



ENERGY EFFICIENCY AGENCY
- Bulgaria

POLICY for ENERGY EFFICIENCY
IMPLEMENTATION and INTEGRATION of
EU DIRECTIVES IN BULGARIA

10 – 15 June 2007 - Beijing , CHINA

STATE POLICY

MAIN ISSUES :

- High efficiency in all energy production, transmission, distribution and consumption processes ;
- Encouragement of EE investments at end consumers .

STATE POLICY

- CONDUCTED BY MINISTER OF ECONOMY AND ENERGY;
- THE EEA EXECUTIVE DIRECTOR ROLE:
 - TO PREPARE, MONITOR, COORDINATE AND SUBMIT TO THE MINISTER OF ECONOMY AND ENERGY THE NATIONAL LONG TERM AND SHORT TERM EE PROGRAMMES , TOGETHER WITH THE CENTRAL AND REGIONAL BODIES AND OTHER STATE INSTITUTIONS ;
 - TO SUBMIT ANNUAL REPORTS ON EE STATUS.

STATE POLICY

- Branch, Regional and Municipal EE Programmes are worked out and implemented by central and territorial executive authority and are submitted to the Energy Efficiency Agency;

- 6 ECONOMIC PLANNING REGIONS
 - SOFIA, PLOVDIV, BOURGAS, VARNA, ROUSSE, VIDIN
 - Covers 28 districts and
 - 264 Municipalities;

 - 28 District EE Councils were established in 2004

ECONOMIC REGIONS IN BULGARIA



ENERGY EFFICIENCY ACT

Adopted by the 39th National Assembly, 19February 2004.

- THE EE ACT REGULATES THE PUBLIC RELATION, RELATED TO THE IMPLEMENTATION OF STATE POLICY ON EE IMPROVEMENT.
- BASED ON ENERGY STRATEGY OF BULGARIA SINCE 2002.

ENERGY EFFICIENCY ACT

TARGETS

- TO DEFINE EE AS NATIONAL PRIORITY WITHIN ECONOMIC POLICY OF THE GOVERNMENT ;
- TO DEFINE STATE INPUTS AND SUPPORT FOR EE IMPLEMENTATION ;
- TO CREATE NATIONAL, LEGAL AND FINANCIUAL MEANS FOR SUCCESSFUL EU INTEGRATION .

ENERGY EFFICIENCY ACT

LEGAL SOURCES

- EU ENERGY CHARTER ;
- KYOTO PROTOCOL ;
- EU MEMBER STATES LEGAL ACTS ;
- EU DIRECTIVES FOR RATIONAL ENERGY USE .

ENERGY EFFICIENCY ACT - 4 ORDINANCES

FOUR SECONDARY ACTS UNDER EE ACT :

1. ORDINANCE FOR ENERGY PERFORMANCE OF SITES ;
2. ORDINANCE FOR BUILDINGS CERTIFICATION ;
3. ORDINANCE FOR EE AUDITS ;
4. ORDINANCE FOR CONDITIONS AND ORDER FOR REGISTERING PERSONS, DELIVERING AUDITS ON EE AND WAYS TO RECEIVE INFORMATION .

1. NATIONAL LONG TERM EE PROGRAMME 2005 - 2015

- National Long Term Energy Efficiency Programme - as EE Strategy ;
- Adopted by Council of Ministers ;
- Indicative National Target 1 % / year reduction of GDP energy intensity = 66 ktoe(764 GWh)/year.

2. NATIONAL SHORT TERM EE PROGRAMME 2005 - 2007

- Adopted by CM ;
- 552 projects ;
- 135 mln Euro ;
- 140 000 toe ;
- 600 000 t **CO**₂ saved .

3. NATIONAL STRATEGY FOR ISOLATION OF BUILDINGS 2005-2020

- Adopted by CM in 2005 ;
- 508 state owned buildings – 75 MLN Euro ;
- 3 454 municipal buildings – 5.2 MLN Euro ;
- 650 981 private buildings 255 MLN Euro ;
- 336 MLN Euro state subsidy .

4. NATIONAL EE PROGRAMME IN BUILDING STOCK 2006

RESULTS

- 1 Mln Euro state subsidy ;
- 250 buildings with EE audits ;
- 163.5 GWh/ year foreseen savings ;
- 8.2 Mln Euro / year foreseen economy ;
- 59 800 t / year saved **CO**₂.

