



# BUILD UP SKILLS

ENERGY TRAINING FOR BUILDERS



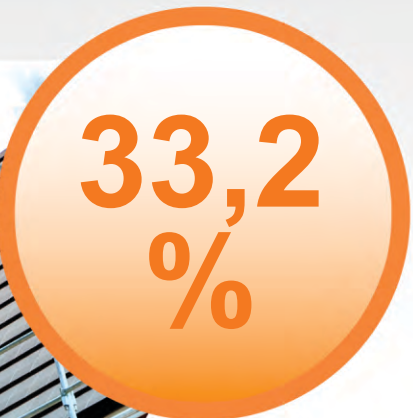
# BUILD UP SKILLS MACEDONIA

## National status quo analysis

[www.buildupskills.mk](http://www.buildupskills.mk)

### AVERAGE SPECIFIC ENERGY

The average specific energy consumption in the public buildings is 214 kWh/m<sup>2</sup>



### POTENTIAL

The potential of savings has been estimated at 33%, and 95.2 million EUROS are required for its implementation

### ENERGY COSTS

Average energy costs amount 18.7 EURO per 1m<sup>2</sup> heated area.



### TOTAL HEATING AREA

Heating area in all public buildings. But Financial Plan for implementation of the National Program for EE in the public buildings in the Republic of Macedonia 2012-2018 refers to 2.6 million m<sup>2</sup> of area of public buildings.



### ENERGY SAVINGS

By 2020, the energy savings anticipated are 237.31 ktoe or 14.5% compared to the average consumption in the period of 2002-2006  
By 2018 at least 9% savings from the average annual consumption of final energy in the 2002-2006 period.

### Households

28,67 Mio m<sup>2</sup>  
78% of buildings (1946-1970 )  
564.296 households  
698.143 dwellings  
5.000 - 5.500 dwellings/year  
29.2% in final energy cons.  
52.6% electric energy consumption (mostly for heating)

### Public buildings

59% - before 1970  
6,5 Mio sqr m. (5,7 heated)

### Needs for reconstruction according EU recommendations



828.000 m<sup>2</sup>/year (private building stock)

325.000 m<sup>2</sup>/year (public buildings)

### National Qualification Occupations that needs EE and RES skills

Bricklayers; Carpenters and joiners; Roofers, Plasterers; Insulation workers; Glaziers, Finishers of Interior Walls and Floors; Thermal insulation worker; Electrician for installation and equipment; Electricians in buildings; HVAC installers and craftsmen.

9.800 - 16.000 workers to be trained  
1.500 - 2.000 workers trained/year  
300 € per worker  
150 trainers

### Required number of workers

12.400 - workers in reconstruction  
40.000 - workers for new buildings

2 TOTAL: 52.400 workers

3 43.600 in the moment  
9.000 NEW workers

