

LEGAL FRAMEWORK IN THE FIELD OF ENERGY EFFICIENCY AND RES AS ONE OF THE KEY PRECONDITIONS FOR THE SUSTAINABLE DEVELOPMENT OF SERBIA

dr Mila PUCAR *
Borjan BRANKOV *
Ana STANOJEVIĆ **
dr Marina NENKOVIĆ-RIZNIĆ *

**Institute of Architecture and Urban&Spatial Planning of Serbia, Belgrade*

***Faculty of Civil Engineering and Architecture, University of Niš*

1. Introduction

2. Experiences of the EU and the neighboring countries

2.1. European Union

2.2. Laws on Electricity/Energy laws in Western Balkan countries (Federation of BiH, Republic of Srpska, Montenegro, Croatia and Slovenia)

3. Overview and novelties of the legal framework in energy efficiency and RES in Serbia

3.1. The Law on the Use of Renewable Energy Sources

3.2. The Law on Energy Efficiency and Rational Use of Energy

4. Strategic and legislative framework as preconditions for the adoption of the laws

5. The need for bylaws

6. The use of RES in Housing sector

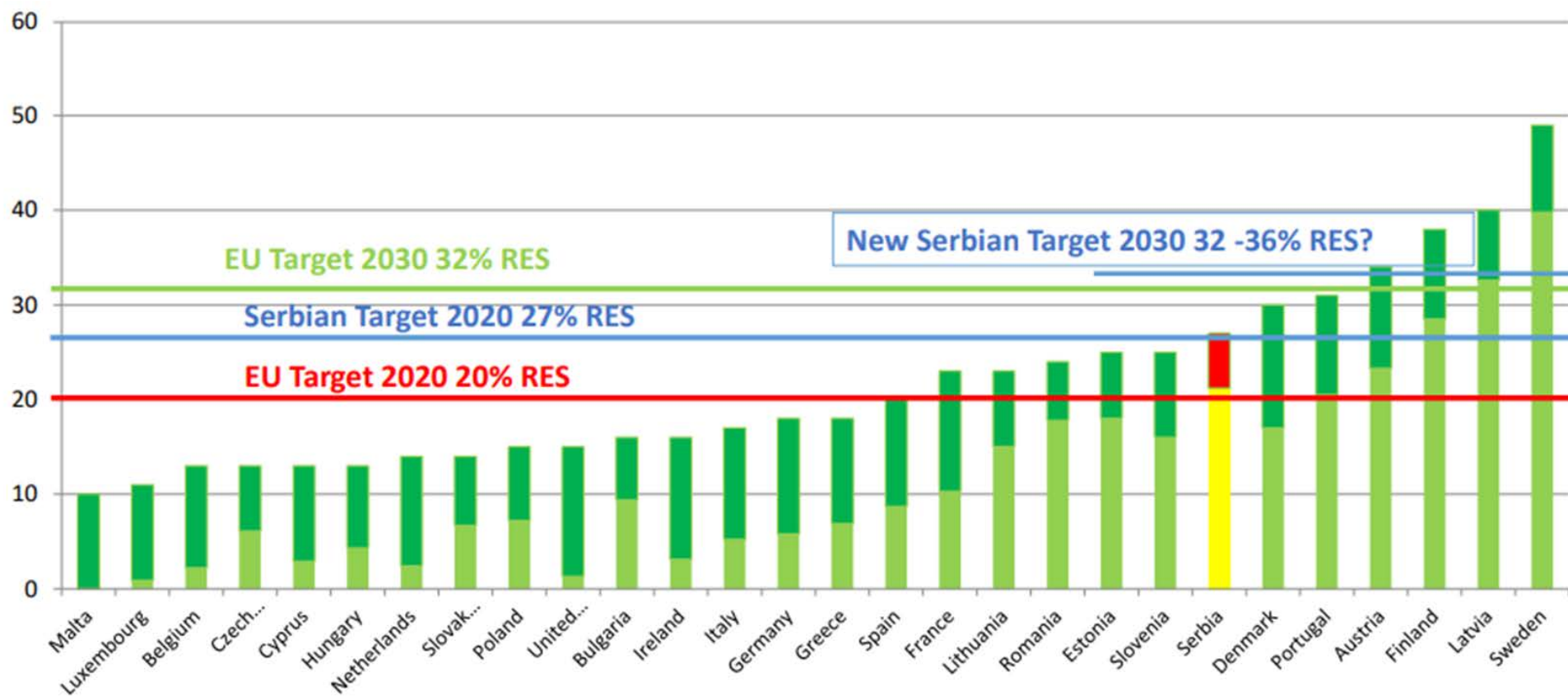
6.1. terms and measures for prosumers (in housing sector) presented in two new energy laws in Serbia

6.2. Potential problems and how to solve them

7. Conclusion

RES in SERBIA

According to the European Union Directive 2018/2001/EC, Serbia has set a goal to achieve **32% of green energy in total energy consumption by 2030**



