



CENTRAL & EASTERN EUROPEAN
ENERGY EFFICIENCY FORUM

13–16 JUNE 2018

SEROCK, POLAND



BULGARIAN CONSTRUCTION CHAMBER

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Energy Efficiency of Multi-Family Residential Buildings National Programme in Bulgaria 2015-2017 (1)

× **Main characteristics:**

- ✓ *Decentralization Implementation Model*
- ✓ *Eligible buildings*
- ✓ *Eligible activities*
- ✓ *Territorial range*
- ✓ *Financial resource*
- ✓ *Implementation period*



Energy Efficiency of Multi-Family Residential Buildings National Programme in Bulgaria 2015-2017 (2)

× **Results:**

- ✓ *Renovated – multi-family residential buildings – **50***
- ✓ *Affected households – **1093***
- ✓ *Expected energy savings per year - **8 488 575 kWh**
(40-60%)*
- ✓ *Expected savings of CO2 emissions (per year) - **6 672 tones***
- ✓ *The **model** for **voluntary association** of condominium owners for the purposes of renovation and future maintenance and management of **common areas** has been tested*



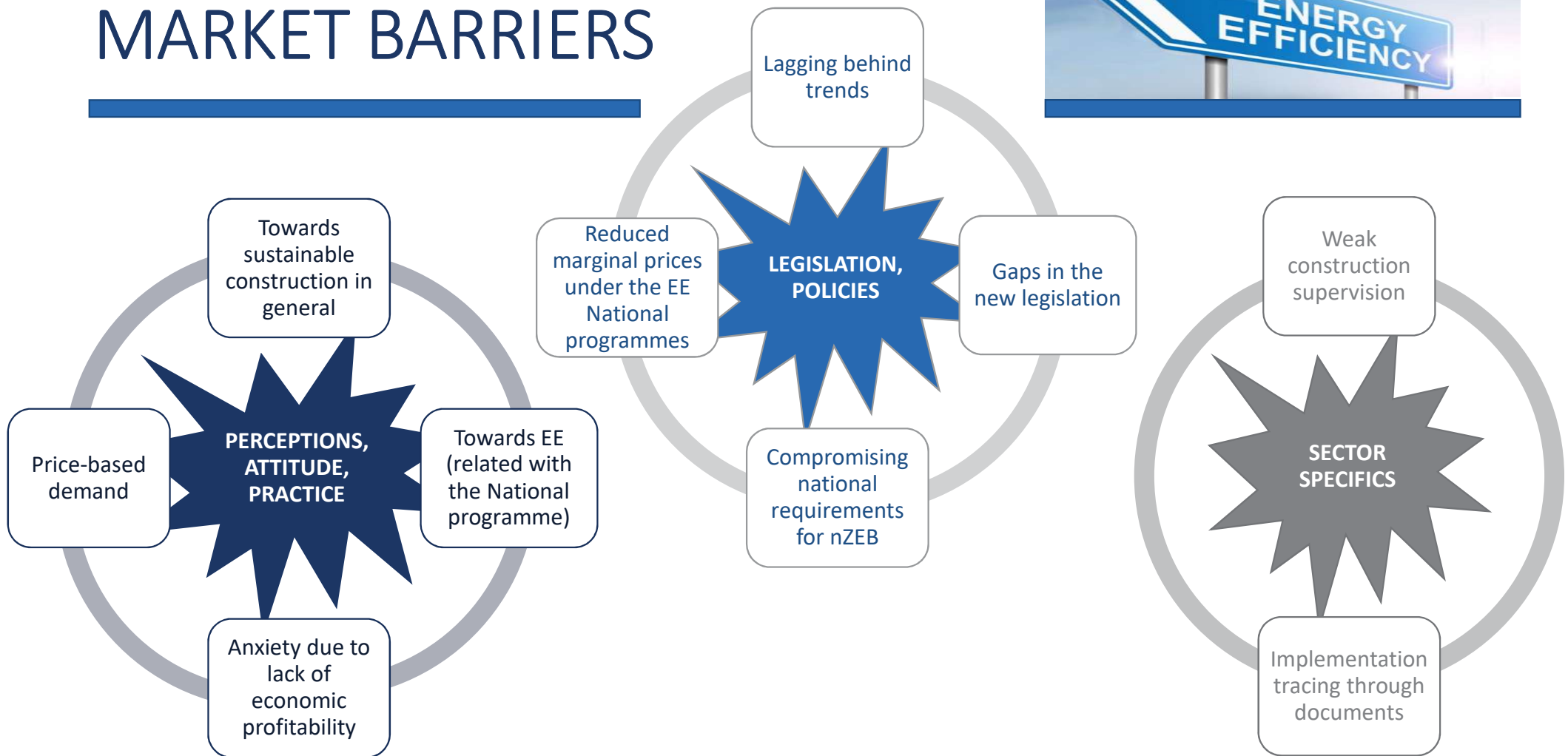
Energy Efficiency of Multi-Family Residential Buildings National Programme in Bulgaria 2015-2017 (3)

