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Support market champions
More info and guidance,
TOWARDS A DEFINITION AND ROADMAP
IMPLEMENTING NEARLY ZERO-ENERGY BUILDINGS (nZEB) IN BULGARIA –
To meet current sectoral and overall EU climate & energy goals
To align with EPBD cost-optimality requirement
To bridge the gap between (nearly) zero CO₂ and zero energy buildings
To deal with temporal and local disparities of renewables
To balance between energy efficiency and renewable energy supply
To have transferability to varied climate and building types
To have flexible and open nZEB definition, avoiding the lock-in effect
To consider single building vs. groups of buildings
To include or not the household electricity for appliances
To have or not a life-cycle approach

TOWARDS A SUSTAINABLE nZEB DEFINITION
nZEB PRINCIPLES:
SET CLEAR BOUNDARIES IN THE BUILDING’S ENERGY FLOW...
- where the quality of energy need is defined
- where the renewable energy share is measured or calculated
- where the primary energy and CO₂ emissions are calculated
nZEB_THRESHOLDS
- for the maximum allowable energy need (proposal: the threshold and local corridor between C-O and BAT)
- for the minimum share of renewables demand (proposal: 30%<>90%)
- for the overarching primary energy demand and CO₂ emissions (proposal: <3kgCO₂/m²/yr)

10 CHALLENGES TO OVERCOME FOR A ROBUST AND PRACTICAL nZEB DEFINITION
POLICY
To meet current sectoral and overall EU climate & energy goals
To align with EPBD cost-optimality requirement
TECHNICAL
To bridge the gap between (nearly) zero CO₂ and zero energy buildings
To deal with temporal and local disparities of renewables
To balance between energy efficiency and renewable energy supply
To have transferability to varied climate and building types
To have flexible and open nZEB definition, avoiding the lock-in effect
BEYOND EPBD
To consider single building vs. groups of buildings
To include or not the household electricity for appliances
To have or not a life-cycle approach

TOWARDS COMMON nZEB PRINCIPLES AT THE EU LEVEL
ESTIMATED MACRO-ECONOMIC BENEFITS OF nZEB IMPLEMENTATION BETWEEN 2020-2050 IN BULGARIA, POLAND AND ROMANIA
CO₂ savings: 47 - 5.3 million CO₂ equivalent
Energy savings: 15.3 - 17 TWh
Gradual improvement for meeting proposed nZEB definitions
3 reference buildings
Simulation of energy performance, renewable energy and CO₂ emissions
Economic implications

For more information please visit our website at www.bpie.eu
and discover our new Data Hub for the Energy Performance of Buildings on www.buildings-data.eu