

UN Economic Commission for Europe

Summary of Policy Developments to Promote
Energy Efficiency and Renewable Energy Investments
in **Albania**

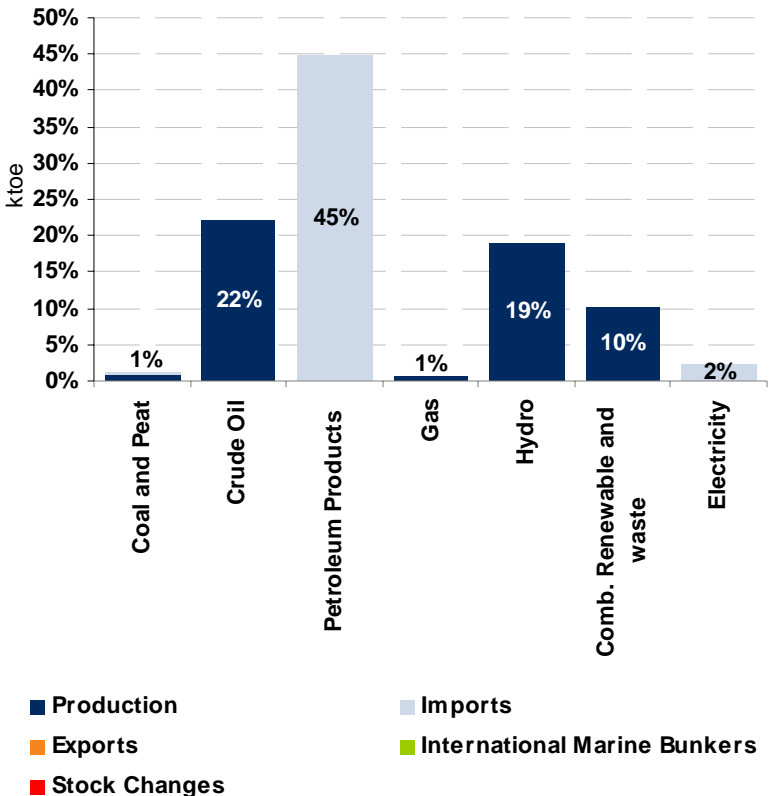
Seminar on Policy Reforms to Promote
Energy Efficiency and Renewable Energy Investments

Geneva, October 7.-8., 2009

Energy Situation in Albania

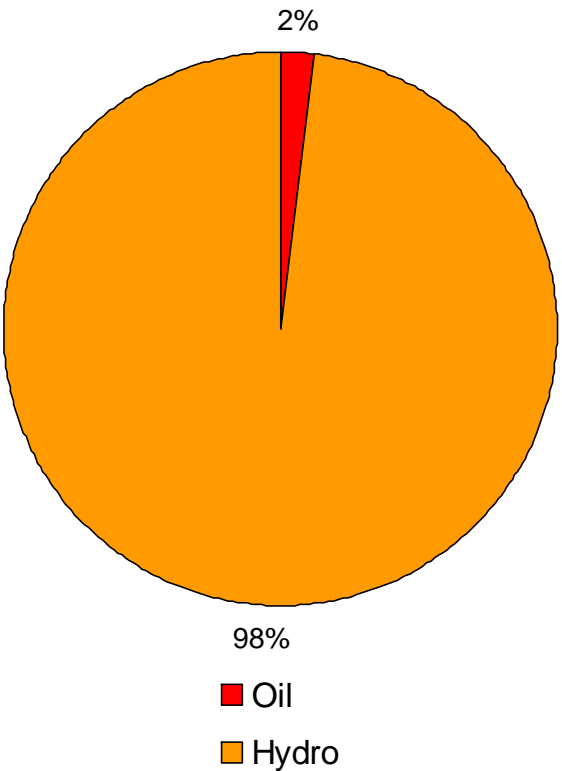
Albania has a high energy import dependency of 47%, but its power generation is almost exclusively based on domestic hydro power