× **Results:**

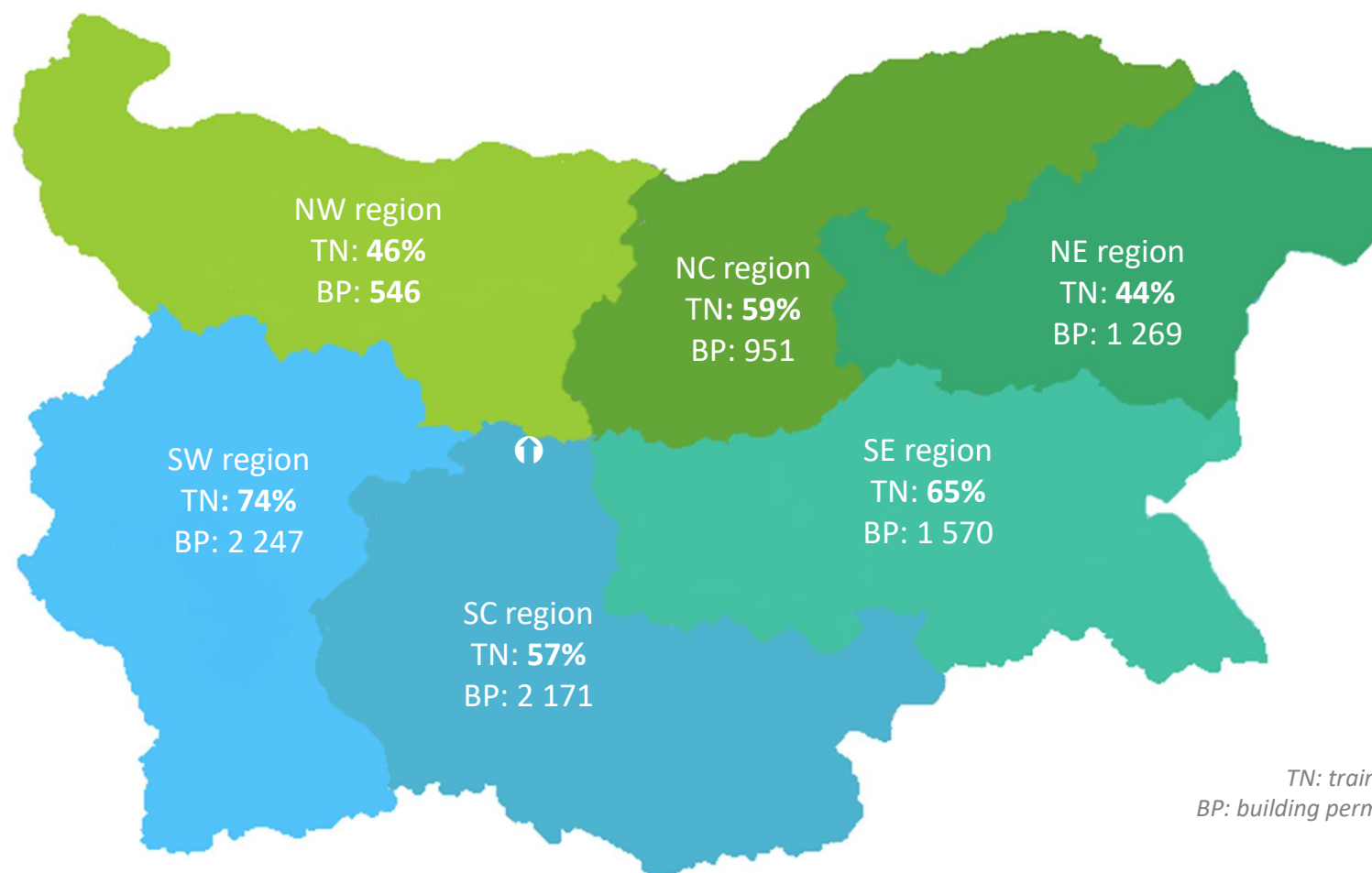
- ✓ A technical model for **renovation of an entire multi-family** residential building has been tested
- ✓ A model for the preparation and implementation of **Renovation Programmes of small range**
- ✓ **Change of attitudes** and overcoming skepticism
- ✓ A model for **complex energy renovation** of residential buildings by introducing **RES** has been tested on **3 buildings in Sofia**