5. NATIONAL TARGETED EE PROGRAMME IN BUILDING STOCK 2007

- Adopted by MEE ;
- 1.64 Mln Euro state subsidy ;
- 110 state owned buildings with EE audits ;
- 31 042 MWh/year expected savings .

6. SMES EE AUDITS PROGRAMME 2006

- Adopted by CM – in process ;
- 0.51 Mln Euro state subsidy ;
- 35 SMEs included in audit procedure ;
- 5 received audit reports by the current moment ;
- Final date - september 2007 .

7. NATIONAL EE TRANSPORT PROGRAMME

- Adopted by Ministry of Transport;
- 14 projects ;
- 35.8 mln euro;
- 5 pay back period;
- expected state subsidy.

ENERGY EFFICIENCY FUND

(Chapter 4 , EE Act)

- Bulgarian EE Fund established to promote EE Development (revolving tool)
- Public Private Structure – Governing Board , Executive Director , staff
- The Fund provides :
 - Low interest Loans for investment projects both in public and private sectors ;
 - Guaranties

ENERGY EFFICIENCY FUND

- The Fund CAPITAL is \$ 17 million
 - \$ 10 million by GEF – WB
 - \$ 1.5 million by BG GOVERNMENT
 - \$ 5.5 million by other donors
- 2006 – 17 projects – 3.5 million BGL
(1.8 MEUR)
- 2007 – 18 projects – 6.4 million BGL
(3.27 MEUR)
up to now

KOZLODUI FUND - KIDSF

- The Fund is established in connection with decommissioning of 4 Units in NPP Kozlodui ;
- The Fund
 - provides GRANTS (50 %) for EE Projects in Public buildings, Hospitals, Schools, etc.
 - 5 Mln Euro - first transfer ;
- 36 EE Projects completed in Hospitals , Schools , Cultural Institutions

RESULTS :

- 5 Mln Euro investments ;
- 0,68 Mln Euro / year savings ;
- 4 185 t / year CO₂ savings ;
- 7,44 Years payback period .

RESIDENTIAL EE & RES Credit Line

Credit Line = EBRD`s Credit + KIDSF`s GRANT

- 4 Trade Bulgarian Banks
- Total 60 MEUR - 50 MEUR Credit
- 10 MEUR GRANT
- 30 000 Small EE Projects - up to 7 500 EUR
- 20 % GRANT for EE&RES projects - Household appliances, Solar , Wind , Hydro , Biomass , Geothermal , Biogas Systems
- Provision of Technical Assistance

INDUSTRIAL EE & RES Credit Line

Credit Line = EBRD`s Credit + KIDSF`s GRANT

- 7 Bulgarian Trade Banks
- Total 60 MEUR - 50 MEUR Credit
- 10 MEUR GRANT
- Small EE Projects - up to 1,5 MEUR
- 7,5 % GRANT for EE Projects
- 20 % GRANT for RES projects - Solar , Wind , Hydro , Biomass , Geothermal , Biogas Systems
- Provision of Consulting Assistance

NATIONAL TRUST FUND (EcoFUND)

- Co-financing for EE&RES Projects (debt to a nature)
- Priority Area - Reduction of greenhous gas emmissions
- Provides :
 - GRANT up to 30 % total project costs
 - LOAN up to 50 % total project costs
- Eligible candidates : - budget organozations , municipalities , companies , NGO , etc..

EU Directives Integration - 36

- Directive 2006/32/EC of EP and of EC of 05 April 2006 on energy end-use efficiency and energy services - EEAP's 2007, 2011, 2014 - 9% national indicative target
- Directive 2002/91/EC of EP and of EC of 16 December 2002 on the energy performance of buildings (EPBD)
- Directive 2004/8/EC of EP and of EC of 11 February 2004 on the promotion of cogeneration based on a useful heat demand - preferential prices

EU Directives Integration - 36

- Directive 2001/77/EC of EP and of EC of 27 September 2001 on the promotion of electricity produced from RES - incentives
- Directive 2002/31/EC of 22 March 2002 on the energy labeling of household airconditioners
- Directive 2002/40/EC of 08 May 2002 on the labeling of household electric ovens
- Directive 2000/55/EC of 18 September 2000 on EE requirements for ballasts for fluorescent lighting

EE MEASURES

- Management on EE
- EE services and new technology implementation
- Assessment on EE of sites
- Buildings EE audits and certification
- EE audits in industrial systems

EE STUDIES, AUDITS, CERTIFICATION

■ 5 476 Buildings above 1 000sq m gross floor area

- 65,9 % municipal

- 34,1 % state

obliged to carry out EE audits and certification ;

