

CLIMATE CHANGE, ENERGY AND ENVIRONMENT

# GAP ANALYSIS BETWEEN THE LEGISLATIVE FRAMEWORK OF THE ELECTRICITY SECTOR IN THE REPUBLIC OF NORTH MACEDONIA AND THE EUROPEAN LEGISLATION

**Professor Vesna Borozan, Ph.D. UKIM/FEIT**

**Associate Professor Aleksandra Krkoleva Mateska, Ph.D. UKIM/FEIT**

**Assistant Professor Petar Krstevski, Ph.D. UKIM/FEIT**

November 2020



The energy transition in North Macedonia must inevitably follow the path of the EU's Clean Energy for all Europeans package



On this path, it is our responsibility to respect the techno-economic specificities of existing energy systems and to achieve a transition that ultimately benefits society



Let us not disregard the prevailing energy poverty in the country and instead overcome it in a just manner

CLIMATE CHANGE, ENERGY AND ENVIRONMENT

# GAP ANALYSIS BETWEEN THE LEGISLATIVE FRAMEWORK OF THE ELECTRICITY SECTOR IN THE REPUBLIC OF NORTH MACEDONIA AND THE EUROPEAN LEGISLATION

## **ACKNOWLEDGEMENT**

The work of the authors is a part of the H2020 project CROSSBOW – CROSS BOrder management of variable renewable energies and storage units enabling a transnational Wholesale market (Grant No. 773430), which is a project funded by the European Union.



"Ss. Cyril and Methodius" University in Skopje  
**FACULTY OF ELECTRICAL ENGINEERING  
AND INFORMATION TECHNOLOGIES**

# CONTENTS

	<b>INTRODUCTION</b> .....	3
<b>1.</b>	<b>THE LEGAL AND INSTITUTIONAL FRAMEWORK OF NORTH MACEDONIA</b> .....	4
1.1	Energy.....	4
1.2	Energy Efficiency.....	6
1.3	Environment.....	6
1.4	Climate .....	7
<b>2.</b>	<b>ANALYSIS OF THE ACHIEVEMENTS OF THE REPUBLIC OF NORTH MACEDONIA IN THE INTRODUCTION OF EUROPEAN LEGISLATION</b> ....	9
2.1	Electricity Market.....	9
2.2	Renewable Energy Sources.....	11
2.3	Energy Efficiency.....	12
2.4	Environment.....	13
2.5	Climate .....	13
	REFERENCES.....	16
	LIST OF ACRONYMS.....	17



# INTRODUCTION

Reforms in the energy sector which are instituted through the application of the Energy Community (EnC) legislation are not only a precondition for further harmonization with the European Union (EU) Law, but also represent a comprehensive process which is expected to help the development of a cost-effective and sustainable energy system. In fact, this process is an important segment of the preparations of the Republic of North Macedonia for the accession process to the European Union and in general, for the overall economic growth of the country. Considering the EU commitments for transition to low-carbon economy, reforms are indispensable, which, besides the development of the energy sector, are also focused on the process of decarbonisation of the economy and the impact of the industry and energy facilities on the environment and climate.

This publication consists of two parts, the former being a short version of the extensive analysis of legislation in the electricity sector in the Republic of North Macedonia, presented in the main publication titled "Legislative Framework of the Electricity Sector in the Republic of North Macedonia and its International Standing" [1]. In fact, the first part is a summary of the information contained in the mentioned publication, reflecting on texts and data from the same publication, focusing on electricity markets, energy efficiency, renewable energy sources (RES), environment and climate. Further on, that material is used for gap analysis of the national against the EnC target legislation, contained in the second part of this text. The goal of this text, which is an addendum to the main publication, is to provide a brief overview of the current situation, but also to draw a comparison of the accomplishments against the EnC and EU objectives. The overview of the state of affairs and of the objectives shall provide

the groundwork for further monitoring of legislative changes in the pertinent areas, but also an overview of the country's progress towards fulfilment of objectives laid down in the EnC Treaty.

In addition to the EnC law and the respective legislation on electricity in the Republic of North Macedonia, the publication [1] contains an overview of the standing EU legislation from the Clean Energy for all Europeans Package (the Clean Energy Package). The gap analysis does not cover this piece of legislation, since it has been in force for a relatively short time, is not binding for the EnC Contracting Parties and is still not fully implemented in EU Member States either. Nevertheless, it is worth mentioning that our country was the first one among EnC Contracting Parties, without being driven by any strict legislative obligations, to develop a draft version of the integrated National Energy and Climate Plan (NECP), which is compliant with the requirements of the Governance Regulation from the Clean Energy Package. In October 2020, North Macedonia submitted its NECP to the EnC Secretariat for review and a further regional coordination. Following the received opinion from the Secretariat, the final adoption of this important strategic document is expected in the first half of 2021.

Another progressive step forward, outside the mandatory legislative framework of the EnC, has been made with the Decision of the Government of the Republic of North Macedonia from September 2020 to designate the National Operator of the Organised Electricity Market in North Macedonia – MEMO as the Nominated Electricity Market Operator (NEMO), in full compliance with the EU market Network Codes. This is another unique case of progress made by our country compared to the other EnC Contracting Parties.

# 1

## THE LEGAL AND INSTITUTIONAL FRAMEWORK OF NORTH MACEDONIA

In compliance with the EnC Treaty, the Republic of North Macedonia is harmonizing its national legislation with the standing EnC law, comprised of relevant parts of the EU Law (*acquis communautaire*) in the following agreed areas of harmonisation: energy, competition, RES, energy efficiency, oil reserves, energy statistics, infrastructure, environment, and climate.

This chapter presents a short overview of the existing legislative framework and institutional setup of the Republic of North Macedonia in the areas of energy, energy efficiency, environment and climate which has been elaborated in detail in the main publication [1].

### 1.1. ENERGY

The standing legislative framework as well as the strategic determinations of the EnC have been mainly incorporated in the **Energy Law** [2], adopted by the Parliament of the Republic of North Macedonia in May 2018. The Law stipulates the legal framework for the domestic energy sector, including electricity, gas and heating energy markets as well as the crude oil, petroleum derivatives and transport fuels market. The Law also regulates the provision of public services on electricity, gas and heating energy markets, as well as the rights and obligations of customers of energy and users of energy systems. Moreover, the Law also regulates the areas for use of RES, security of energy supply, status and competences of the Regulatory Commission for Energy and Water Services of the Republic of North Macedonia (ERC), construction of energy facilities and other issues in the field of energy. The Energy Law for the first time precisely defines the category - “vulnerable customer”<sup>1</sup>, and stipulates the specific measures for fighting energy poverty<sup>2</sup>. With the view of operationalizing the Energy Law but also provisions from other laws which regulate energy-

related areas, almost all the envisaged bylaws have already been adopted<sup>3</sup>.