MARKET BARRIERS



TRAINING NEEDS (1)

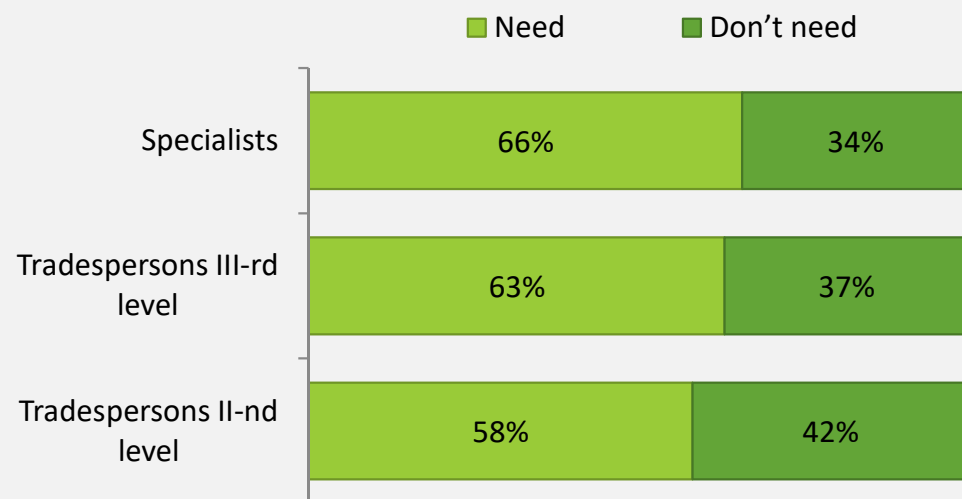


Legend:
TN: training needs (% , base: total – 403)
BP: building permits issued in 2015 (volume, NSI)

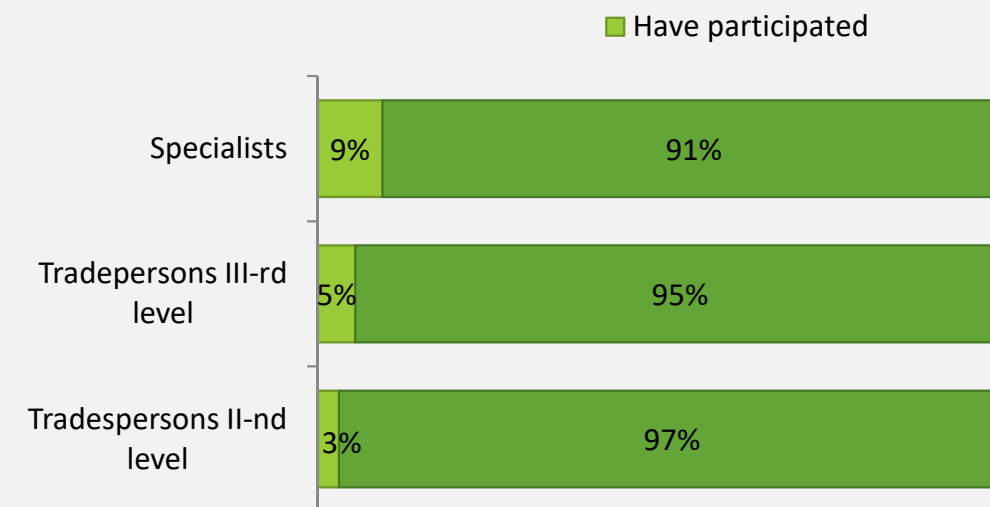
TRAINING NEEDS (2)



