

Introduction of MVP in Greece

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CRES

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Alternative measures

- *18 energy efficiency measures were designed for the period 2014-2020 in order to achieve the energy saving target.*
- *5 energy efficiency measures have been reported until 2015.*

Energy Efficiency Obligation Scheme

- *Introduction of the EEOS from the beginning of 2017 until 2020.*

Buildings of residential and tertiary sector

- **Measurement:** Scaled method through EPCs
- **Monitoring:** EPC registry
- **Control & Verification:** EPC registry & YPEN's responsible authority
- **Reporting:** Annual basis

Passenger cars

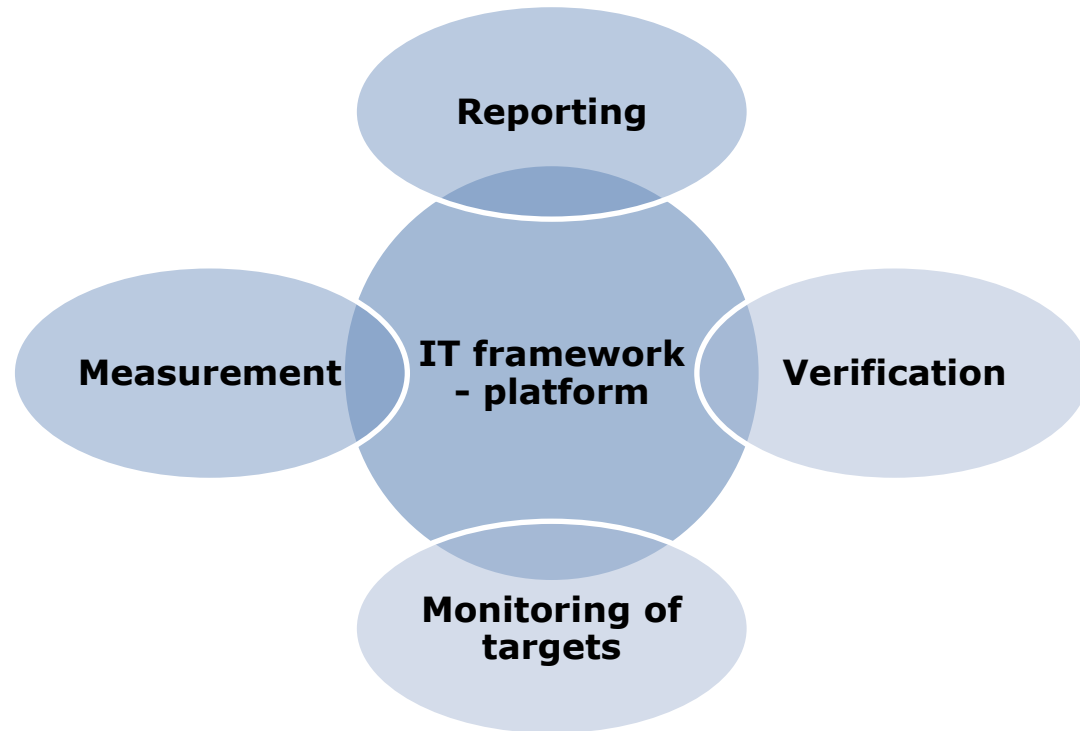
- **Measurement:** Deemed method
- **Monitoring:** Submitted documentation from Ministry of Infrastructure and Transport
- **Control & Verification:** Ministry of Infrastructure and Transport
- **Reporting:** Annual basis

Metro

- **Measurement:** Deemed method
- **Monitoring:** Data for validated tickets from passengers using metro by Attica Metro
- **Control & Verification:** Attica Metro
- **Reporting:** Annual basis