ADOPTED ENERGY LAWS IN SERBIA

- Law on Energy (March 30, 2021)
- Law on Renewable Energy Sources (March 30, 2021)
- Law on Energy Efficiency and Rational Use of Energy (March 30, 2021)
- Law on Climate Change (regulates the GHG emissions) (March 23, 2021)
- Law on Mining and Geological Research (March 30, 2021)

THE LAW ON THE USE OF RENEWABLE ENERGY SOURCES IN SERBIA

It enables the **public sale of electricity from RES**;

A community of renewable energy sources - a legal entity established on the principle of open and voluntary participation of its members;

Buyer-producer (prosumer)- the end customer who has connected his facility for the production of electricity from RES to the internal installations;

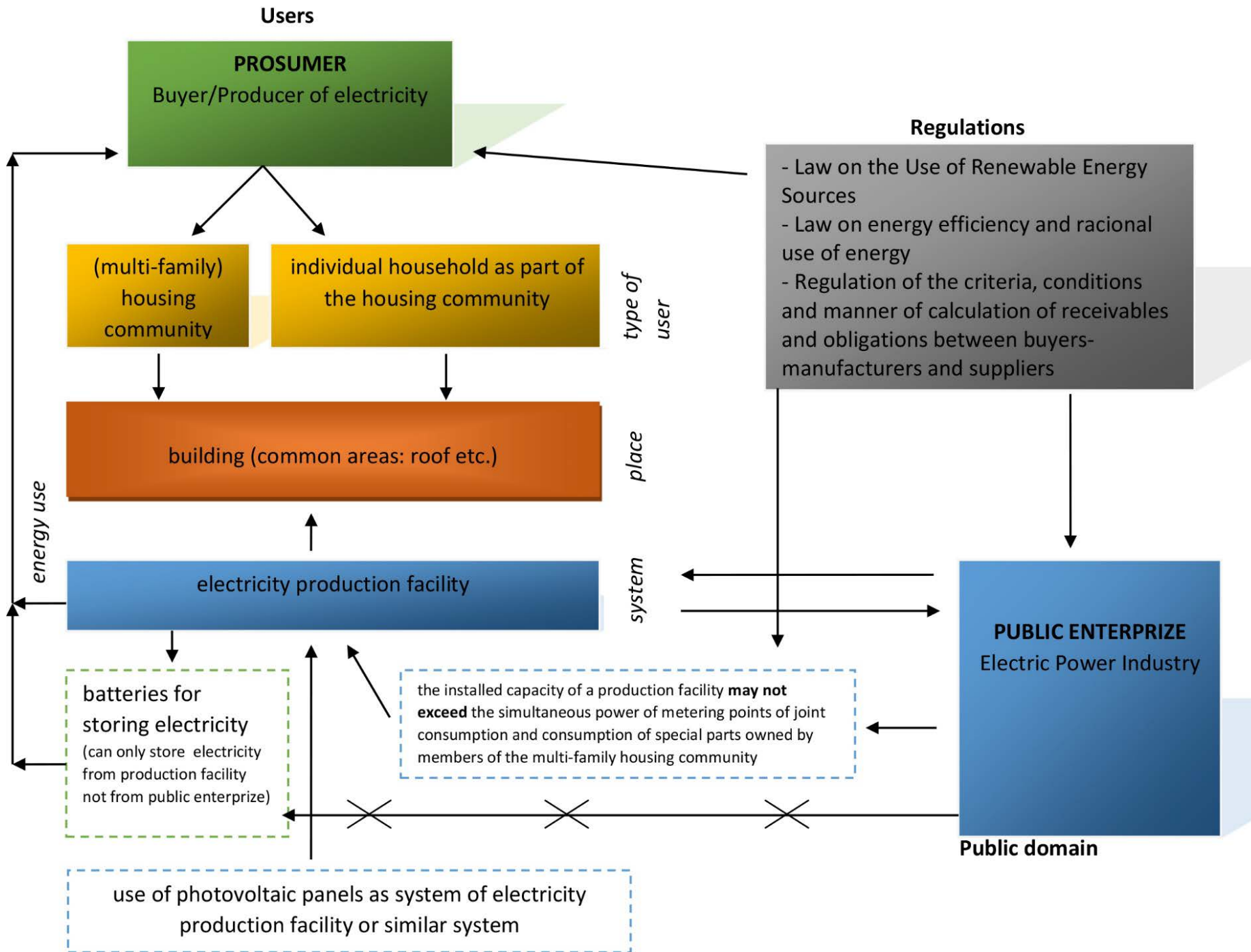
The system of incentives - it is a set of incentive measures related to a particular energy production technology from RES, applied to achieve national goals regarding the use of electricity;

THE LAW ON ENERGY EFFICIENCY AND RATIONAL USE OF ENERGY IN SERBIA

This Law **created a framework for subsidizing citizens;**

Subsidies will also be able to be used by households for the installation of efficient biomass and gas boilers, insulation systems, and carpentry;

Citizens' participation will amount to 50%, while the remaining amount will be financed by the Government and local self-government units, with 25% each;