Need for trainings on EE, nZEB and integrated RES by target groups



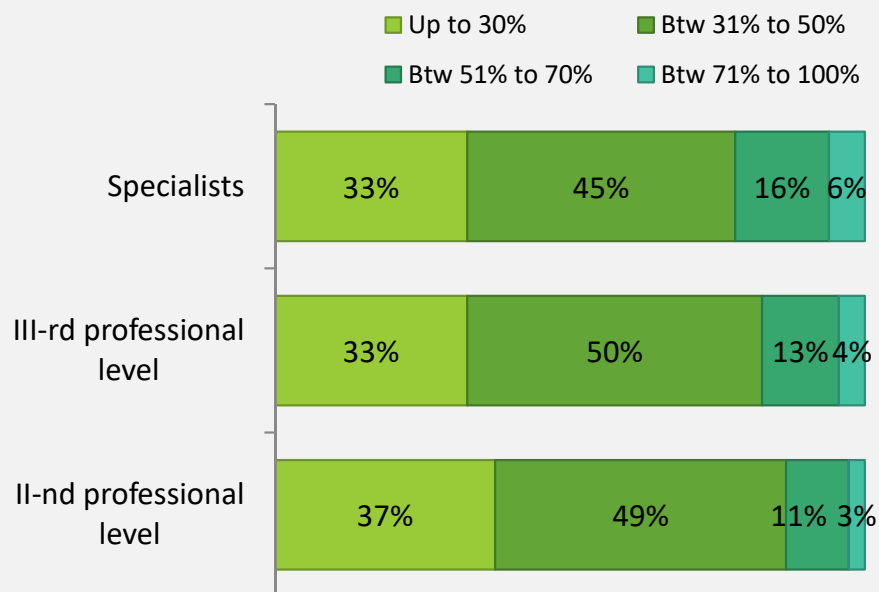
Participation in trainings on EE, nZEB and integrated RES by target groups



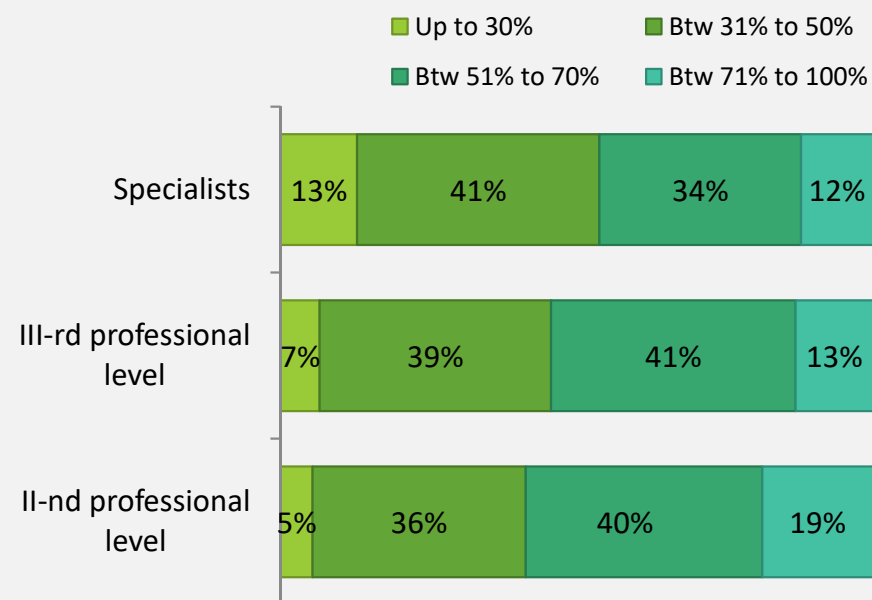
THEORY & PRACTICE



Ratio between theory and practice – THEORY SHARE



Ratio between theory and practice – PRACTICE SHARE



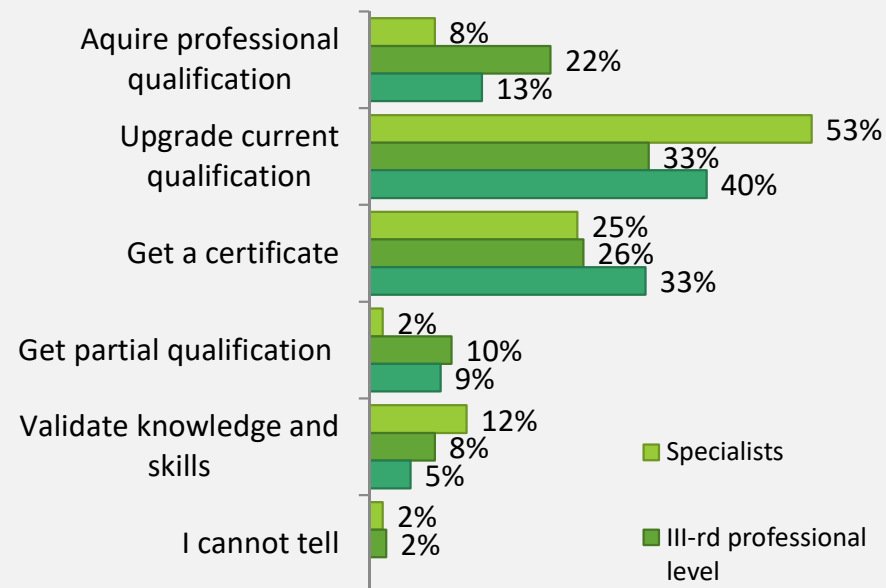
Base: indicated that they would participate in trainings, specialists – 132, 3rd professional level – 46, 2nd professional level – 75