Energy Balance



Source: IEA 2006

Energy Sources for Power Generation

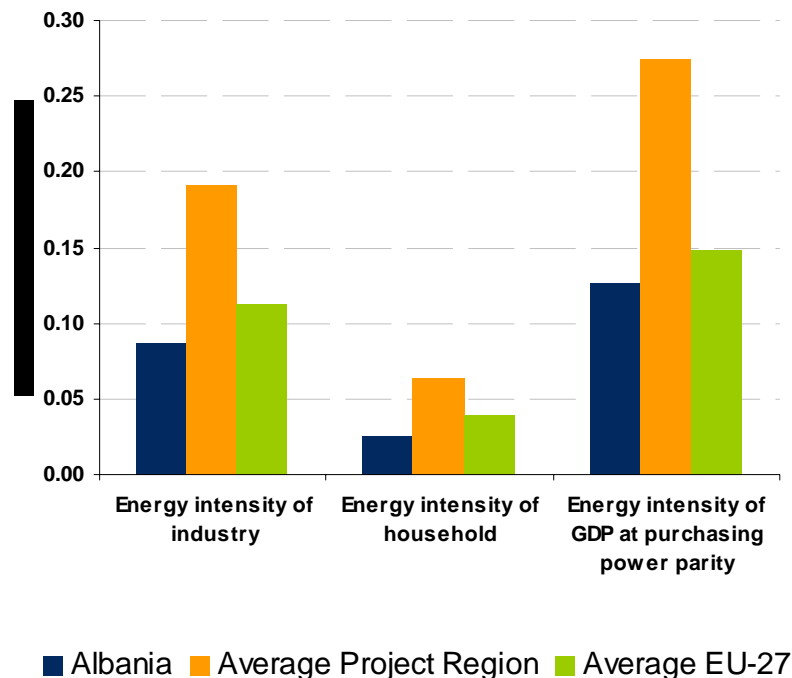


Source: IEA 2006

Energy Efficiency and Renewable Energy Sources in Albania

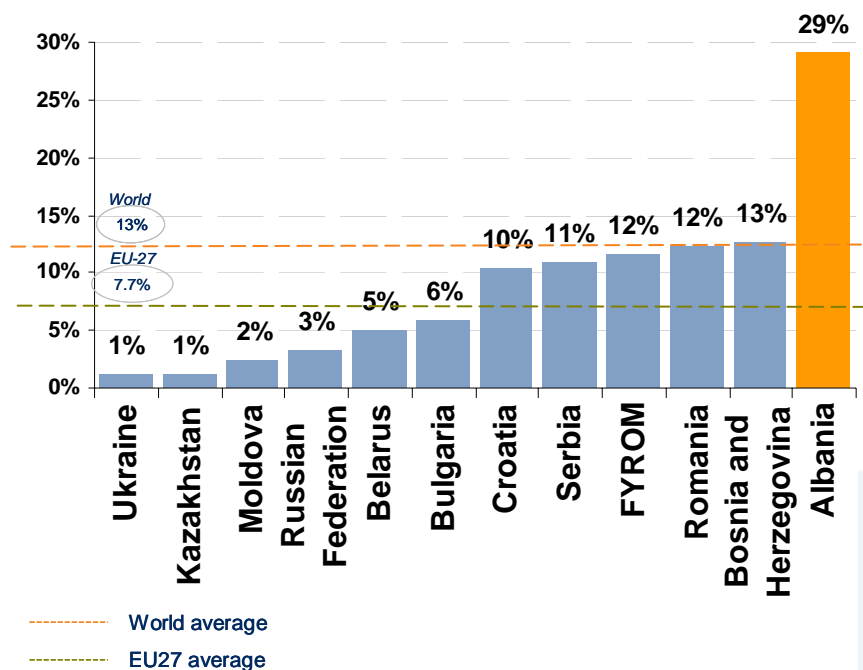
Albania has the lowest energy intensity and the highest share of renewable energy in the total primary energy supply of all project countries

Energy Intensity



Source: Enerdata 2007

Renewable Energy Sources



Source: IEA 2006

Barriers for Investments in EE and RES in Albania

The main barriers for investments in energy efficiency are lack of public funds and low awareness levels on the part of customers and banks...

**Legal,
institutional
and
administrative
barriers**

- **Limited capacity of the power transmission grid for intermittent sources**
- **Lack of dedicated law on renewable energy sources**
- **Vague foreseen financing instruments for energy efficiency**

**Economic and
financial
barriers**

- **Low energy tariffs**
- **High commercial electricity losses due to electricity theft and non-payments**
- **Absence of public funding for renewable energy and energy efficiency projects**

**Lack of
awareness,
human
capacities and
professional
skills**

- **The market for energy services is virtually inexistent in Albania**
- **Commercial banks have no experience and no interest to finance projects in energy efficiency**

Policy Developments in Albania

...however, in recent years several policy reforms have been undertaken by Albania to overcome these barriers

Unbundling and privatization of Distribution System Operator

- **The Albanian Distribution System Operator (OSSH) was unbundled in 2007, privatized in 2009 and was recently bought by the Czech energy company CEZ. CEZ will actively try to reduce the high commercial losses in Albania, as it has done in other countries.**

