



Financing Energy Efficiency in Industry via Voluntary Agreement in Finland

Financing Energy Efficiency in Poland, Czech Republic, Slovakia and Lithuania

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Confederation of Finnish Industries EK

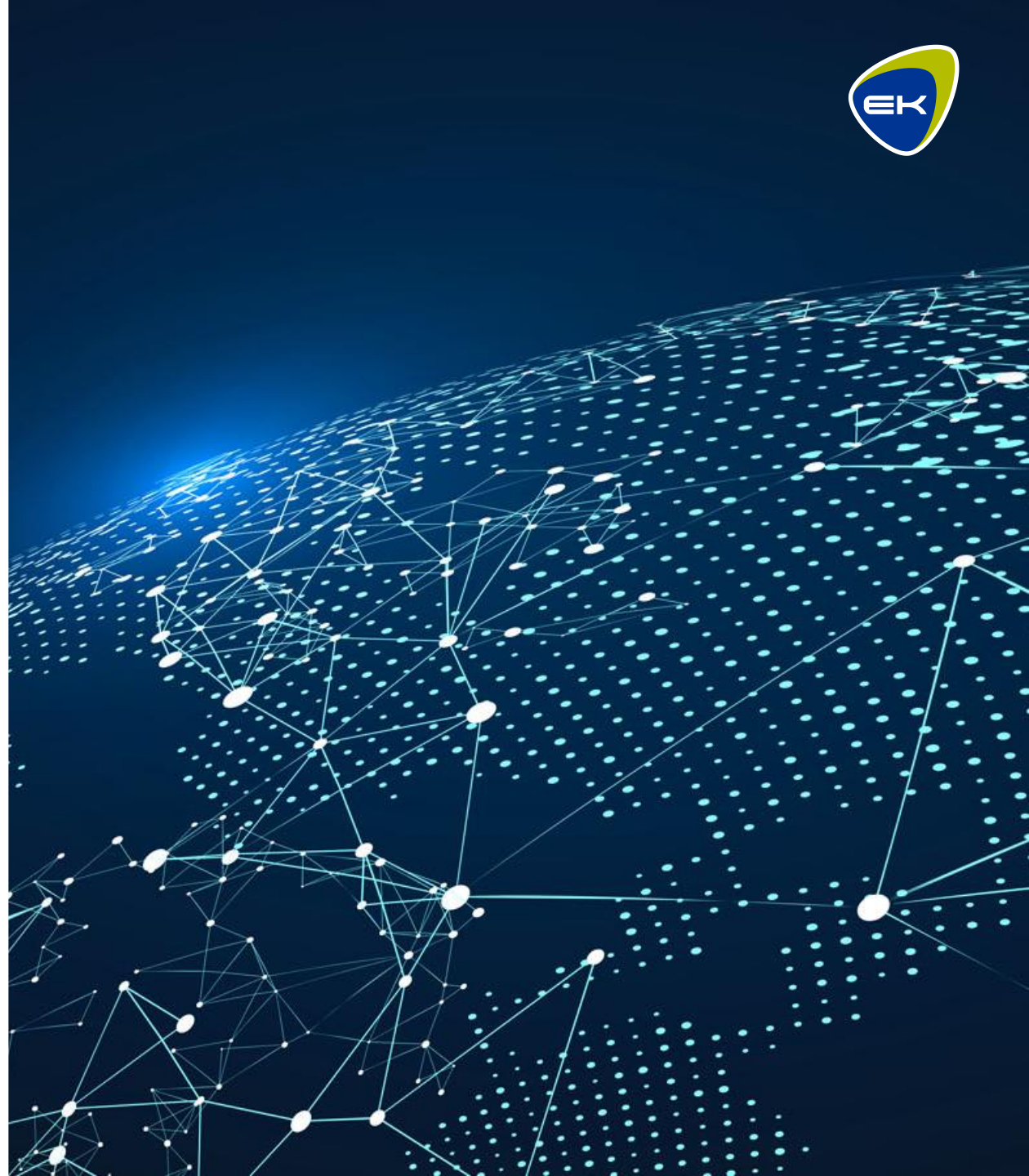
What is EK?

EK represents the interests of its members in business and employment matters, and in decision-making in society.

EK represents the entire private sector and companies of all sizes.