Strategic documents have a particular relevance for the development of the country’s energy policy. Thus forth, in January 2020 the Government adopted its **Strategy for Energy Development in the Republic of North Macedonia until 2040** [3]. This key document [3] further defines six strategic goals presented in Figure 1. These goals are mapped along the five energy pillars of the EU Energy Union [4], and their achievement is considered through three different scenarios, which are different in terms of the possibilities and manners of partial or full fulfilment of the indicative targets of the EnC and of the dynamics of achievement. The Strategy [3] provides a strategic roadmap, estimates the time frame and the responsible administrative body for implementation, while achievement of the targets is tracked through relevant indicators. The policies and strategic measures stipulated by the Strategy [3] have been aligned with the priorities laid down in the Energy Law [2].

The implementation of legislative provisions and of the energy policy in North Macedonia in general, is within the competence of several institutions and refers to various activities pertaining from the legislative framework [1]. The general overview of the institutional setup and competences of key institutions in the energy sector is presented in Figure 2.

As presented in Figure 2, the role of the **Government** in the energy sector is distinctive, especially for creating development policies, implementing the Energy Law and pertinent measures. The Government is responsible for adopting the Strategy for Energy Development, its Implementation Program, as well as the Annual Program for Reducing Energy Poverty. In addition, the Government has a significant role in establishing the criteria and conditions for declaring crisis situation, the manner of supplying electricity in crisis conditions, the manner of supplying certain

1 Energy Law, Article 3 – Definitions, paragraph (1), line 58) “vulnerable customer” shall mean a household where a person resides to whom, due to his/her social condition and/or health condition, the right to use the network and/or the supply of electricity, natural gas or heat energy is given under special conditions

2 Energy Law, Article 15 – Protection of vulnerable customers

3 <https://www.erc.org.mk/>

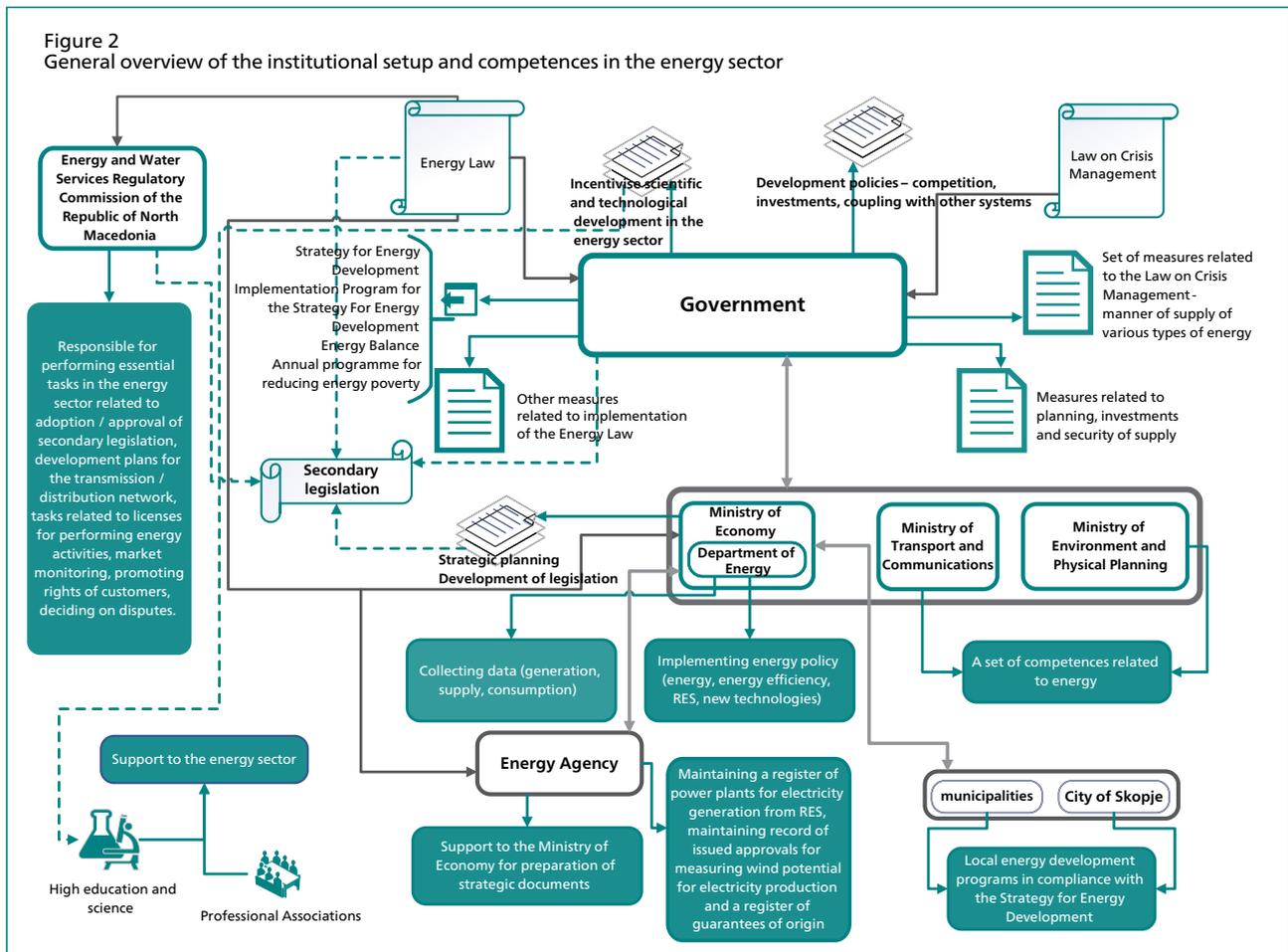
types of energy in crisis situation, as well as the rights and obligations of license holders for energy-related activities, in accordance with the Law on Crisis Management. The Government is responsible for creating favourable conditions for incentivising investments in

energy, stimulating competition as well as reducing energy poverty. Other line ministries are involved in the implementation of policies, of which the **Ministry of Economy** has the main role, with its Department on Energy. For purposes of providing support to the

Figure 1  
Strategic goals in 2040, [3]

Energy pillar	Indicator	STRATEGIC GOALS	Metric
1 Energy efficiency	Energy efficiency 	Maximize energy savings	• Reduction of primary and final energy consumption vs. BAU scenario
2 Integration and security of energy markets	Energy dependence 	Maintain current energy dependence around today's level (54% net import), while improving overall integration in European markets	• Net import share in primary energy consumption
3 Decarbonisation	GHG emissions 	Limit the increase of GHG emissions	• Absolute amount of GHG emissions (CO <sub>2</sub> , CH <sub>4</sub> and NO <sub>2</sub> ) vs. BAU scenario and vs. 2005
	RES share 	Strongly increase RES share in gross final consumption from today's level (19% of RES) in a sustainable manner	• RES share (heating & cooling, electricity, transport) in gross final energy consumption
4 R&I and competitiveness	Total system costs 	Minimize system costs based on least cost optimization	• System costs per annum & cumulative in euros incl. overall annualized investments, O&M costs, delivery costs & fuel supply costs
5 Legal & regulatory aspects	Legal & regulatory compliance 	Ensure continuous harmonisation EnC acquis and its implementation	• Harmonisation of national legislation with EnC acquis and its implementation in practice

Figure 2  
General overview of the institutional setup and competences in the energy sector



Government in the implementation of the energy policy, the **Energy Agency of North Macedonia** is tasked with maintaining a register of power plants for electricity generation from RES as well as maintaining record of issued approvals for measuring wind potential for electricity production and a register of guarantees of origin<sup>4</sup>. **The local self-government units** have their role in the adoption and implementation of energy programs, in compliance with the Energy Development Strategy.