■ 357 Industrial Systems above 3 000 MWh/year

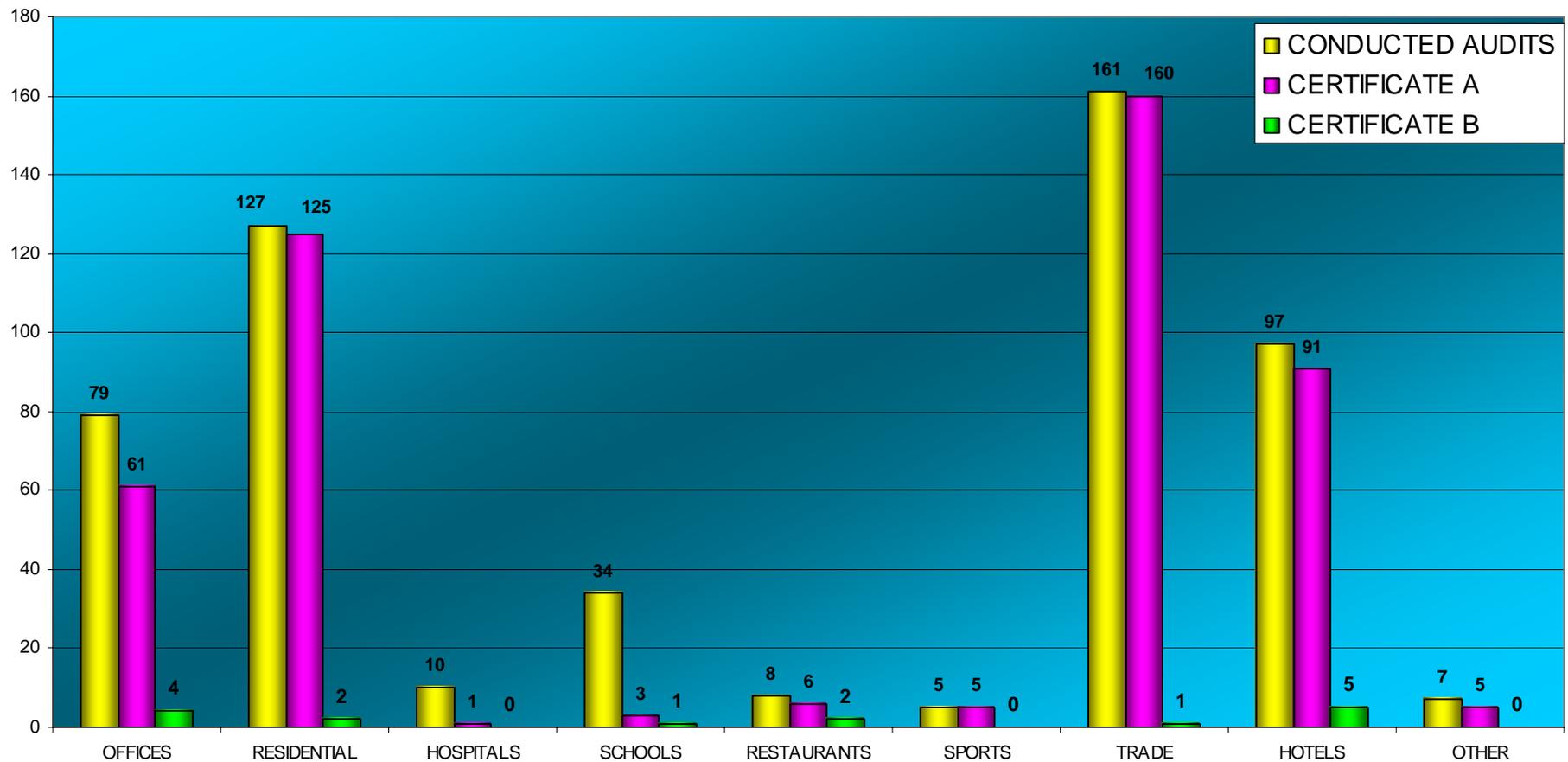
obliged to carry out EE audits .

