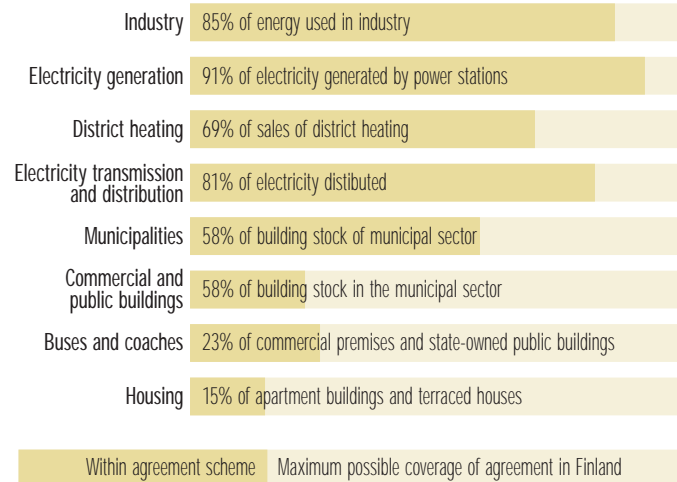
Voluntary energy conservation agreements play a key role in the implementation of Finland's climate strategy and the associated energy conservation programme. Since 1997, several wide-ranging framework agreements have been made between organisations in various sectors and the relevant ministries.

Business associations have widely undertaken to promote energy conservation and involve more of their members in such agreements. Companies and other organisations subscribing to these agreements resolve to carry out energy audits or analyses in their own properties or production plants, to draw up energy conservation plans, and to implement cost-effective conservation measures. The Ministry of Trade and Industry subsidises energy audits and analyses, as well as energy conservation investments that fulfil certain criteria.

Where housing is concerned, audit subsidies and assistance for improvements in energy economy are provided by the Ministry of the Environment, while energy conservation agreements as a whole are administered and monitored by the state-owned company, Motiva.

By the end of 2004 a total of eight extensive energy conservation agreements were in force, covering industry, the energy sector, the property and construction sector, the

COVERAGE OF ENERGY CONSERVATION AGREEMENTS IN FINLAND AT THE END OF 2004



The International Energy Audit 06 conference offers a unique opportunity for the exchange of ideas, experiences and results related to energy audit programmes, with a view to the future development of energy audit activities worldwide.

The conference focuses on energy efficiency and the increased use of renewable energy in improving the energy performance of the buildings and processes assessed in energy audits.

The Energy Audit 06 conference has been planned to benefit national and local policy makers, programme planners and coordinators in ministries and energy agencies, international associations and financial institutions, and other public and private organisations.

The conference will take place in Lahti during Finland's EU presidency, and is being organized by the Ministry of Trade and Industry and Motiva Oy in close cooperation with the Ministry of the Environment and the Ministry for Foreign Affairs.

MORE: www.audit06.fi

municipal sector, buses and coaches, and residential properties. These agreements cover about 60% of Finland's total energy consumption.

Significant impacts

At the end of 2004, the total annual impact of the conservation measures in all participating companies was 6.1 TWh. This saving is the equivalent of the electricity and thermal energy consumed annually by over 300,000 single-family houses. Industry accounted for some 85% of all the savings.

The annual impact of conservation measures implemented to date in terms of carbon dioxide emissions has been about 1.7 million tonnes of CO₂ equivalent*. The estimated savings in costs have been more than 110 million euros a year.

Energy audits

Energy audits are vital in implementing voluntary energy conservation agreements. They provide companies or other organisations with a comprehensive overview of energy and water consumption rates in buildings or processes, as well as practical proposals for conservation measures, including feasibility studies.

Nine energy audit models have been designed for various service and business premises, industry and the energy sector. One important objective of the municipal audit

model introduced in 2004 is to investigate opportunities to use more renewable energy on a regional scale. Motiva works to improve energy audits, and monitors their effectiveness and quality, while also training and authorizing auditors. The Ministry of Trade and Industry provides subsidies that meet 40-50% of the costs of energy audits.

Finland's Energy Audit Programme (EAP) is one of the oldest national energy efficiency grant schemes in place. Since 1992 over 6,000 industrial and service sector buildings have been audited in Finland.

Permanent savings

According to realisation estimates, every year auditing leads to energy savings of almost one TWh, reducing carbon dioxide emissions by about 200,000 tonnes* annually. The Ministry of Trade and Industry granted almost 19 million euros for energy auditing over the period 1992-2004, some 50% of which was used by industry. Surveys have shown that about 60% of the measures proposed in the audits are typically implemented soon after audits in industry and about 70% in the service sector.

MORE: www.motiva.fi/en

* Calculated by using the average coefficient 200 kg CO₂/MWh for CO₂ emissions from electricity use