In response to the demands for appointing a single national energy regulatory authority for every Contracting Party, allocating new authorizations and responsibilities as well as improved transparency reflected in the target legislation of the EU and the EnC, the Energy Law [2] has strengthened the role and competences of the **ERC**.

Some of the most important competences of the ERC include: monitoring the functioning of energy markets, adopting regulations and tariff systems and adopting or approving methodologies for establishing tariffs for regulated energy activities, adopting methodologies and tariff systems for the supply of specific types of energy and/or energy sources for tariff customers, adopting decisions on prices and tariffs, approving grid codes adopted by respective energy system operators, adopting rules for electricity, heating energy and natural gas supply, adopting rules on the electricity and natural gas supply of last resort, adopting rules on the electricity market and rules on the natural gas market, deciding on requests for exemption from the obligation for third party access to energy systems or new interconnection gas lines, maintaining a register of preferential electricity producers and adopting a decision on granting status of preferential electricity producer, safeguarding and promoting rights of customers and users of energy systems, proposing measures for stimulating competition on energy markets, stipulating conditions, manner and procedure and adopting decisions for issuing, changing, transferring, suspending, seizure and termination of licenses for performing certain activities in the field of energy and monitoring their execution, approving development and construction plans of transmission and distribution systems and monitoring their implementation, deciding on disputes between entities performing regulated activities and their users, including cross-border disputes.

## 1.2. ENERGY EFFICIENCY

The standing legislative framework of the EnC in the field of energy efficiency, including the Energy Efficiency Directive, the Directive on the energy performances of buildings, the Regulation on labelling of energy related products, and the Directive on co-design of energy related products has been transposed in the **Law on Energy Efficiency** [5] and in the secondary regulation adopted before this Law came into force in February 2020. The competences of institutions in the implementation and enforcement of legislative provisions are presented in Figure 3. It is important to mention that the majority of rulebooks [1] adopted before the Law was enacted, are still in force, however, the competent institutions should adopt new ones within relatively short deadlines. In order to respond to this challenge and to increase the capacities in the area of energy efficiency in the competent Ministry, donor assistance has already been arranged for drafting of secondary legislation which will define the mandatory support schemes (SS) of energy efficiency, as well as the manners of achieving the objectives determined by Article 7 of the Energy Efficiency Directive, [6].

**The National Energy Efficiency Action Plan (NEEAP)** is an important document for the establishment of series of measures for achieving measurable results within a three-year period. Until present, three NEEAPs have been adopted, and the fourth one is currently drafted for the 2020 – 2023 period, which is to be submitted to the Government until the end of 2020. It is expected to set new indicative energy efficiency targets, taking 2015 as the base year [7]. According to the third NEEAP, the estimated primary energy consumption in North Macedonia would reach 3,014 ktoe in 2020. This means that North Macedonia will maintain consumption of primary energy in line with the “individual consumption per capita”, set for EnC Contracting Parties amounting to 3,270 ktoe [3].

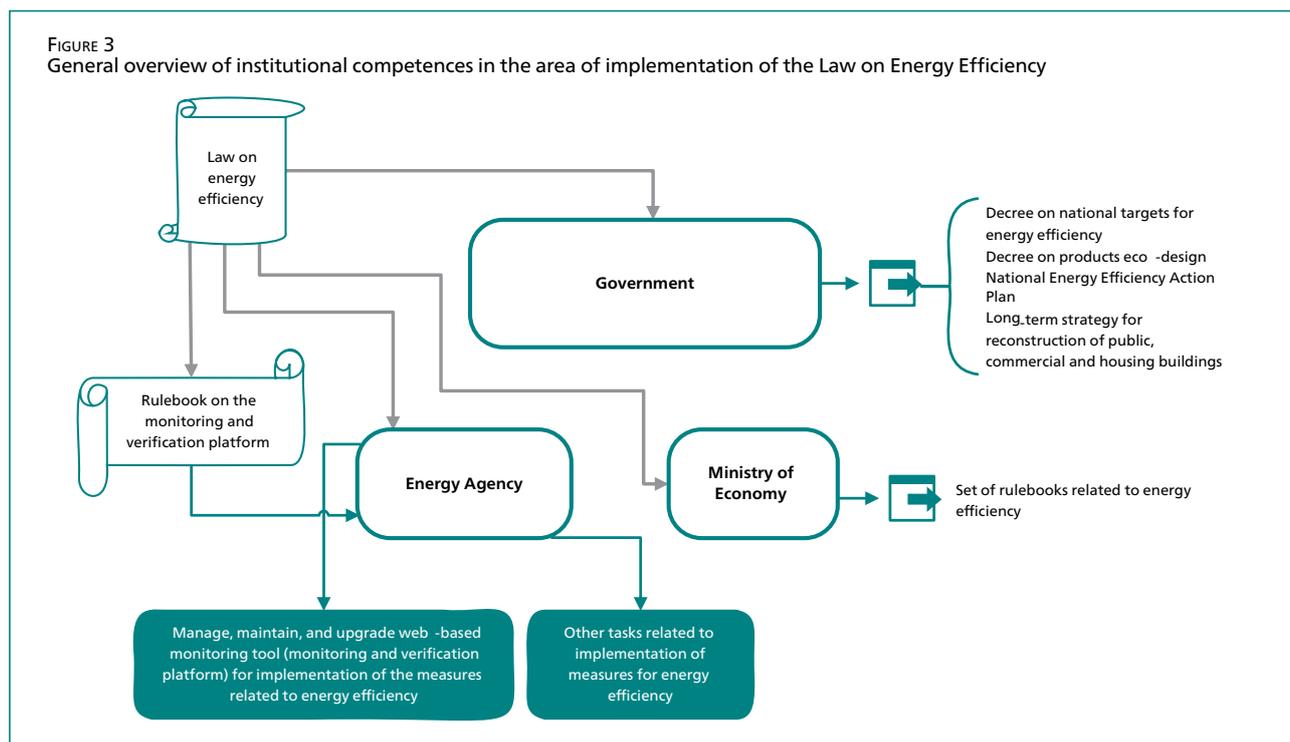
## 1.3. ENVIRONMENT

Environmental regulations cover several significant aspects, that is the assessment of environmental impact on certain projects, plans and programs on the environment, the quality of ambient air and limitation of emissions of certain pollutants from large combustion plants from the new or fully renovated fossil fuel plants. All of them have been transposed from several directives of the EU legislation into several laws and bylaws. Thus, Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment [8], as well as Directive 2001/42/EC on the assessment of the effects of certain plans and programs on the environment, have been effectively transposed into the national

---

4 Energy Law, Article 3 – Definitions, paragraph (1), line 10) “guarantee of origin” shall mean a document aimed at providing evidence to consumers that a particular share or a certain amount of energy is generated from renewable energy sources

FIGURE 3  
General overview of institutional competences in the area of implementation of the Law on Energy Efficiency



**Law on the Environment**<sup>5</sup> and its relevant bylaws. The amendments to Directive 2011/92/EU, introduced by Directive 2014/52/EU have not been transposed yet. **The Law on Ambient Air Quality**<sup>6</sup> and the relevant secondary regulations<sup>7</sup> have transposed Directive (EU) 2016/802 on the reducing content of a sulphur dioxide in certain liquid fuels.