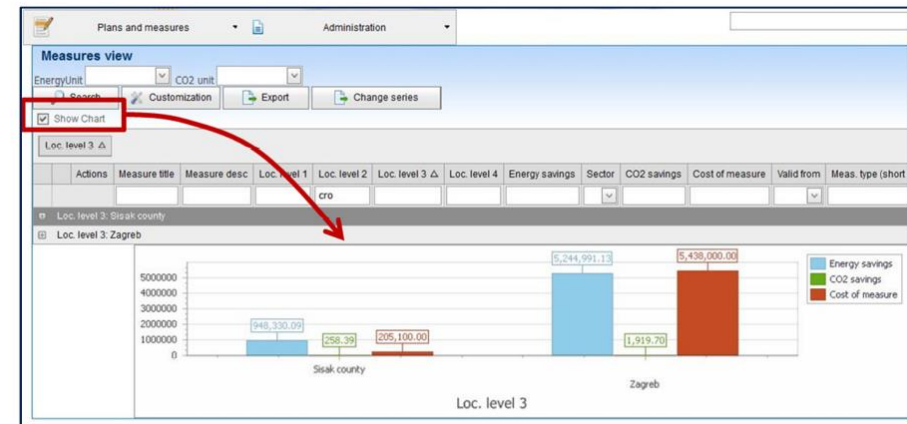
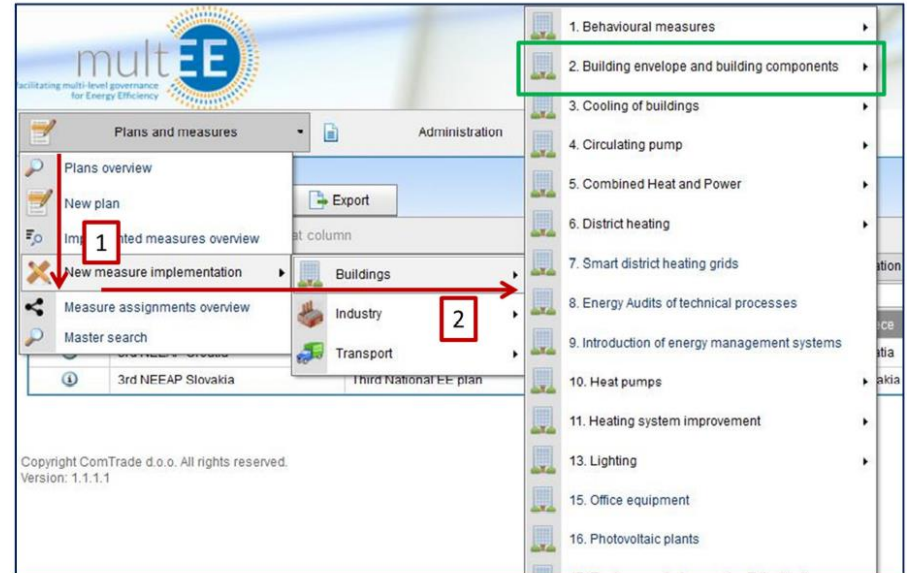
YPEN has undertaken the coordination and administration of the MRV with the technical collaboration of CRES.

- The **efficient measurement** of the achieved energy savings.
- The **effective control and verification** of the implemented energy efficiency measures.
- The **precise reporting** of the achieved energy savings.
- The **continuous evaluation** of progress towards the established energy efficiency targets.