Introduction of the Concession Law

- **Following a competitive and transparent concession policy, and supported by a comprehensive legal and by-legal framework, from March 2007 on, more than 170 new projects on small hydro power plants have been considered and 60 concessionary agreements have been approved.**

Establishment of auction office for interconnection capacity

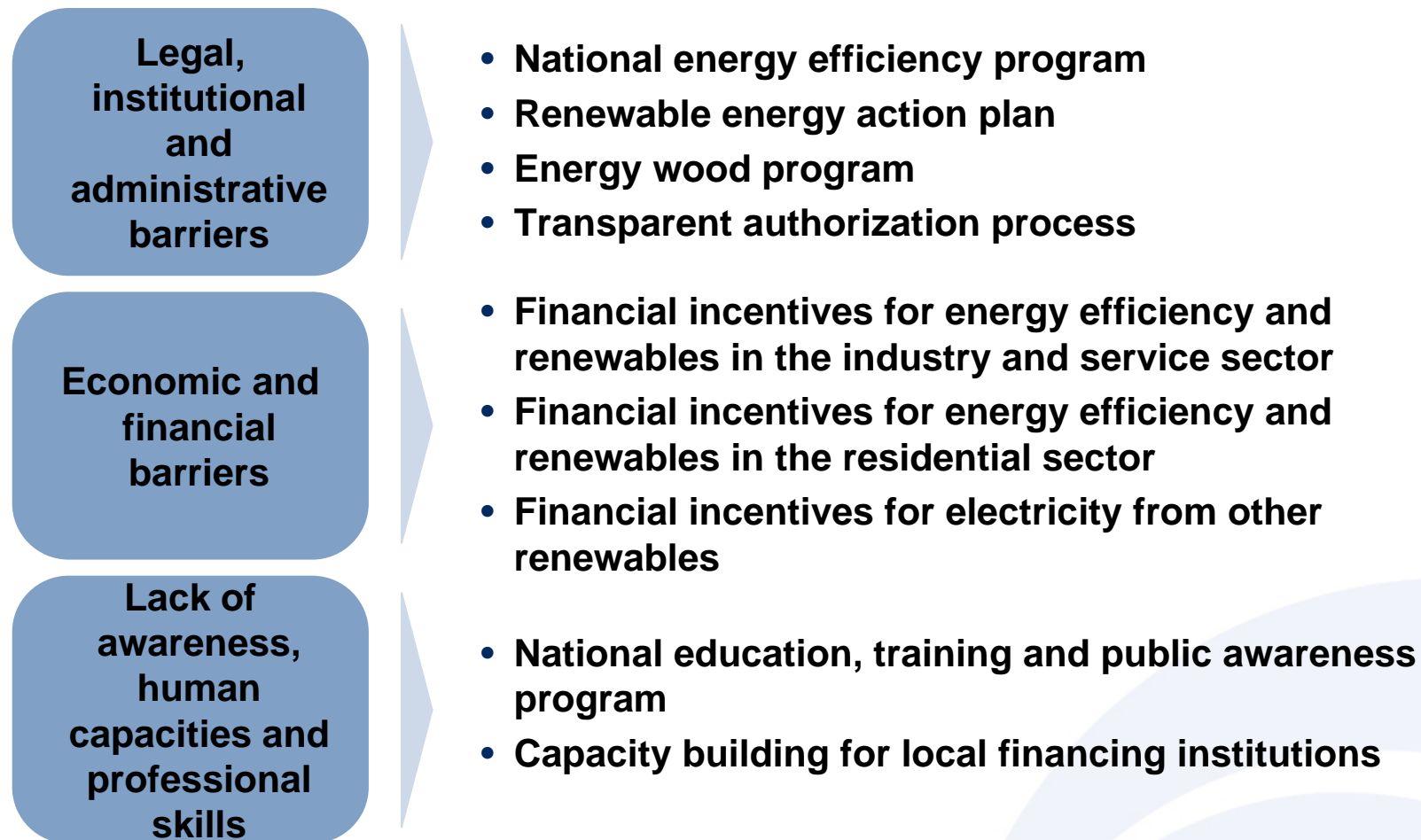
- **The establishment of an auction office for the management of electric interconnection capacity based in Montenegro underlines the importance of Albanian plans to extend the transmission and interconnection lines**

National Power Law that established the regulator

- **The National Power Law (2003) led to the establishment of the energy regulator (ERE) and thus simplified the procedure for obtaining generation and trade licenses**

