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# New ITS Project Sustainable Energy Activity in EaP Countries

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# INOGATE New ITS Project



## Implementation of EE Legislation in Bosnia and Herzegovina and some other EnC countries

*By Lejla Uzicanin  
Sustainable Energy Expert*

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# Legal and Regulatory Framework



- Contracting Parties progressing with regard to completion of national legal and regulatory framework but the work is still ongoing.
- Directive on energy performance of buildings is generally recognized as the most complex of all three.
- In order to support the CPs EnC Secretariat launched a “Study on Energy Efficiency in Buildings in the Energy Community” (May 2011-February 2012).

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# National Energy Efficiency Action Plans (NEEAP)



- Obligations to develop NEEAPs
  - 1<sup>st</sup> – **Forward Looking**
  - 2<sup>nd</sup> and 3<sup>rd</sup> – with a review of the previous plan implementation.

## 1<sup>st</sup> NEEAPs

- Uniform reporting template and common guidelines on the level of detail and type of data required in the NEEAPs are not provided for by the Directive.
- Contracting Parties agreed on a common template for the preparation of the 1<sup>st</sup> EEAP, which was prepared under the RES Task Force Mandate.

# Challenges with setting savings targets



- Problems with setting national indicative savings targets and distribute these per sector.
- Statistics! Contracting Parties have had difficulties with the availability of statistics in the Eurostat format for calculating the baseline consumption per sectors. For example:
  - The former Yugoslav Republic of **Macedonia and Montenegro** reports the consumption of commercial and public sector together.
  - In the case of **Serbia**, the reported energy consumption of buildings includes both public and residential buildings,
    - difficult to report measures savings for separate categories.



# SECTORAL COVERAGE IN NEEAPS



- NEEAPS benefited from common template - homogenous and balanced approach.
- Positive impact of technical assistance programs provided by various donors (USAID, GIZ, EC)
- Measures aimed at saving energy in the residential sector, including buildings and equipment a key feature of most NEEAPs.
- Relatively weak focus on the industry and transport sectors in the majority of the NEEAPs

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# NEEAPs – COULD THEY BE BETTER?



- Some NEEAPs of high quality:
  - ✓ linked to energy and energy efficiency strategies;
  - ✓ actions and measures backed by institutional and financial provisions.
- With some, difficult to assess how realistic they are:
  - Sporadic indication of saving estimates in some NEEAP;
  - Limited degree of detail about assumptions made in estimating savings;
  - Institutional framework unclear;
  - Available funding for activities? Without funding, hard to implement activities.....

Some reviews of NEEAPs.....



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- Establishment of the EE Agency and EE Fund will significantly contribute to the implementation of the NEEAP;
- Responsible institutions defined per each measure. **However, not clearly assigned.** The Ministry is currently main responsible body for NEEAP, but it will be the future Energy Efficiency Agency? NEEAP should further elaborate role of the EE Agency.
- Investment costs have been calculated, but not all. **The financial analysis for whole NEEAP implementation, as well as elaboration of financing sources is missing.**
- The financial and fiscal mechanisms should be better described, especially **EE Fund that seems to be, when established, one of the major sources of funding;**
- Detailed actions related to introduction of ESCOs concept together with legal and administrative background currently missing.
- No information given on evaluation and methodologies to measure and monitor the energy savings.





- Calculation of the national indicative energy savings target not in accordance with Annex I.
- Establishment of the Energy Efficiency Fund will significantly contribute to the implementation of the NEEAP; **The EE Fund seems to be the major source of funding and if it is not materialised as planned, then most of the measures will be lacking financing!**
- The NEEAP states that the main problem for calculation of the energy saving target, as well as estimation of savings per different sectors (residential, commercial and public sectors) is due to **statistical gap and lack of proper historical data.**
- It was mentioned that Serbia will improve existing data collection system, but further details in NEEAP are missing.



- Energy savings estimated per sector and year.
- Cost benefit analysis per sectors undertaken and investment elaborated.
- Budget requirements and sources of financing elaborated for most of the measures.
- Unclear materialization of the financial sources, especially from the state budget could be significant barrier for successful implementation of the NEEAP.
- Strong link between implementation of the EE law and planned measures under NEEAP has been established.
- **Statistics** and production of the energy efficiency indicators **should be improved and harmonized** with EUROSTAT.

*Montenegro*

# NEEAPs – how much it costs?



- ✓ How much funding is actually needed to implement the NEEAPs?
  - If the NEEAPs have not been fully costed, it is not possible to say whether funds available are adequate to meet the needs.
  
- ✓ NEEAPs should provide enough information to demonstrate whether and how Contracting Parties can reach the savings target!