AUDITS AND CERTIFICATION OF BUILDINGS

Buildings with detailed audits	528
CERTIFICATE "A"	457
CERTIFICATE "B"	15
FORESEEN SAVINGS – MWh/year	25 419
FORESEEN ECONOMIC EFFECT – Mln BGL/YEAR.	2 . 05

AUDITS AND CERTIFICATION OF BUILDINGS

CONDUCTED AUDITS AND ISSUED CERTIFICATES
OF BUILDINGS IN BULGARIA

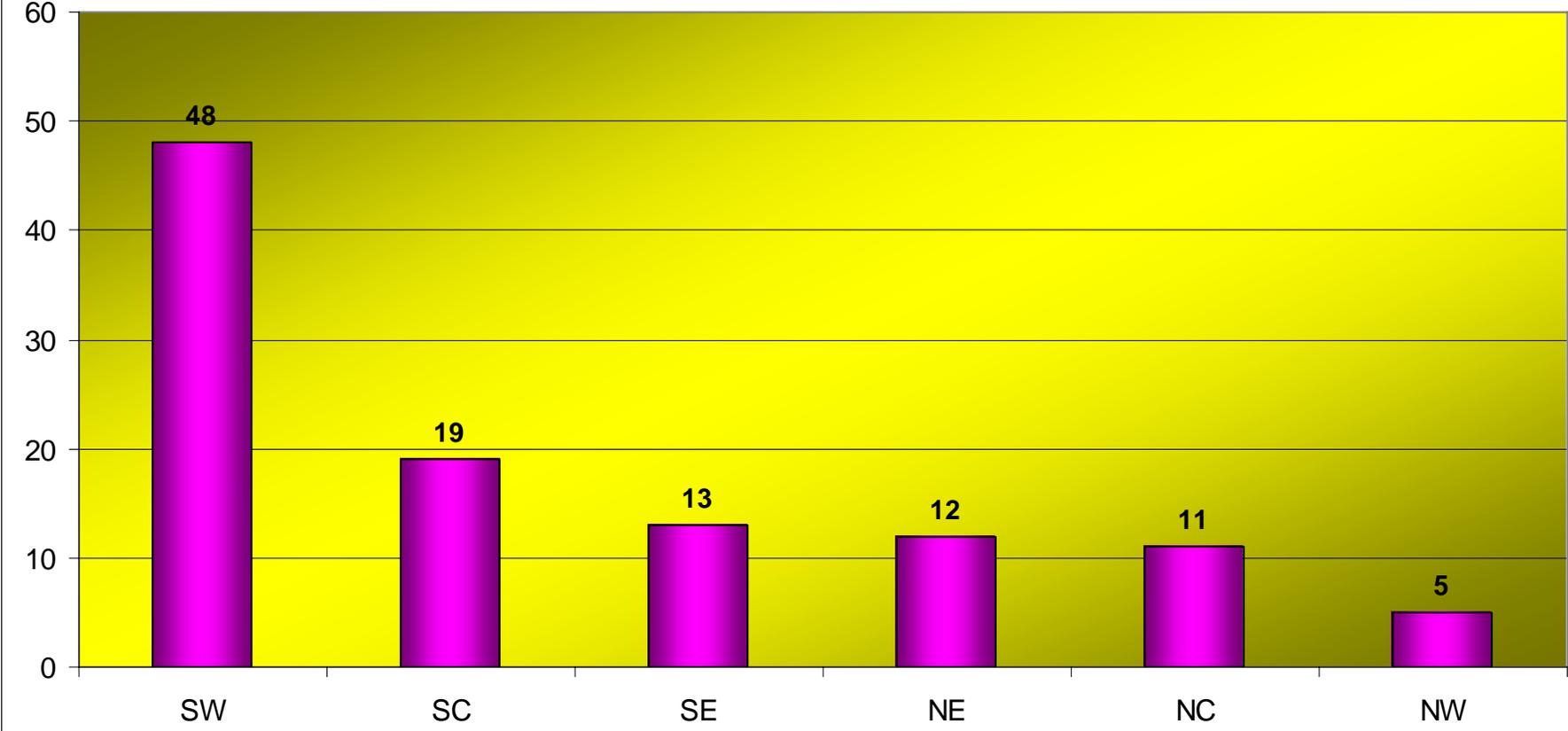


INDUSTRIAL SYSTEMS AUDITS

SECTOR	SITES AUDITED	ANNUAL ENERGY CONSUMPTION	ANNUAL SAVINGS OF FUELS AND ENERGY	MONEY SAVED DUE TO EE MEASURES	INVESTMENTS
	NUMBERS	MWh/year	MWh/year	MLN BGL/YEAR.	MLN BGL/YEAR
AGRICULTURE	1	1242.5	510.0	0.05	0.28
FOODS	1	11 006.5	2 776.5	0.17	0.67
TEXTILE	1	7 576.6	1 929.1	0.48	0.79
METAL PRODUCTS	4	53 920.5	21 310.4	1.46	3.79
TOTAL	7	73 746.1	26 526.0	2.20	5.50