- 25 member federations
- 16,000 member companies, 96% of which are SMEs
- Around 950,000 employees

When a company joins an employers' association representing its own branch, it also becomes a member of EK.



Energy Efficiency Agreements 2017-2025:

<http://www.energiatehokkuussopimukset2017-2025.fi/en/>



INDUSTRIES

ENERGY EFFICIENCY AGREEMENT

INDUSTRY

Energy Intensive Industry | Food and Drink Industry | Chemical Industry
Technology Industry | Wood Product Industry | Industry - General

ENERGY SECTOR

Energy Production | Energy Services

SERVICE SECTOR

Commerce Sector | Hotel and Restaurant Sector | Motor Trades & Repairs | Services – General

PROPERTY SECTOR

ENERGY EFFICIENCY AGREEMENT

COMMERCIAL PROPERTIES
HOUSING PROPERTIES

MUNICIPAL SECTOR

ENERGY EFFICIENCY AGREEMENT

CITIES & MUNICIPALITIES &
JOINT MUNICIPALITIES

HÖYLÄ IV – OIL SECTOR

ENERGY EFFICIENCY AGREEMENT

DISTRIBUTION OF LIQUID HEATING
FUELS
Oil-heated real estates

Why Voluntary Energy Efficiency Agreement?

- Alternative measure for regulations to implement the energy efficiency directive EED and the national climate and energy strategies
- A present phase 2017-2025 is based on earlier phases in place since 1992: **Good results!**

Financial benefits for a company:

- **Subsidies for energy audits for SME's**
 - 50% of energy audits in micro, small and medium-sized enterprises
 - 40% of other energy audits, analyses and investigation projects
- **Subsidies for conventional energy efficiency investments (case-dependently)**
 - 20% for **participants**; 25% when an energy service company (ESCO) is used
 - Pay-back time needs to be over 3 years. If 3-5 years, additional explications are required from the large companies.
- **Subsidies for new technology energy efficiency investment (case-dependently)**
 - 40% maximum

No energy tax connection – separate schemes function better!

Results from the previous period of 2008-2016: reported by about 460 joined companies with over 4200 sites

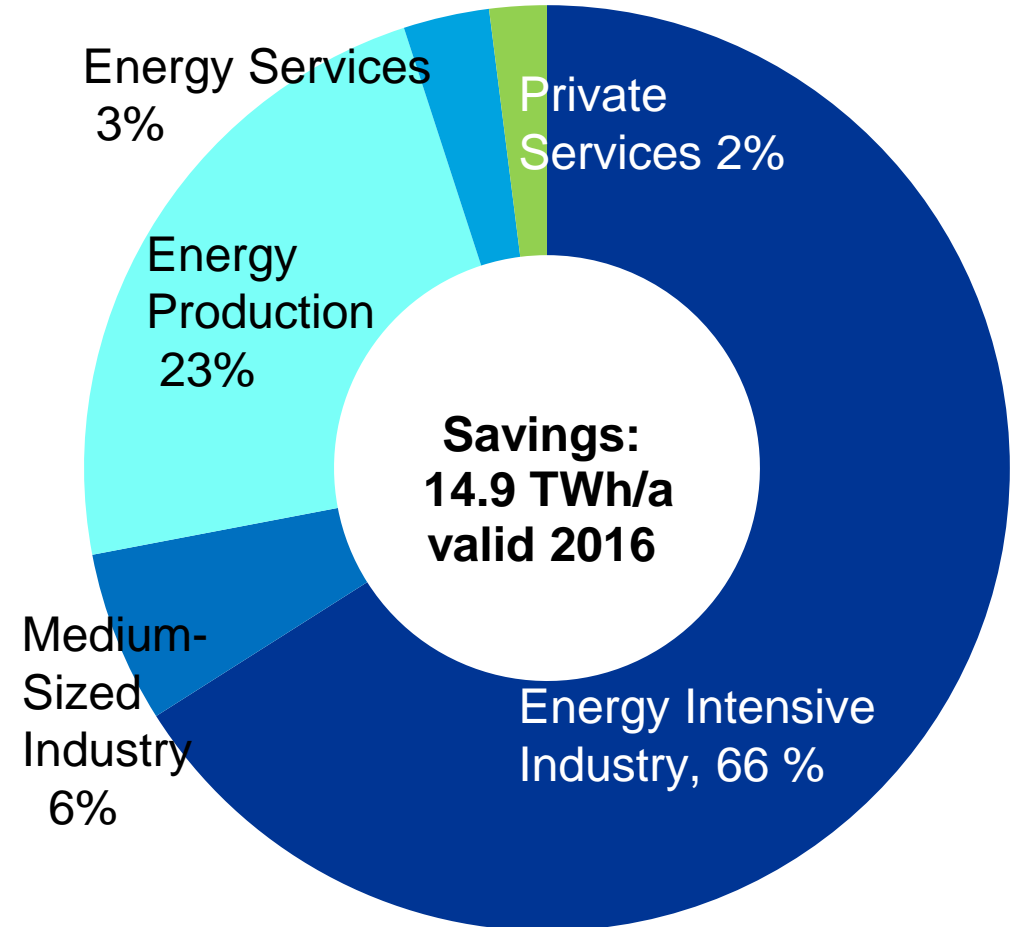
Industry and Private Services, 11 TWh/a:

- Savings of heating energy and fuels 9 TWh/a
- Electricity savings 2 TWh/a
- CO₂ savings about 3.2 mill. Ton/a
- About EUR 580 million investment costs
- Savings in energy costs EUR 1.6 billion cumulatively, EUR 380 million annual 2016

Energy subsidies granted to **all sectors**:

- For energy audits EUR 8.9 million
- For energy-saving investments EUR 61 million

Targets were achieved by 92-220 % depending on sector



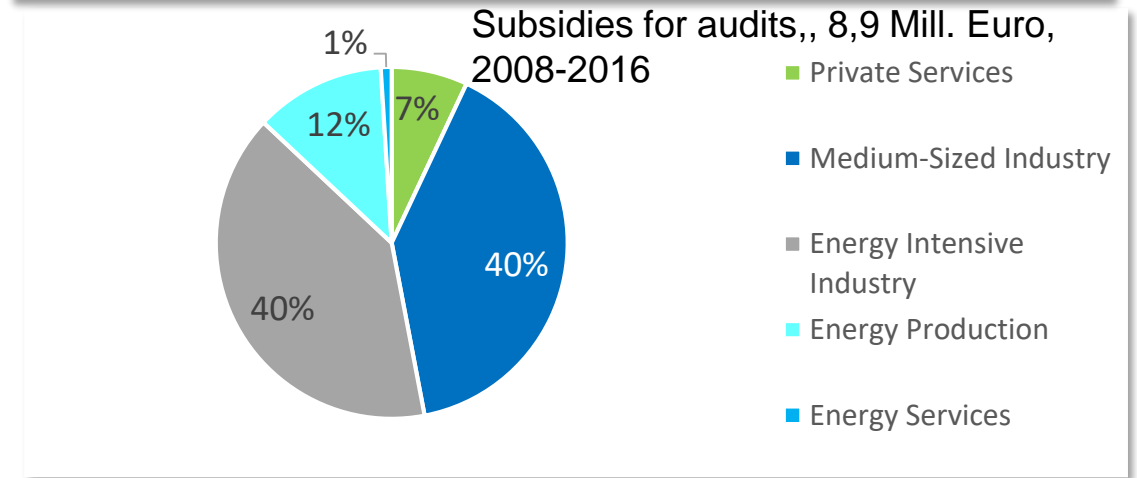
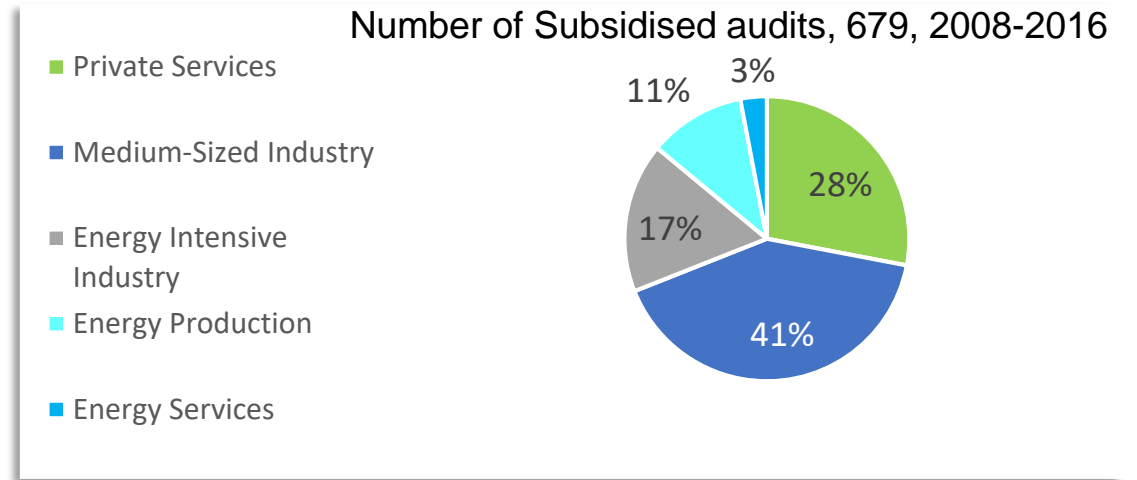
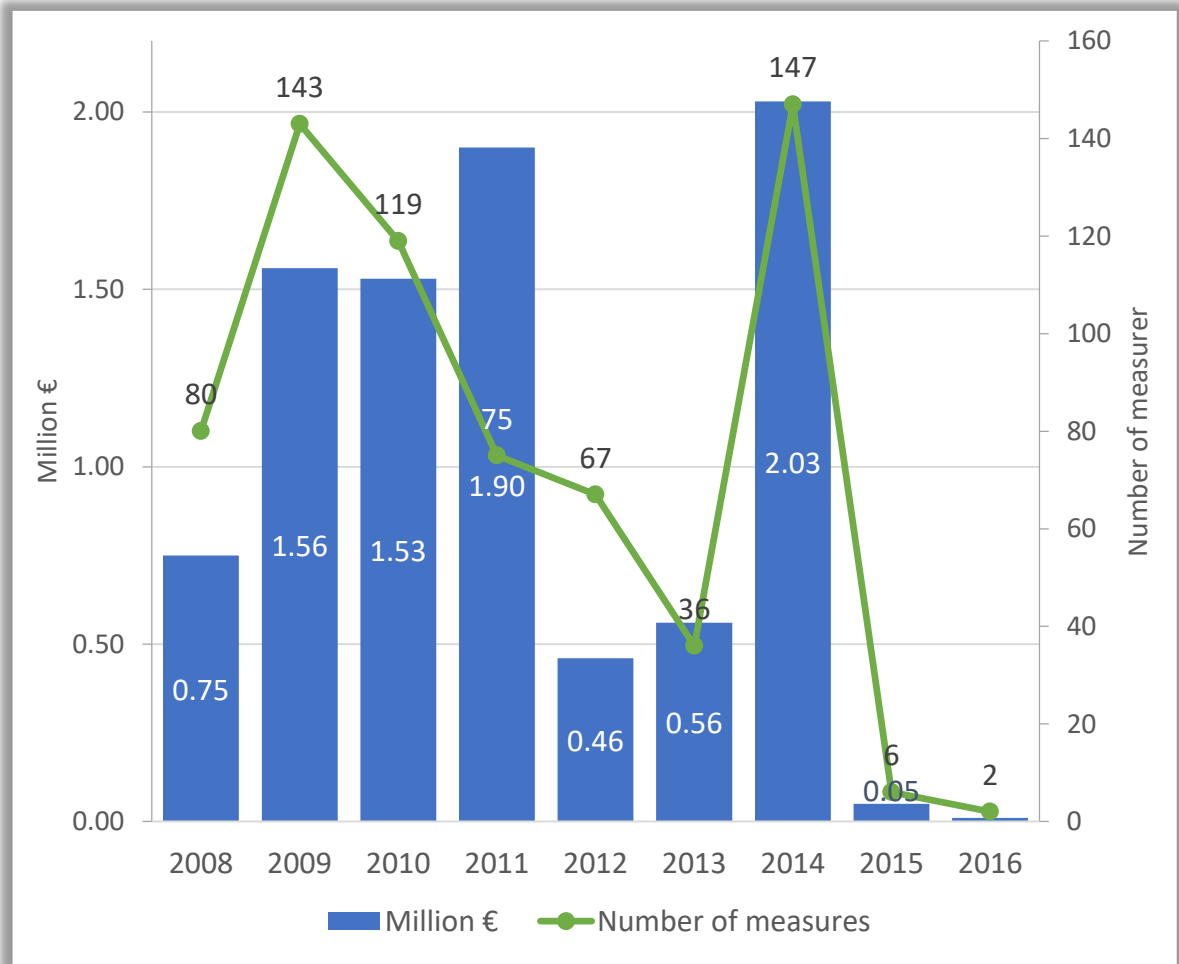
Pay-back times in Energy Intensive Industry 2008-2016:

Even 38 % of electricity savings with no investment

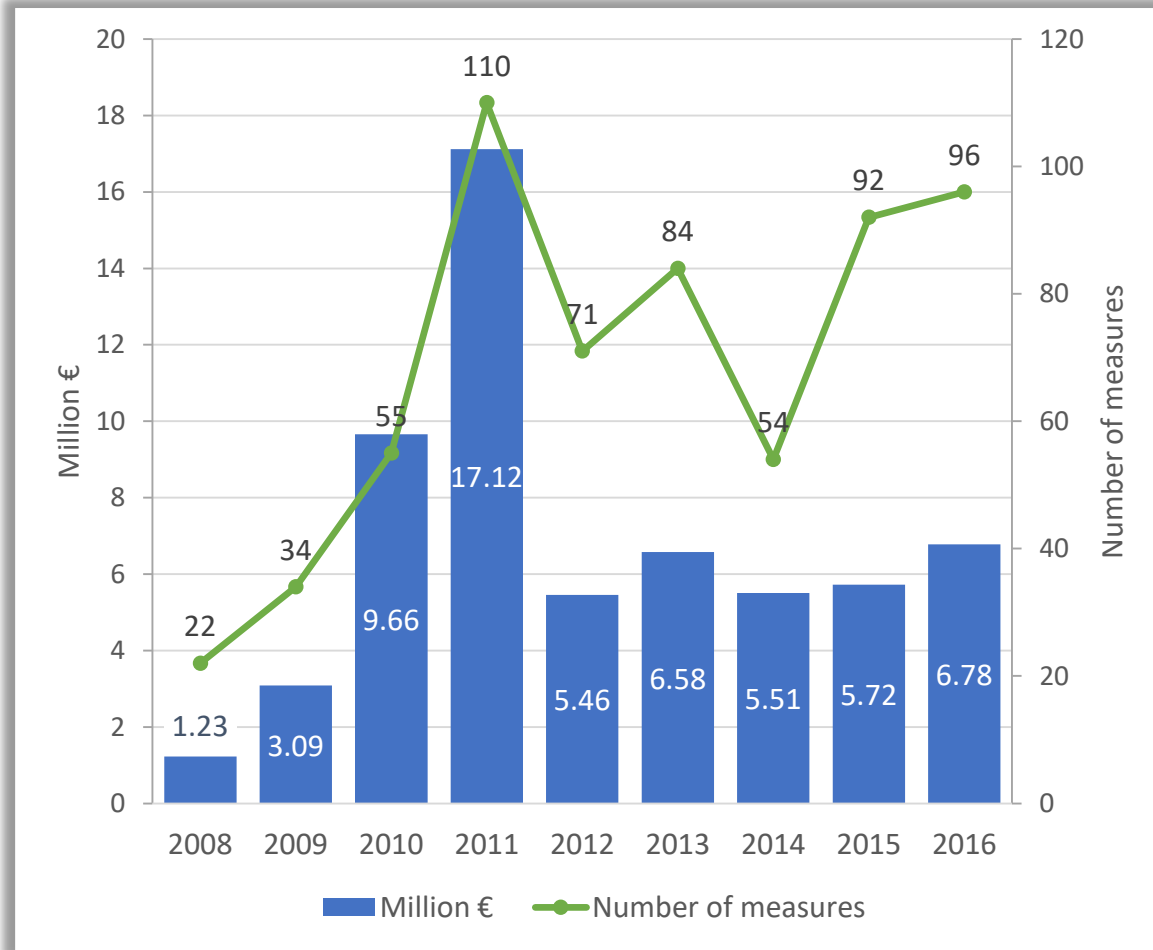


Pay back time, year	Number of measures	Electricity savings	Share of saved electricity	Heat and fuels savings	Share of saved heat and fuels
		GWh/a	%	GWh/a	%
PBT=0	379	693	38%	1228	15%
0>PBT>1	290	276	15%	1574	19%
1< PBT>2	427	607	33%	4004	47%
2<PBT>5	150	111	6%	1127	13%
Over 5	219	148	8%	516	6%