Cross-ministerial working groups for the development of the NEEAPs, especially involving ministries of finance, so that realistic plans in relation to funding and borrowing are developed.



# Funding



- Many NEEAPs adopted without having appropriate and comprehensive financing schemes in place.
- Thus, EC/EnC Secretariat funded several studies on the topic of available / possible financing options / mechanisms.
- Various options:
  - Subsidies
  - Grants
  - VAT reduction
  - Tax deduction
  - Energy Efficiency/RES Fund – sources of funding?
  - Municipal borrowing – is there a Law on Public Debt?
  - Energy performance contracting – inflexible Public Procurement Law?
  - Multi annual accounting – is it possible?

➤ **Involvement of Ministries of Finance!**



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# Where the funding is needed - public or private sector?



- The largest energy-saving potential is in the public sector, necessitating a substantial amount of public sector borrowing, if targets are to be met.
- Studies demonstrated that the majority of funds currently available are targeted at private sector borrowing with a major emphasis on SMEs and industry.
- Borrowing?
  - The borrowing capacity of the public sector at local and national level is limited.
  - The need for borrowing for EE will be evaluated against other borrowing needs for the country.
  - The Ministry of Finance involved in discussions on the NEEAPs?

# Reported Barriers for Sustainable NEEAPs Implementation....



- Low economic capability at all levels (state, municipal, companies, population),
- High indebtedness at all levels;
- High degree of poverty in the population;
- Expensive commercial loans
- Non cost-reflective prices of energy carriers;
- Lack of upfront financing for Energy Efficiency Improvement investments;
- Lack of technical knowledge, information and /or awareness at all levels;
- Lack of cost-benefit studies about fiscal mechanisms for supporting Energy Efficiency Improvement investments.

# Need for Marketing of Energy Efficiency



- It is often assumed that energy efficiency is considered as an attractive good in its own right. However, research of experiences with implementation of energy efficiency does not demonstrate this.
- When there is a need for an industrial enterprise to re-equip, or improve its quality, this may coincide with an opportunity to profit from energy efficiency.
- When a household wants to improve comfort, and increase the value of its property or carry out a general modernization of an old property, this may also coincide with an opportunity to profit from energy efficiency.

**But it seems that without the first stimulus the second opportunity may not arise.**

**Promotion of Energy Efficiency is important!**



# Availability of Information



- Recommendation that Ministries should provide more information on their respective websites about opportunities and funds available in their country.
- It is recommend that there should be:
  - A dedicated page on the website of the Ministry of Environment and Ministry of Economy in each Contracting Party.
  - The page should provide a listing of financial mechanisms (funds) available in the relevant country, sorted by end user (public/private, company, household, housing association, municipal infrastructure, public buildings).



# Energy Performance of Buildings



Recognized as the most complex directive for implementation.

- Study on Energy Efficiency in Buildings in the Contracting Parties of the Energy Community (completed in 2012).
- The Study provided recommendations on aspects of EPBD implementation, including:
  - method to make buildings stocks inventory;
  - a common methodology for national data base for climate parameters and calculation of energy performance of buildings;
  - assessment on the potential for energy savings and investments needed to harvest the potential;
  - an outline of the required secondary legislation and a detailed Roadmap for the implementation of the EPBD.

# Measurement and verification



- 2<sup>nd</sup> and 3<sup>rd</sup> NEEAPs – include review of the previous periods.
- A number of local communities involved in energy efficiency implementation (municipalities, cities...)
  - Data are needed for calculation of energy savings
  - Lack of communication and cooperation between national and local levels > **lack of data.**
- Statistics important for setting targets but also for further steps – measurement and verification.

# Example: Data Collection Croatia



- Example of Croatia: System of energy statistics and energy balance well established, in line with EU standards .....
- In final energy balance final energy consumption in energy end-use sectors is:
  - Industry - 8 industrial branches
  - Transport - 6 types of transport
  - Others (Households, services, agriculture, construction)

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# Example: Data collection – Bosnia and Herzegovina



- In Bosnia and Herzegovina **3** agencies for statistics, 2 entity and one state agency
  - All three established by the law
  - Laws foresee mutual cooperation
  - Entity laws oblige entity agencies to provide inputs for the State agency

*National (BiH) statistics do not provide sufficient inputs for calculation energy efficiency indicators.*

➤ **Needed statistical system under development**



# Lessons learned and recommendations from Croatian experience

- Evaluation (M&V) of energy savings is time and resource consuming;
  - Start timely with data collection and calculations;
- Bear in mind that you need to evaluate savings again after three years of implementation;
- Be critical, do not make it look better than it is;
- Ensure stakeholders' participation – **start timely!**

# Thank you for the attention!