TRAINING RESULTS



- ✓ *45% of the respondents expect to **upgrade** or expand their **professional qualification** as a result the training and to acquire **new expertise**.*
- ✓ *The **validation of knowledge and skills** is not a high priority for the respondents in the survey, even though **more than 50% of the specialists and tradespeople are interested in this option**.*

Training expectations



Base: indicated that they would participate in trainings, specialists – 129, tradespeople 3rd professional level – 51, tradespeople 2nd professional level – 82

Key Factors for Success & Conclusions

× **5 key preconditions for success of the center:**

- ✓ *Quality of the teaching staff*
- ✓ *Relevant practical training topics*
- ✓ *Practically oriented programs*
- ✓ *Demonstration capabilities and flexible presentation of information*
- ✓ *Recognition of the center*

× **Additional recommended preconditions:**

- ✓ *Excellent first impression (flying start)*
- ✓ *Lobbying for changes in the legislation and introduction of requirements for training of employees working in the field of sustainable construction*
- ✓ *Establishing and developing partnerships with educational institutions as well as companies from the construction sector and manufacturers*



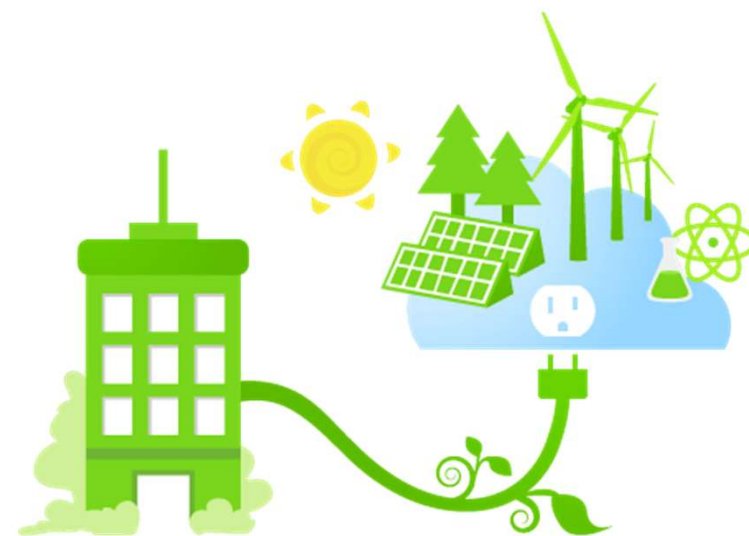
New Housing Strategy 2018-2030

- × Achieving a sustainable housing sector is the strategic goal of the new housing **strategy** by the Ministry of Regional Development and Public Works until 2030
- × The government has an ambition to renovate nearly **42,000 residential buildings** in the **next 25 years**. By comparison, around 1000 buildings have been rehabilitated throughout the country for the past 2 years
- × The **National Renovation Program in Bulgaria** will continue, but with **co-financing from the owners** in the **renovation** activities
- × Recently, the regional ministry has spread a poll, according to which nearly 1/5 can finance up to 25% of the cost, and every 10th may allocate between 26 and 50%. **About 30% say they can give up to 2000 BGN.**



New Housing Strategy 2018-2030

- × A **long-term horizon** of at least 25 years, the inclusion **RES inclusion** and an **adequate monitoring** mechanism are among the priorities for the continuation of the national rehabilitation program
- × The **strategy** provides for the technical passporting of all **buildings** in the country.
- × **Prioritization of investment in public funds, tax changes, creation of a fund with sustainable and predictable sources of assistance to citizens and municipalities, as well as the construction of an information system for housing data in Bulgaria** are among the priorities set in the strategy.



New Housing Strategy 2018-2030

× ***Potential Financial Mechanisms:***

✓ ***Option 1: STATE***

- 100% grant payment (expected results: 100-150 buildings per year)

✓ ***Option 2: STATE & OWNERS***

- Example: 60/40; 70/30; (expected results: 200-250 buildings per year)

✓ ***Option 3: STATE, MUNICIPALITIES & OWNERS***

- Example: **40/30/30**; (expected results: 300-350 buildings per year)





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THANK YOU!



Good practices:
<http://www.mrrb.government.ba/ba/energijna-efektivnost/nacionalna-programa-za-ee-na-mnogofamilni-jilistni-sgradi/dobri-praktiki/>