Directive 2001/80/EC on the limitation of emissions of certain pollutants into the air from large combustion plants pertaining to the existing thermal power plants and the Directive 2010/75/EU on industrial emissions, which regulates the matter of construction of new plants on fossil fuels or fully renovated plants have been fully transposed through the **Rulebook on the limit values for the permissible levels of emissions and types of pollutants in the exhaust gases and vaporous emitted into the air from stationary sources**<sup>8</sup>. The adoption of the new Law on Industrial Emissions has been delayed for the new 2020 – 2024 legislative period [8].

The responsible ministry for transposition and implementation of European law in the environmental area is the **Ministry of Environment and Physical Planning**, which besides implementing and enforcing laws in the environmental area, derives some of its competences from the relevant secondary legislation as well [1].

## 1.4. CLIMATE

Relevant provisions concerning climate are, for the time being, only included in the **Law on Environment**, however, preparation is under way of a separate law on climate action which will enable transposition of the Regulation (EU) 525/2013 on the mechanisms for monitoring and reporting greenhouse gas (GHG) emissions. The Law on Environment also includes provisions related to the National inventory of anthropogenic GHG, but what is missing are provisions defining reporting competences and responsibilities, which is an important requirement for implementation of provisions from Regulation (EU) 525/2013. In this context, it is important to mention that as of 2000, North Macedonia has been preparing its GHG Inventory using the methodology of the Inter-governmental Panel on Climate Change (IPCC) from 1996 and 2006. The latest National inventory summary report was submitted to the United Nations Framework Convention on Climate Change in 2014, accompanied by the Third national climate change communication. Data on GHG emissions have been verified by the Macedonian Academy for Sciences and Arts (MANU). The Law on Environment provides the legal basis for preparation and adoption of a national climate change plan by the Government, which is expected to include

5 Law on Environment, "Official Gazette of Republic of North Macedonia", no. 53/2005, 81/2005, 24/2007, 159/2008, 83/2009, 48/10, 124/10, 51/11, 123/12, 93/13, 42/14 and 44/15

6 Law on Ambient Air Quality, Official Gazette of Republic of North Macedonia", no. 67/04, 92/07, 35/10, 47/11, 59/12 and 100/12, [http://www.moep.gov.mk/?page\\_id=16548](http://www.moep.gov.mk/?page_id=16548)

7 [http://www.moep.gov.mk/?page\\_id=16548](http://www.moep.gov.mk/?page_id=16548)

8 Rulebook on the form and the content of the templates for submitting data for emissions in the ambient air from stationary sources, the manner and time period of data delivering, according to the capacity of the installation, the content and manner of keeping records for emissions in the ambient air "Official Gazette of Republic of North Macedonia", no 79/11 from 13.06.2011

GHG emissions projections as well as analysis for their abatement. Assessment of potentials and projections for mitigating emissions are part of every report sent to the United Nations Framework Convention on Climate Change since 2000, as well as the nationally determined contributions (NDCs).

Upon adoption of the recommendation of the EnC Ministerial Council in 2018 for preparation of mandatory integrated National Energy and Climate Action Plans (NECPs), North Macedonia has achieved significant accomplishments in this area. In other words,

NECPs, which cover ten year periods, starting from the 2021–2030 period are in fact a mechanism for achieving the targets and target percentage of the Governance Regulation [9]. This Regulation integrates all the legislative acts of the Clean Energy Package in a single action and underscores the importance of achieving the targets in the fields of energy and climate until 2030. This is why the fact that the Republic of North Macedonia is the first among the EnC Contracting Parties to submit its draft version of the NECP is an exceptionally significant step forward of the country towards intensifying national activities in the area of climate.

## 2

# ANALYSIS OF THE ACHIEVEMENTS OF THE REPUBLIC OF NORTH MACEDONIA IN THE INTRODUCTION OF EUROPEAN LEGISLATION

The detailed information in [1], as well as the brief overview from the previous chapter clearly indicates that the Energy Law [2] is the basis for implementing the robust reform process for transposition of the European law in the country's electricity sector. The implementation of this Law and the relevant secondary legislation adopted by competent state institutions puts North Macedonia among the EnC Contracting Parties which have transposed in their national legislation the Third Legislative Package on the EU internal electricity and natural gas market (the Third Package). Further in this chapter, an overview is presented of the most relevant bylaws and other documents which further define the legislative will in the areas of direct relevance for this text – the electricity market, tapping of RES and energy efficiency. It also makes reference to the main structural and institutional reforms and other activities, implemented with a view to harmonising the provisions of the latest Energy Law [2].

## 2.1. ELECTRICITY MARKET

Figure 4 presents part of the legislative acts adopted or approved by relevant institutions, which enable the more significant reform achievements related to the implementation of European legislation.

One of the key requirements introduced by the Third Package was met with the implementation of the Law on Energy and the finalization of the ownership unbundling of the transmission system operator (TSO) - MEPSO. Moreover the certification process of MEPSO as a TSO was completed successfully. The extended competences of the ERC and the implementation of the Third Package has enabled ERC to apply for membership in the working bodies of ACER and thus to contribute to the further advancement of the work of ERC.

Figure 4 presents yet another essential step which contributes to the process of implementation of Market Network Codes, which is the establishment of a National operator of the organised electricity market in North Macedonia – MEMO, which is an

exceptional achievement among EnC Contracting Parties. Even more important is that in September 2020, by Government decision, MEMO was designated as the Nominated Electricity Market Operator (NEMO), in line with the Market Network Codes of the EU. In fact, our country is the first of the EnC Contracting Parties to have implemented such a decision<sup>9</sup>. Although the process of establishment of organized electricity market was prolonged for a certain period, during 2019 and 2020, MEMO undertook series of activities for the establishment of the first organized electricity market (the day-ahead and intraday market) in North Macedonia, and for its coupling with neighbouring markets into a single electricity market of the EU<sup>10</sup> [10]. These activities are steps towards achieving the European Electricity Market Target Model, for which “as a unique case among all Contracting Parties, the EU network codes adopted thus far by the EnC in the electricity sector<sup>11</sup> become directly applicable in the legislation of North Macedonia, in accordance with the Law on Energy, without the need for their formal transposition into a separate legal act.” [8]

Upon adoption of the Energy Law and of series of bylaws described in detail in [1], the wholesale and retail electricity market were completely transformed. Figure 5 presents a general picture of the achievements made.