STRATEGIC AND LEGISLATIVE FRAMEWORK AS PRECONDITIONS FOR THE ADOPTION OF THE LAWS

- **NERP - National Plan for Reduction of Emissions of Major Pollutants from Old Large Combustion Plants**
- The draft **Low Carbon Development Strategy** (expected during 2021 or 2022);
- Draft **National Housing Strategy 2020-2030**;
- **Energy development strategy of the Republic of Serbia until 2025 with projections until 2030** and the Decree on determining the Program for the implementation of the Energy Sector Development Strategy of the Republic of Serbia for the period until 2025, with projections until 2030, for the period from 2017 to 2023
- the **Integrated National Energy and Climate Plan (NECP)**
- The **Sofia Declaration** signed in November 2020 obliges Serbia to transpose the EU Emissions Trading System directives and introduce carbon prices

THE USE OF RES IN HOUSING SECTOR

Up to 70% of existing buildings are mostly poorly insulated and often built of poor material;
In Europe, including Serbia, only 1% of new buildings are built annually;

In the Draft National Housing Strategy 2020-2030 - improving the energy performance of this built fund is a task not only of national but also global importance (multi-family/collective and family/individual housing).



Terms and measures	Definition of selected terms and measures presented in two laws	Summary of the 2 new laws and the new Regulation
Prosumer	final customer who has connected to the internal installations its own facility for the production of electricity from RES	-produce electricity for own consumption -store electricity for own needs -deliver the surplus produced electricity to the distribution system
Multi-family housing community	legal entity established in accordance with the law governing housing and maintenance of building(s) that can become a prosumer	Allowed to be a prosumer (production facility must be in common areas)
Household	community whose members live together, eat together and spend the earned income	Allowed to be a prosumer, or part of the prosumers as a whole community
Building	building with a floor, roof and external walls, built as an independent unit in which energy is used to achieve certain internal climatic conditions, and is intended for housing	Prosumer's production facility is intended to be part of the building's common spaces
Technical system of the building	technical equipment of the building or parts of the building for heating, cooling etc., including systems using energy from RES	Production facility of electricity is part of the building's technical system
Financing	Financial encouraging the production of electricity and heat from renewable sources for own needs	-the budget of the R. Serbia or the autonomous province and LSUs -European Union and other funds, donations, gifts, contributions -loans from international financial institutions
Market premium	Operating state aid that is a supplement to the market price of electricity that market premium users deliver to the market	Not allowed for prosumer
Feed-in tariff	aid granted in the form of an incentive purchase price guaranteed per kWh for delivered electricity- only legal entity or entrepreneur that produces electricity from renewable sources and is entitled to a feed-in tariff or market premium	Not allowed for prosumer
Storing electricity	storage of produced electricity until the moment when it will be used (batteries etc.)	prosumer can store produced electricity in batteries (which cannot store the electricity from the public enterprise)
Penalties	Penalties consist of money penalty for not abiding the Law on the Use of RES	No penalties for the prosumers - there is penalty for building small-scale hydro power plants in protected areas

OVERVIEW OF IMPORTANT TERMS AND MEASURE IN NEIGHBOR COUNTRIES REGARDING THE LAWS ON RENEWABLE ENERGY RESOURCES AND POSITION AND IMPORTANCE OF PROSUMERS

Selected terms and measures (with focus on housing areas and prosumers)	Serbia	Bosnia and Herzegovina	Republic of Srpska*	Montenegro	Croatia	Slovenia
Prosumer (as an option for users)	+	(+)	+	+	+	+
Residential complex/housing (mentioned as an area for producing electricity)	+	-	+	-	-	+
Financing (financial incentive)	+	n/a	+	+	+	+
privileged producer status for prosumer	-	n/a	+	n/a	+	n/a
Penalties for prosumers	-	(+)	+	+	+	+

POTENTIAL PROBLEMS?

- **The Question Of The Financing System**
- **issue of tenants' consent and goodwill for EE improvements in a residential building**
- **Future Maintenance Of Devices/systems for the use in en. production from RES**
- **the issue of use and access to common areas of the building**
- **Number Of Apartments/Tenants**
- **which residential buildings are the most adequate for installing PV panels**
- **possibility of upgrading the current prosumer benefits**

CONCLUSIONS

Permanent promotion and proposals for systematic and planned education, raising citizens' awareness of the importance of the potentials and benefits of using RES and the application of energy efficiency

Stimulation of the state both through the adopted legislation, through practical procedures, and through favorable loans, can enable easier determination of users of housing communities for this type of energy production;

Adopt a series of bylaws which will initially resolve numerous doubts and simplify the procedure.

THANK YOU

dr Mila PUCAR

pucarmila@gmail.com

Borjan BRANKOV

borjan@iaus.ac.rs

Ana STANOJEVIĆ

ana.stanojevic@gaf.ni.ac.rs

dr Marina NENKOVIĆ-RIZNIC

marina@iaus.ac.rs