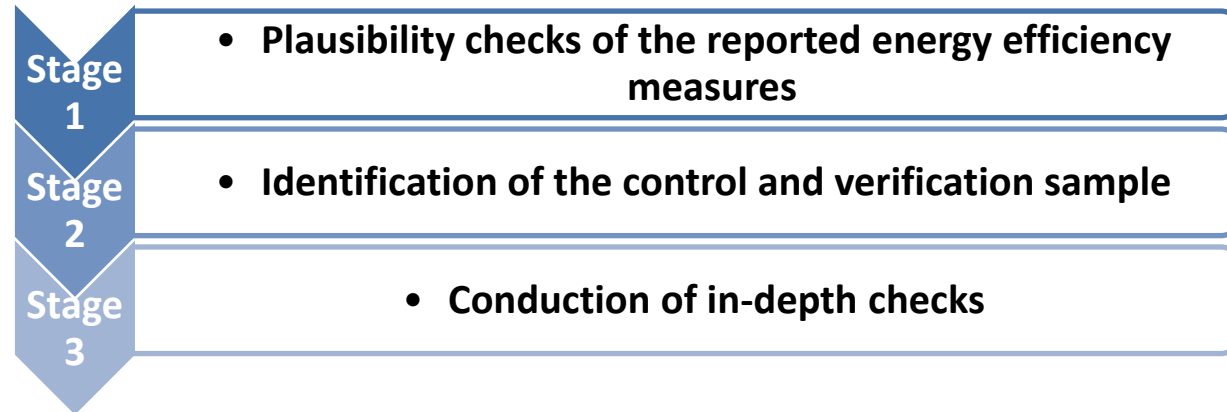


Bottom-up methods for the measurement of the achieved energy savings
BU1: Awareness raising campaigns
BU2: Energy audits for households
BU3: Smart Meters and informative billing
BU4: Energy upgrade of the building envelope in buildings of the residential and tertiary sectors
BU5: Energy upgrade of the existing cooling systems with high-efficient in buildings of the residential and tertiary sectors
BU6: Energy upgrade of the existing heating boilers with high-efficient in buildings of the residential and tertiary sectors
BU7: Production of hot water with solar energy
BU8: Energy audits of technical processes
BU9: Introduction of energy management systems
BU10: Energy efficient lighting in buildings of the residential sector
BU11: Energy efficient lighting in buildings of the tertiary sector
BU12: Efficient lighting in industrial buildings
BU13: Energy efficient street lighting
BU14: Alternative vehicle technologies
BU15: Eco-driving
BU16: Efficiency improvement through use of fuel-savings lubricants and tyres
BU17: White goods
BU18: Office equipment
BU19: Standby killer in households
BU20: Systems for heat recovery in buildings
BU21: High efficient heating circulating pumps
BU22: Improved thermal insulation of warm water tanks
BU23: Thermal insulation of pipes in the heating system
BU24: Installation of thermostatic valves on radiators
BU25: Other measures
BU26: Efficiency improvement through various energy efficiency measures in the transport sector

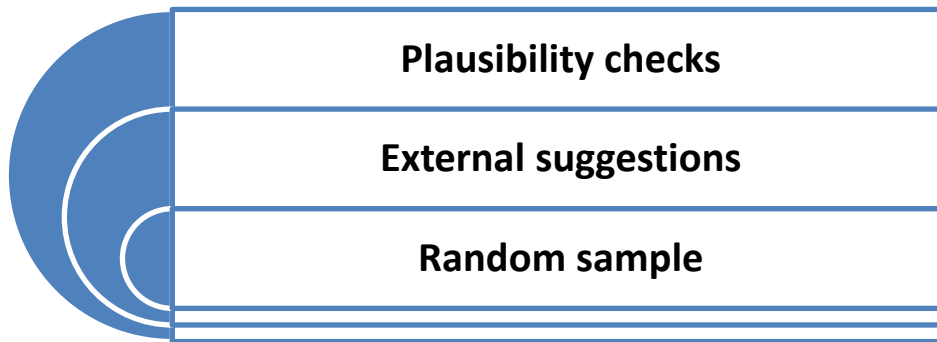
The **multEE Monitoring and Verification Platform (MVP)** allows authorities to consistently measure progress towards energy efficiency targets.



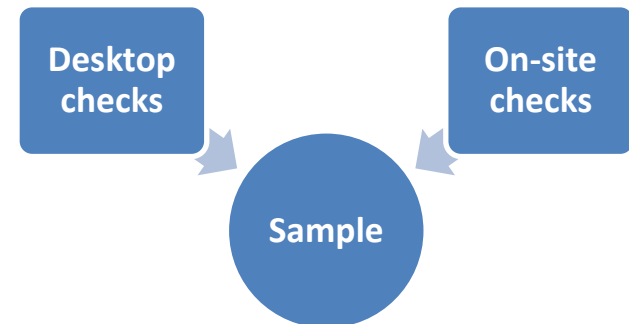
Proposed methodological approach



Stage 2



Stage 3



Thank you for your attention !!!