Recommendations to overcome barriers for investments in EE and RES in Albania

The establishment of a renewable energy action plan is necessary for the constant and sustainable growth of renewable energy sources



Recommendations to overcome barriers for investments in EE and RES in Albania

Legal, institutional and administrative barriers (1/4)

National energy efficiency program

- **The Energy Efficiency Law 2005 foresees, among other measures, the elaboration of a National Energy Efficiency Program every two years. The first program 2007-2009 has not yet been prepared. The elaboration and implementation of national programs or action plans with clear timelines and responsibilities, backed up by national and local energy agencies with adequate human and financial resources as prerequisite for the successful implementation of policy instruments and measures is highly recommended for Albania.**
- **The National Energy Efficiency Program should have the following content:**
 - **indicative overall and intermediate targets,**
 - **a description as well as ex-post evaluation of the energy efficiency improvement measures in place,**
 - **a description of new measures including authority in charge for implementation, and expected date of implementation**
 - **an ex-ante evaluation of the expected contribution of each measure in place and planned to reach the overall and intermediate target in terms of energy saved and socio-economic effects,**
 - **a timetable for implementation, monitoring and reporting of the program, and**
 - **monitoring methodologies**

Recommendations to overcome barriers for investments in EE and RES in Albania

Legal, institutional and administrative barriers (2/4)

Renewable energy action plan

- **Despite a high potential of renewable energy sources in Albania, national indicative targets are not set yet. The elaboration and implementation of an action plan combined with periodic monitoring is the basis for constant and sustainable growth of renewable energy sources. The Action Plan should cover renewable heating/cooling, electricity and biofuels.**
- **The content of the renewable energy action plan should comprise the following topics:**
 - **Summary of national renewable energy policy**
 - **Expected final energy consumption for the target period**
 - **National overall target and sector targets covering electricity, heat and biofuels**
 - **Measures for achieving the targets**
 - **Specific measures for the promotion of the use of energy from biomass (please refer to the Energy Wood Program further below)**

Recommendations to overcome barriers for investments in EE and RES in Albania

Legal, institutional and administrative barriers (3/4)

Energy wood program

- **Fuel wood has a large potential for energetic use both in households and large scale power plants. However, lack of forestry management coupled with extensive cut has led to significant deforestation in the past , with potential long-term impact on the climate and on the environment.**
- **The development, implementation and monitoring of an energy wood program shall contribute to pre-vent negative impacts on climate and environment and encourage the sustainable use of wood re-sources. The Energy Wood Program shall mobilize so far unused wood energy resources, increase and accelerate the availability of energy wood in Albania.**
- **Measures and activities implemented within the Energy Wood program could comprise:**
 - **promotion of enhanced co-operation and information exchange between market players such forest owners, wood traders and sales companies, utilities, wood processing industry etc.**
 - **ongoing data collection on energy wood demand and supply and the price development**
 - **capacity building on biomass logistics for forest owners and large scale energy wood buyers.**

Recommendations to overcome barriers for investments in EE and RES in Albania

Legal, institutional and administrative barriers (4/4)

Transparent authorization process

- **Non-transparent regulations and inefficient bureaucracy are a further barrier to investments in renewable energy and energy efficiency projects such as installation of cogeneration in industry. Numerous authorities (national, regional and municipal) are involved in the permitting process. Lack of coordination between authorities often leads to delays, investment uncertainty and a multiplication of necessary efforts. One responsible authorization agency appointed by the government can drastically reduce the administrative burden for the developer related to authorization of new projects.**
- **Clear guidelines for authorization procedures would further contribute to overcome the above mentioned barrier. Obligatory response periods for the authorities involved can be incorporated in such procedures. Setting approval rates can be a tool for checking the streamlining of authorization procedures.**

Recommendations to overcome barriers for investments in EE and RES in Albania

Economic and financial barriers (1/3)

Financial incentives for energy efficiency and renewables in the industry and service sector

- **The absence of public funding has been identified as economic barrier. Within the industry sector, the light industry (e.g. food processing) and the construction material sectors show in general a high potential for energy efficiency, in particular for cogeneration and solar thermal. The public sector should set a good example regarding investments, maintenance and other expenditure in energy efficiency and renewable energy use.**
- **Such a fund may provide for grants, loans, financial guarantees and/or other types of financing that guarantee results and shall be open to all providers of sustainable energy measures, such as ESCOs, industry companies, independent energy advisors, utilities and energy distributors, retail energy sales companies, installers.**
- **Furthermore, it could promote accompanying measures such as energy audits or the installation of metering devices.**
- **The key areas of support and key sectors should be selected based on the available energy savings potential as well as the cost-benefit ratio to be evaluated when developing the National Energy Efficiency Program.**