9 “North Macedonia becomes first Contracting Party to designate market operator in line with EU CACM”, <https://www.energy-community.org/news/Energy-Community-News/2020/09/14.html>

10 MEPSO, that is MEMO, has signed Memoranda of Understanding on market coupling with Bulgaria, and Albania, and in 2020 it was also negotiating with Greece. The market coupling of the day ahead market between North Macedonia and Bulgaria has been projected for 2022, <http://memo.mk/Public/Post.aspx?id=32fafd22-eba3-4fc4-be0b-1223e7f41500>

11 These network codes are included in detail in section 3.5 of [1]. However, the EU Regulation 2016/1447 establishing a network code on requirements for grid connection of high voltage direct current systems is not taken into consideration, as such power systems are not implemented in the Republic of North Macedonia

Figure 4  
Overview of the key achievements from the implementation of EnC legislation

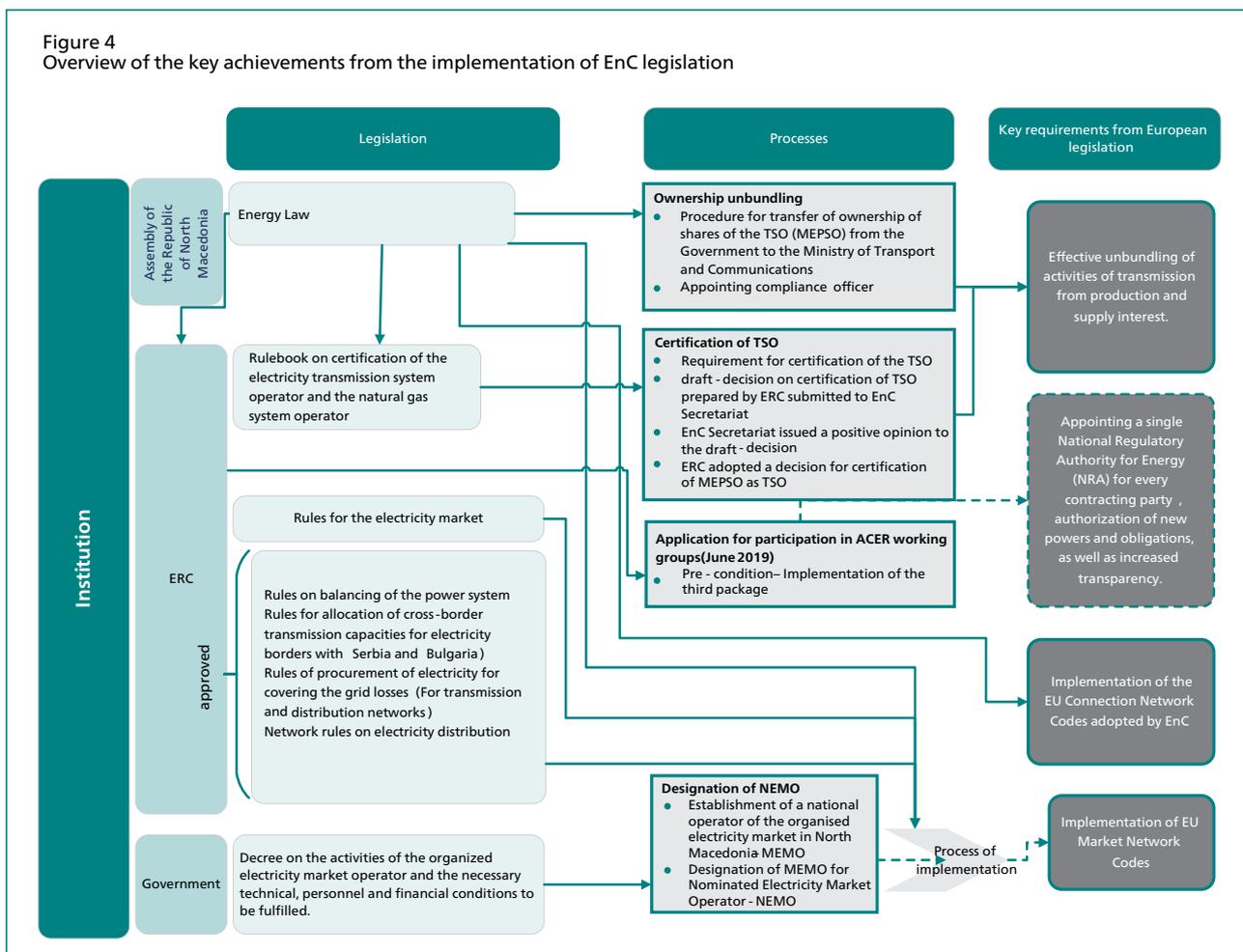
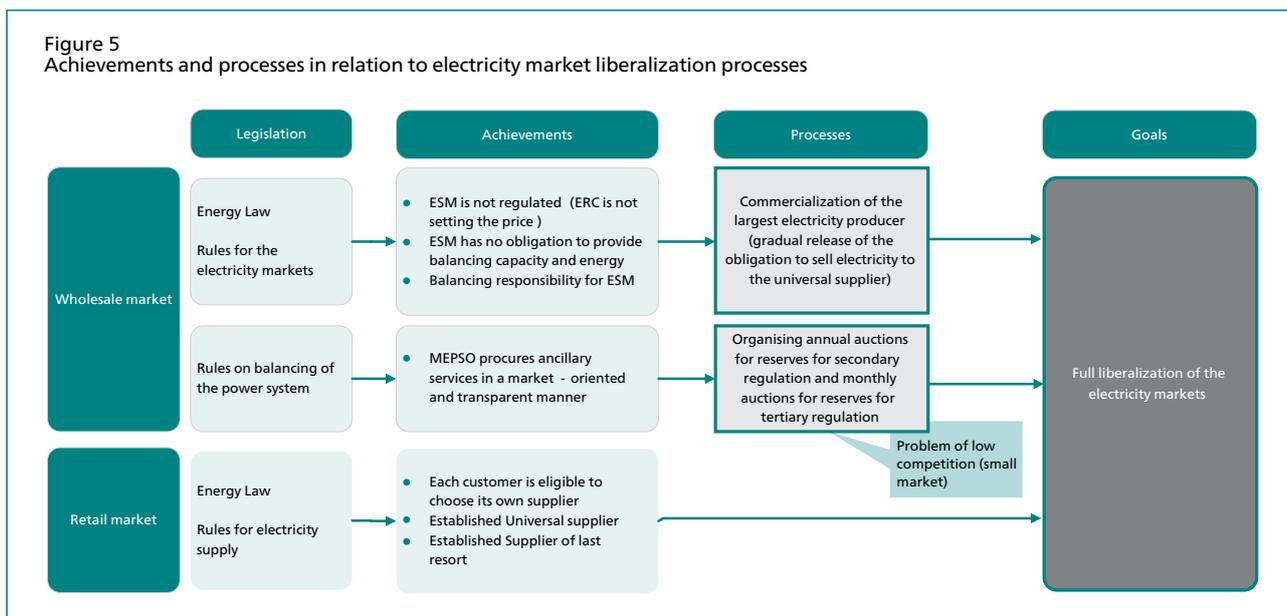


Figure 5  
Achievements and processes in relation to electricity market liberalization processes



According to the assessment of the level of the application of EnC legislation in North Macedonia [8], the estimate is that all the actions taken for implementation of the Energy Law and the development and adoption of secondary legislation, above all through the expertise of the ERC, has led to the establishment of "advanced model of electricity market with high level of openness". [8] Nevertheless, the process of

alignment with the EU law is not complete yet, since the challenges for EnC Contracting Parties are renewed with every new development of the European legislation [1]. Therefore, it may be well expected that the transposition of acts from the new package, the Clean Energy Package, and of the other Network Codes of the EU will be soon introduced in the EnC legislation.

