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ENERGY TRANSITION IN BOSNIA AND HERZEGOVINA - CHALLENGES AND OPPORTUNITIES -

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- **Energy system (ES) is exceptionally complex interdisciplinary** (technical, economic, social and (geo)political) **system.**
- **Transition (transformation)** of ES, which includes environmental and climate aspect, is a demanding, long-term and complex process whose implementation is especially challenging for „small” countries (BH, WB6).
- **Strategic framework** for energy transition in B&H is defined by **EU energy and climate policy** whose transposition is being realized within **the Energy Community (EnC).**
- Energy transition in B&H is at the beginning (initial thinking) but in the next few years key **strategic documents** (iNECP, NDC) are to be adopted.

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- There are no „recipes“ for transition: **each country has to define its „road map“**. Vision and strategic orientation (of radical energy sector development paradigm change) should be a result of achieving **consensus amongst key social stakeholders**.
- During consideration/planning of energy sector development a dialogue based on facts should be conducted and **all available options should be perceived**.
- **CHALLENGE:** How in the development of strategic transition documents to involve all stakeholders (political, professional, public/citizens, economic and financial institutions) and how to actively participate in **coordination of the transition process with the neighboring countries (WB6) and international actors (EU)**.

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- **METHODOLOGICAL FRAMEWORK FOR PROCESS OF STRATEGIES/PLANS DEVELOPMENT – ENERGY TRILEMA**
- **Security of supply**
- **Cost affordability of energy services, based on sector competitiveness (not on state subventions)**
- **Sustainability (environmental and climate)**
- Selection among competing technologies (i.e. renewable energy sources - RES) should be based on market competition.
- **State is a creator of transition policies** (i.e. dynamics and road map of transition) and regulatory bodies are a mechanism which safeguards equal treatment of market participants, protecting interests of consumers, and monitoring transition process.

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- **EU ENERGY AND CLIMATE POLICY AND STRATEGIC OBJECTIVES**
- Key dimensions of the Energy Union are tools for achieving EU strategic objectives – basis for development of iNECP (2020-2030 with perspective until 2050)
 1. **Energy security**, solidarity and trust
 2. A fully integrated internal (EU) energy market
 3. **Energy efficiency** contributing to moderation of demand
 4. **De-carbonization of the sector especially increasing share of RES**
 5. Research, innovation and **competitiveness**

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- Initial documents: studies completed in 2016/2017:
- Framework Energy Strategies of BH (PwC), WB BH Power Sector Note, Regional study SEERMAP (https://rekk.hu/analysis-details/238/south_east_europe_electricity_roadmap_-_seermap)
- Transition could be realized within three scenarios:
- **Under the impact of electricity market (EU ETS), no target scenario**
- **Delayed transition (from 2035)**
- **Gradually and from 2020 (de-carbonization scenario)**
- For planning transition reliable input data are critical (i.e. What is a realistic amount of new MW in large HPP which could be built until 2030, 2040 and 2050).

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- Key factors of transition: **technologies** (costs and adoption), **market** (with all risks), **available financial funds** (Paris agreement), **political decisions** (dynamics and social costs of transition including aspect of just transition)
- **OPPORTUNITY: Initiate in an organized way energy transition (already in planning documents for the period 2020-2030) and regard the process as a development chance.**

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