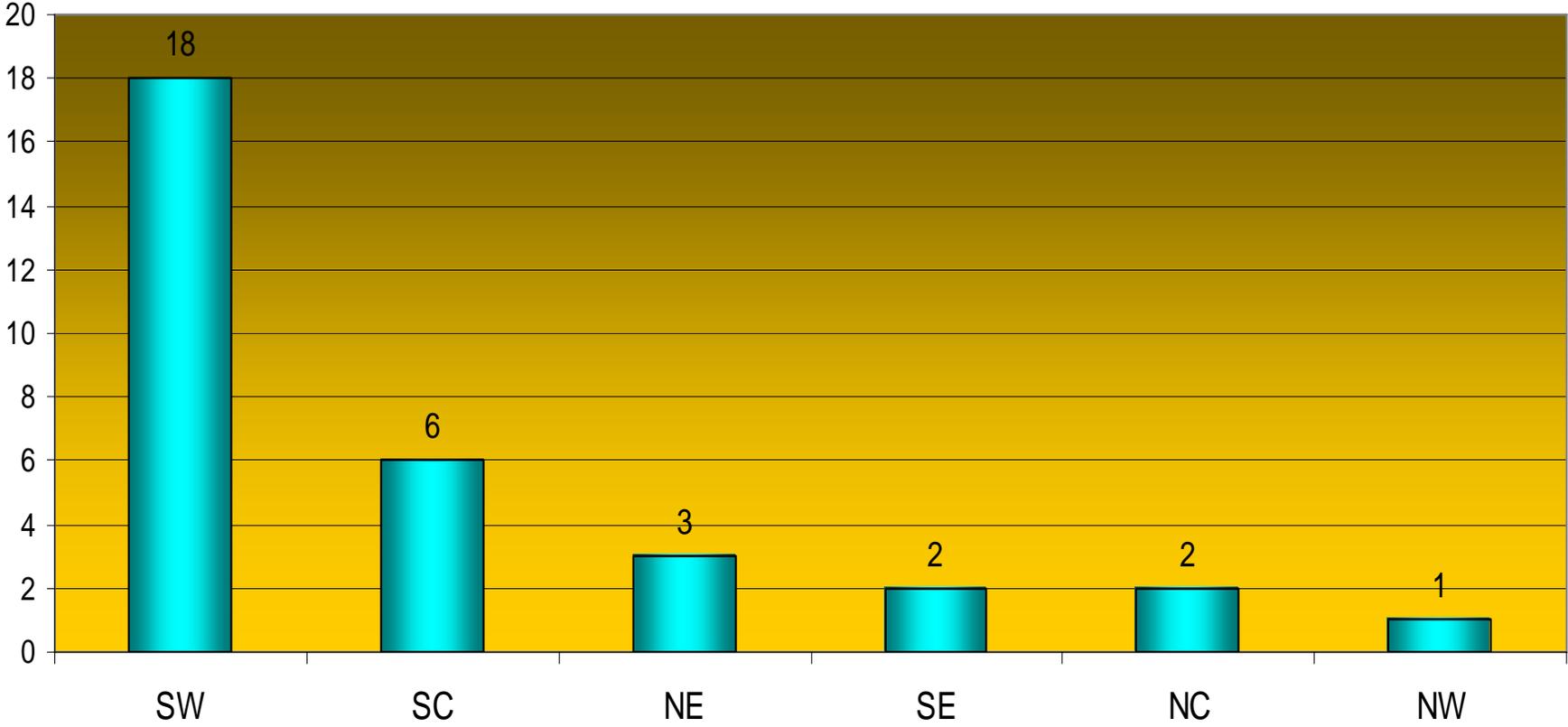
PUBLIC REGISTER ON BUILDING CERTIFICATION

REGIONAL ALLOCATION OF FIRMS FROM THE PUBLIC REGISTER ON BUILDING CERTIFICATION (TOTAL NUMBER OF FIRMS - 108)



PUBLIC REGISTER ON EE AUDITS OF INDUSTRIAL OBJECTS

REGIONAL ALLOCATION OF FIRMS FROM THE PUBLIC REGISTER ON
EE AUDITS OF INDUSTRIAL OBJECTS (TOTAL NUMBER OF FIRMS - 32)



THANK YOU FOR YOUR ATTENTION

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