Table 1 presents a summary of achievements made in the area of electricity markets and in the area of security of supply, which is closely connected to the integration of electricity markets. According to the 2020 European Commission Report on the Republic of North Macedonia, the roadmap for electricity market coupling with Bulgaria is awaiting for conditions to be fulfilled and for the establishment of an organized electricity market. This report also denotes that the independence of ERC is obstructed by political interference.

## 2.2. RENEWABLE ENERGY SOURCES

According to the detailed overview [1] the adoption of the Energy Law [2] brought about significant changes in the area of RES, with a view to increasing electricity generation from renewables and introducing SSs for RES in accordance with the Guidelines on state aid for environmental protection and energy 2014 - 2020 of the European Commission [11] and guidelines issued by the EnC Secretariat [12]. The most significant changes refer to the introduction of

Feed-in Premiums (FIPs), as SS along with the already existing Feed-in Tariffs (FITs). Moreover, for the first time customers have the possibility to install photovoltaics and other systems for electricity production for own consumption, and for the surplus of generated electricity to be fed into the grid.

Figure 6 below presents the acts adopted by competent institutions, the application of which facilitates the processes for introduction of FIPs, innovations to FIPs and regulating in full the implementation of power plants for electricity generation from RES. The end objective of these processes is increasing electricity generation from RES, but also reducing subsidies for electricity generation from RES by way of applying competitive bidding procedures in the process of awarding the status of preferential producer.

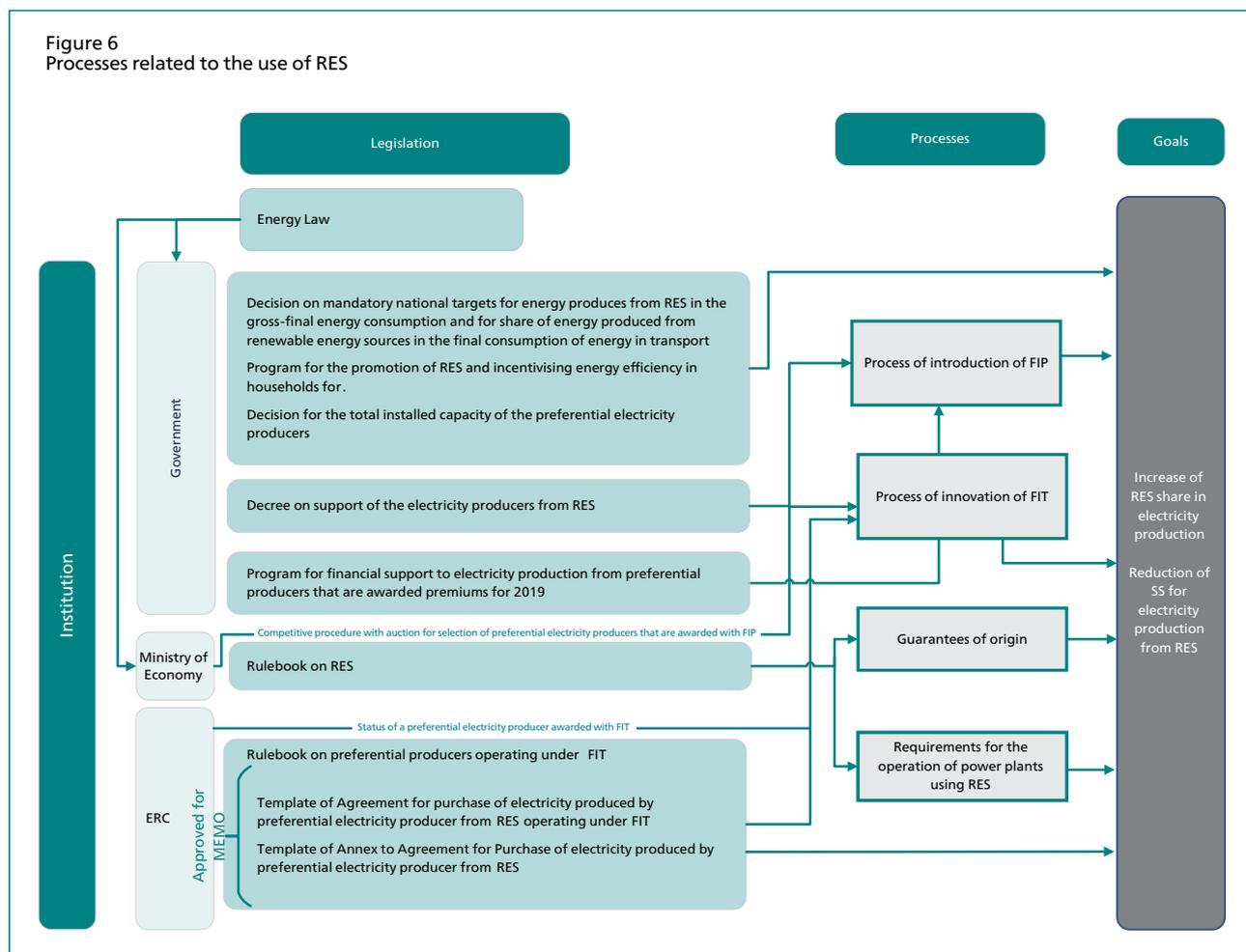
Experience with the use of FIPs so far has shown that this SS enables venture of technologies for producing electricity from RES. Further development of this area not only depends on the introduction of FIPs but also on the development of competitive electricity market, and on the gradual introduction of balancing

Table 1  
Achievements in the areas of electricity markets and security of supply - summary

Area	Process / adopted acts	Status
Electricity market	TSO is unbundled and certified	■
	DSO is legally and functionally unbundled	■
	MEMO is established	■
	MEMO is designated as NEMO	■
	ERC is established and is independent	■
	Organised market (day ahead and intraday) is functional	■
	New Electricity market rules are adopted	■
	Rules on balancing the power system are adopted	■
	Wholesale market is liberalised	■
	Retail market is liberalised	■
	Universal supplier is elected through competitive bidding procedure	■
	Supplier of last resort is elected through competitive bidding procedure	■
	Network rules for transmission adopted along with the group of EU Network Codes on connection	■
Security of supply	Energy Strategy adopted	■
	Program for implementation of the Energy Strategy adopted	■
	Annual program for protection of vulnerable energy customers adopted (the program for 2020 is adopted, the one for the next year is adopted at the end of the running year)	■
	Planning energy balance adopted (the one for 2020 is adopted, the one for the next year is adopted at the end of the running year)	■
	Participation in the regional office for auction of transmission capacities	■
	Coupling of electricity market with Bulgaria	■

Unfulfilled requirements Fulfilled requirements

Figure 6  
Processes related to the use of RES



responsibility for preferential electricity producers. In addition the processes of coupling of markets in the region and the introduction of cross-border mechanisms for utilizing renewable energy ought to give a positive impulse for using RES for electricity production.