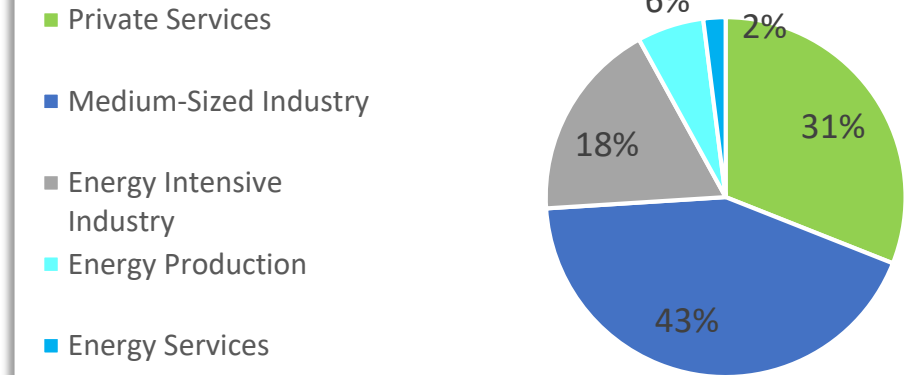
Number of subsidised Energy audits collapsed after the mandatory auditing for large companies on 2015



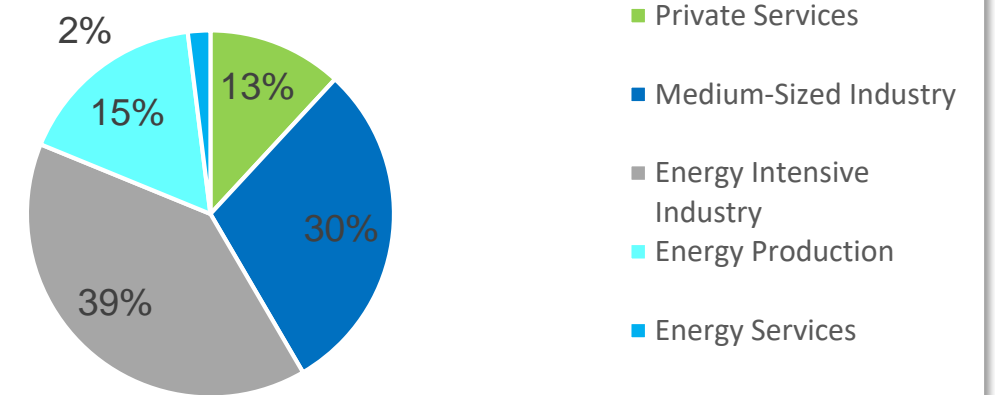
Subsidies for EE-investments stable level after two exceptional years 2010 and 2011



Number of subsidised investments, 618, 2008-2016



Subsidy for investments, 61 Mill. Euro, 2008-2016



Source: Motiva Oy

Conclusions

- A hard competition inside companies: which investments will be approved?
 - Less and less pure energy efficiency investment will be realized
 - **but** energy efficiency is an important part of every investment (improves the viability)
- Subsidies especially important for SME's, but ETS restricts subsidies for large companies.
 - Still lack of information to be seen: for example criteria for subsidies are not widely known
- Companies are satisfied also on other kind of support:
 - Development projects within the agreement: a group of companies, technology suppliers and Motiva's energy experts focus on specific topic, for instance industrial ovens (projects are partly self-financed)
 - Councelling of SME's by Motiva: visits, calls, case publications, etc
 - "Peer support" from colleagues in the steering groups of every action plans (meetings 2-4 times annually)

We continue with earlier good practices and collect new ideas continuously from companies!



**ENERGY EFFICIENCY
AGREEMENTS**

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- EU Emissions Trading Scheme
- Energy taxation
- Electricity market

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