Recommendations to overcome barriers for investments in EE and RES in Albania

Economic and financial barriers (2/3)

Financial incentives for energy efficiency and renewables in the residential sector

- Analogous to the financial incentives for energy efficiency and renewables in the non-residential sector, the introduction of financial incentives for the residential sector is highly recommended.
- Funding could be focused least cost-measures such as:
 - switch from electricity to central heating (biomass, heat pumps or gas (if applicable))
 - installation of efficient/renewable central heating devices in new buildings
 - solar thermal,
 - energy efficiency measures in existing buildings such as improving insulation, tightening or changing windows; and
 - energy efficiency measures in new buildings enhancing compliance with the building code.

Recommendations to overcome barriers for investments in EE and RES in Albania

Economic and financial barriers (3/3)

Financial incentives for electricity from other renewables

- **The absence of a support scheme for renewable electricity other than small hydro power has been identified as key barrier for large scale deployment of renewable energy in Albania. To overcome this barrier we recommend the adoption of a support scheme promoting electricity generation from biomass, wind, geothermal and photovoltaics.**
- **Advanced feed-in tariffs ensure the least cost approach while considering future technology development, changes in market competition and optimum resource utilization in terms of:**
 - **Technology-specific and size specific tariffs supporting different technologies while avoiding windfall profits for cheaper technologies**
 - **Stepped tariffs according to site conditions (e.g. average wind speed)**
 - **Tariff degeneration over time for new installations in order to reflect economies of scale and learning**
 - **Front loading the payment stream considering increased tariffs for the first years of a project while decreasing tariffs in the last years, without increasing the total sum of financial support. This scheme is applied e.g. in Germany for wind energy.**
 - **A maximum time period of e.g. 10 to 20 years depending on the renewable energy sources**

Recommendations to overcome barriers for investments in EE and RES in Albania

Lack of awareness, human capacities and professional skills (1/2)

National education, training and public awareness program

- **Lack of awareness has been identified to be one of the main bottlenecks for the development of a domestic market for energy efficiency and renewable energy projects in Albania. Households, companies and public organizations need know how on the different possibilities for sustainable energy use, economic and environmental advantages, costs and financial support available and information on best practice examples.**
- **The Albanian government with participation of local and regional authorities, shall develop suitable in-formation, awareness-raising, guidance or training program in order to inform citizens of the benefits and practicalities of developing and using energy from renewable sources and energy efficiency measures.**
- **Information dissemination needs to be tailored to the end-user in order to be effective. Activities comprise:**
 - **advertising campaigns e.g. dissemination of leaflets, development of internet platforms, round tables, announcement in newspapers**
 - **advice on behavioral practices, education at schools and information dissemination through energy consultants undertaking energy audits**
 - **capacity building programs for installers, architects, construction companies etc. supporting the increase of awareness on the possibilities for renewable energy and energy efficiency in buildings as well as in financing the corresponding investments**

Recommendations to overcome barriers for investments in EE and RES in Albania

Lack of awareness, human capacities and professional skills (2/2)

Capacity building for local financing institutions

- **Local financing institutions are reluctant to financing energy efficiency and renewable projects, due to lack of experience in financing such type of projects. Development banks such as the European Bank for Reconstruction and Development (EBRD) allocate in the framework of the Western Balkans Sustainable Energy Direct Financing Facility long-term credit lines dedicated to energy efficiency and renewable energy investments to local banks in Albania.**
- **Support to local banks in terms of assistance and training in refining, standardizing and evaluating loan applications and appraisal procedures is recommended to overcome this barrier**

Conclusions

The adoption of the concession law in 2007 led to a significant increase in the development of renewable energy plants in Albania

- **Albania has the highest share of renewable energy in the total primary energy supply of all project countries**
- **Several international investors entered the Albanian market for renewable energy in the past two years due to the introduction of the concession law in 2007**
- **Albania has the lowest energy intensity within the project region**
- **Albania is positioning itself as an important energy hub in the Western Balkans**
- **The high share of commercial losses in the electricity distribution will be gradually reduced due to new measures introduced by the Czech utility CEZ, which recently bought the Albanian Distribution System Operator OSSH**
- **The establishment of a renewable energy action plan is necessary for the constant and sustainable growth of renewable energy sources**

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