### 2.3. ENERGY EFFICIENCY

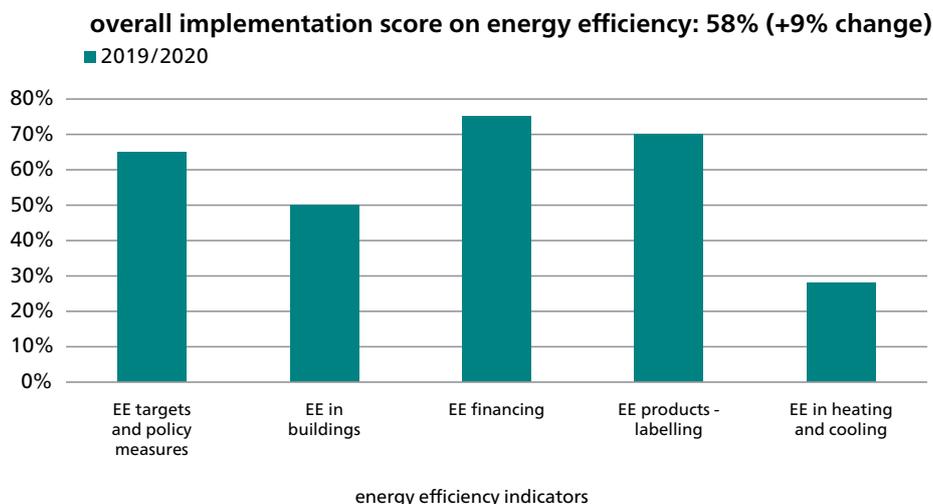
Similar to the Energy Law [2], the Law on Energy Efficiency [5] is also harmonized with the binding requirements of the adopted EnC legislation. Nevertheless, the complete implementation of the Law necessitates adoption of series of bylaws, that are to enable transposition of the remaining EU regulations related to energy efficiency. As described in the previous chapter, preparations were already initiated for adoption of this new secondary legislation. This process requires strengthened capacities of the Ministry of Economy which is responsible for this area. Namely, it is the lack of capacities in the Ministry which is identified as one of the barriers for enhancing the process of adoption of these necessary acts. With a view to utilizing RES and improving energy efficiency, the Ministry of Economy has adopted Annual program for promoting RES and energy efficiency in households for 2018 and 2019.

According to information presented in [1], and in the previous chapter, the adoption of NEEAP is relevant for the establishment of measures for achieving measurable results in energy efficiency in a given three year period. In fact, assessment of achievements in this area was conducted based on the report on the third NEEAP [13] submitted to EnC Secretariat. It is important to note that the degree of overall implementation of standing EnC law on 1 November 2019 was 49%, while according to the latest report of the EnC Secretariat [14] of 1 November 2020, the degree of implementation was 58%. The specifics per certain segments in the area of energy efficiency are presented in Figure 7.

According to [3], consumption of primary energy was reduced, resulting from the increased import of electricity and petroleum products, but also to some extent due to the application of measures for increasing energy efficiency and use of RES.

As mentioned in the previous chapter, the fourth NEEAP for the 2020 – 2023 period, which is expected to set forth new energy efficiency targets, is to be adopted by the Government by the end of 2020.

Figure 7  
Degree of implementation of EnC legislation according to energy efficiency indicators<sup>12</sup>



## 2.4. ENVIRONMENT

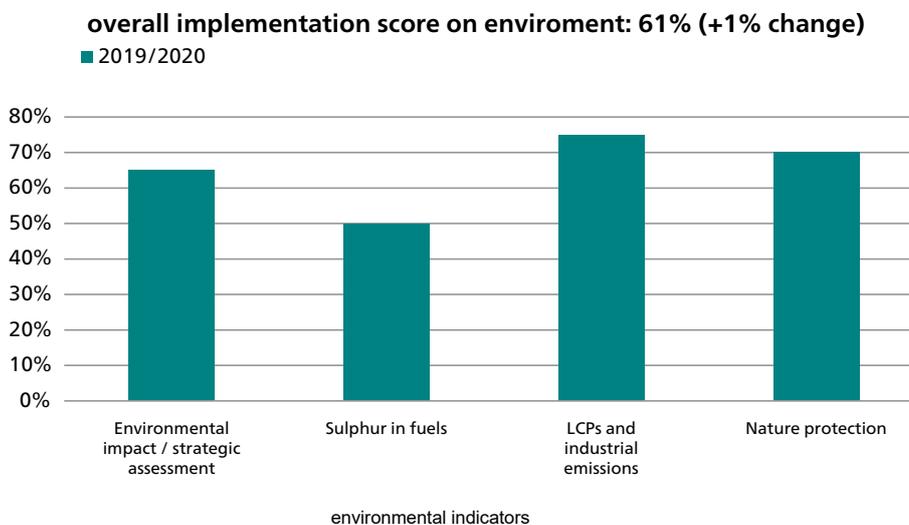
The previous chapter but also the publication [1], presents an overview of the transposed directives, mainly in the Law on Environment, Law on Quality of Ambient Air, the Rulebook on the limit values for the permissible levels of emissions and types of pollutants in the exhaust gases and vaporous emitted into the air from stationary sources, and in the relevant bylaws.

As indicated in [1], the country adopted a National Emission Reduction Plan for large combustion plants in April 2017, whose implementation began on 1 January 2018. It is very important to mention, in this context,

that there are no large combustion plants under the opt-out regime in North Macedonia as provided for by the Directive 2001/80/EC on limitation of emissions of certain pollutants into the air from large combustion plants and Directive 2010/75/EU on industrial emissions due to the limitation of their lifespan [8]. Moreover, the country is meeting its reporting obligations on pollutants by submitting the relevant information to the European Environment Agency<sup>13</sup> [8].

Figure 8 presents an overview of the degree of implementation in the area of environment, from the latest report of the EnC Secretariat [14], expressed by appropriate environmental indicators.

