



INSTITUTE OF ENERGY
FOR SOUTH-EAST EUROPE

Energy Efficiency Framework in Action

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Investing in Energy Efficiency

IENE Conference 24 May 2018

Discovering Energy Efficiency

- ▶ Energy Efficiency in Greece was a relatively unheard of term before the Economic Crisis
- ▶ Rising energy costs - Falling available income
- ▶ The public institutions, the scientific community and the public were unprepared but quick to adapt
- ▶ **Energy Efficiency in an interdisciplinary scientific and technical field**



Energy Efficiency Stakeholders

- ▶ Government and Public Institutions
- ▶ Infrastructure
- ▶ Companies
- ▶ Industry
- ▶ Transportation including Shipping
- ▶ Residential buildings
- ▶ Non-building built environment (urban spaces, rural areas)



Hellenic Legislative Framework related to EE

- ▶ Past Technical /Engineering Framework (Energy Design and Studies)
- ▶ Building Regulations (GCR, BR, NCR, Law 4495/2017)
- ▶ Various official Specifications and Standards(TEE 1986, KENAK, ELOT, Eurocodes, EN, ISO etc.)
- ▶ Sector-specific legislation (Hospitality, Shipping, Agriculture etc.)
- ▶ Environmental regulatory framework (Emissions, waste)
- ▶ International Management Standards (14001, 50001 etc.)
- ▶ Various Certification Bodies and relative Standards(ASHRAE, GBC, Passive House Institute, BRE, WELL Institute etc.)

Energy Efficiency-specific Legislative Framework

- ▶ EU Directive 2010/31 on Buildings' Energy Performance - Hellenic Law 4122/2013
- ▶ EU Directive 2012/27 on Energy Efficiency - Hellenic Law 4342/2015
- ▶ [Ecodesign and Energy Labeling]



What is the Legislation about

1. An annual reduction of 1.5% in national energy sales
2. Energy efficient renovations to at least 3% of buildings owned and occupied by central governments per year
3. Mandatory energy efficiency certificates accompanying the sale and rental of buildings
4. Minimum energy efficiency standards and labeling for a variety of products such as boilers, household appliances, lighting and televisions (ecodesign)
5. The preparation of National Energy Efficiency Action Plans every three years by EU countries
6. The planned rollout of close to 200 million smart meters for electricity and 45 million for gas by 2020
7. Large companies conducting energy audits at least every four years
8. Protecting the rights of consumers to receive easy and free access to data on real-time and historical energy consumption

How are we performing (1 / 2)

1. Building Energy Performance Legislation (2013)

- ▶ The Building Energy Performance Regulation has proved to be very effective
- ▶ Has been implemented extensively and produced rich statistical results
- ▶ Comparative tool
- ▶ Low quality audits and shallow analysis
- ▶ Useful for public/EU funding initiatives (Exikonomo I+II, Municipality scale programmes etc.)
- ▶ Very few incentives for EE measures implementation

How are we performing (2/2)

2. Energy Efficiency Legislation (2015)

- ▶ There is significant delay in the implementation of EE Directive
- ▶ The vast majority of state and government buildings are still highly energy inefficient
- ▶ Funding for state property energy renovation is low and often mismanaged
- ▶ Most large companies are still either unaware or confused about the Energy Audits and their impact
- ▶ Companies have too many and complex legal obligations and too few resources to follow EE initiatives

Energy Efficiency in Greece

Positive SWOT Analysis

Weaknesses

- ▶ FUNDING!
- ▶ Lack of EE experience
- ▶ Financial Tools (maturity)
- ▶ Complex Legislation and slow adaptation

Strengths

- ▶ Positive stance
- ▶ High quality Scientific and Technical background
- ▶ Competitive attitude (pride)
- ▶ Tourism and Shipping Sectors

Energy Efficiency in Greece

Positive SWOT Analysis

Threats

- ▶ National economy still fragile
- ▶ Huge tax burdens and few incentives for companies
- ▶ Vested interests
- ▶ Geopolitical instability shifts priorities

Opportunities

- ▶ Use of EU financial tools
- ▶ Attract high quality EE investments
- ▶ Tax incentives
- ▶ Bold attitude - political will

You have seen my descent, now watch my rising (RUMI)

- ▶ We are not determined enough - much more effort is required
- ▶ Energy poverty, environmental quality, climate resilience energy security are only few of the major issues to address
- ▶ Serving is more inspiring and effective than preaching
- ▶ We all sink or we all rise together



Thank you!