Figure 8  
Degree of implementation of EnC legislation according to environmental indicators<sup>14</sup>



12 [https://energy-community.org/implementation/North\\_Macedonia.html](https://energy-community.org/implementation/North_Macedonia.html)

13 <https://www.eea.europa.eu/>

14 [https://energy-community.org/implementation/North\\_Macedonia.html](https://energy-community.org/implementation/North_Macedonia.html)

It is an obligation of the Republic of North Macedonia to transpose Directive 2014/52/EU, which introduce amendments to the already transposed Directive 2011/92/EU. The obligations also include adoption of a new law on industrial emissions, but this has been delayed for the new 2020 – 2024 legislative period [8].

## 2.5. CLIMATE

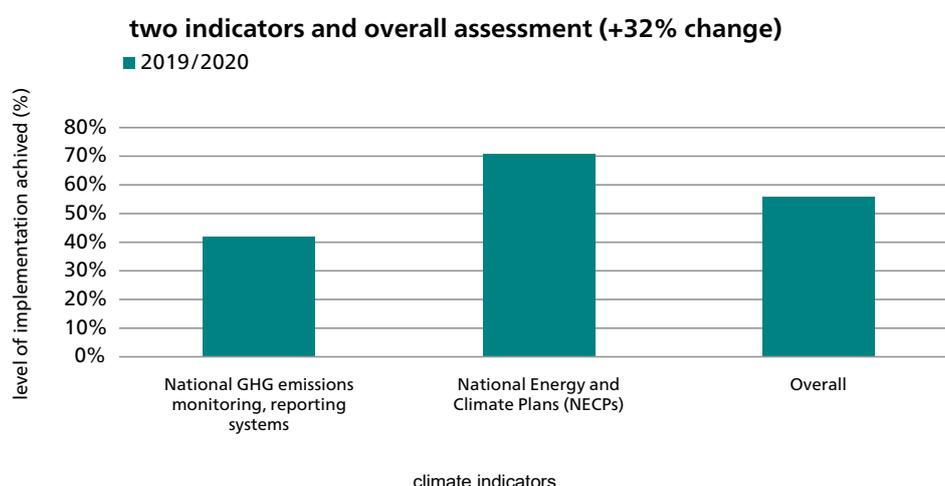
Based on the information in [1] and on data about the degree of implementation of relevant EnC legislation in the climate area<sup>15</sup>, the Republic of North Macedonia has noted progress in the area. For the time being, only the Law on Environment contains provisions concerning climate. The preparation of a separate Law on Climate Action including the transposition of the Regulation (EU) 525/2013 on the mechanisms for monitoring and reporting GHG emissions is in its final stage and is expected to be adopted by the end of 2020. With a view to implementing the essential elements of the Regulation (EU) 525/2013, our country already prepared an assessment, considering also the requirements for establishing legal and institutional pre-requisites. According to the assessment, the country needs to take further activities in relation to the Inventory of GHGs, the policies and projections for mitigating climate change, and the adaptation policies and measures provided for by the Regulation.<sup>16</sup>

Information presented in [1] indicate that the Law on Environment provides the legal basis for preparation and adoption of a National plan on climate change by the Government, which is in relation to the obligation to adopt low-carbon development strategies. The plan is expected to contain projections on GHG

emissions and analysis for their reduction. The work on a long-term strategy on climate action already began and is expected to be finalised in the end in 2020. In addition, the Communication strategy and action plan on climate change<sup>17</sup> adopted in 2014, envisage integration of climate priorities in the country's development plans and in work plans of relevant departments, by strengthening databases and of the analytical and institutional capacities of the states' key institutions.

A particularly significant accomplishment in this area is the preparation of the draft-version of the NECP. It is important to mention that Republic of North Macedonia is the first among the Contracting Parties to have met this requirement. Consultations are under way with the other EnC Contracting Parties and some neighbouring EU Member States. The EnC Secretariat has already published its opinion on the draft-version of NECP of North Macedonia, denoting that the Plan provides a solid foundation for finalisation of the NECP, and provides directions for improvement of certain parts of the Plan<sup>18</sup>. The regional approach and cooperation are of utmost relevance for certain areas elaborated in the NECP, such as integration of energy markets, cross-border mechanisms for renewable energy deployment and trade, risks and security threats in energy networks and critical energy infrastructures and transportation. As already presented in [1], the NECP is expected to adopt straightforward plans and specific budgets for research and innovations in climate and energy, promoting competition and problems related to energy poverty. According to the latest EnC Secretariat report [14], progress has been achieved with the degree of implementation of the EnC law by 32% compared to the previous year, which can be seen in Figure 9.

Figure 9  
Level of implementation of EnC legislation, according to climate indicators<sup>19</sup>



15 [https://www.energy-community.org/implementation/North\\_Macedonia/CLIM.html](https://www.energy-community.org/implementation/North_Macedonia/CLIM.html)

16 [http://www.moep.gov.mk/?page\\_id=4749](http://www.moep.gov.mk/?page_id=4749)

17 [http://www.moep.gov.mk/?page\\_id=368](http://www.moep.gov.mk/?page_id=368)

18 <https://energy-community.org/news/Energy-Community-News/2020/11/24.html>

19 [https://energy-community.org/implementation/North\\_Macedonia.html](https://energy-community.org/implementation/North_Macedonia.html)

## REFERENCES

- [1] V. Borozan, A. Krkoleva Mateska, P Krstevski, "Legislative Framework of the Electricity Sector in the Republic of North Macedonia and its International Standing", Friedrich-Ebert-Stiftung (FES), Skopje, November 2020, ISBN 978-9989-109-96-6
- [2] Energy Law, Official Gazette of Republic of North Macedonia, no. 96/18 and 96/19, <http://www.erc.org.mk/pages.aspx?id=8>
- [3] Strategy for Energy Development of the Republic of North Macedonia until 2040, Official Gazette of the Republic of North Macedonia, no. 25/20, <http://www.economy.gov.mk/doc/2759>
- [4] PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE, THE COMMITTEE OF THE REGIONS AND THE EUROPEAN INVESTMENT BANK A Framework Strategy for a Resilient Energy Union with a Forward-Looking Climate Change Policy, COM/2015/080, 25 February 2015, <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM%3A2015%3A80%3AFIN>
- [5] Law on Energy Efficiency, Official Gazette of the Republic of North Macedonia, no. 32/20, <http://www.economy.gov.mk/doc/2766>
- [6] DIRECTIVE (EU) 2018/2002 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 11 December 2018 amending Directive 2012/27/EU on energy efficiency (Text with EEA relevance), 11 December 2018, [https://ec.europa.eu/energy/topics/energy-strategy/clean-energy-all-europeans\\_en#documents](https://ec.europa.eu/energy/topics/energy-strategy/clean-energy-all-europeans_en#documents)
- [7] Ministry of Economy of the Republic of North Macedonia, Fourth Annual Report Under the Energy Efficiency Directive, June 2020, [https://www.energy-community.org/implementation/North\\_Macedonia/reporting.html](https://www.energy-community.org/implementation/North_Macedonia/reporting.html)
- [8] Energy Community Secretariat, "Assessment of the Application of Community Law in a Third Country – North Macedonia", For the purpose of participation of the Energy and Water Services Regulatory Commission of North Macedonia in Working Groups of the Agency for the Cooperation of Energy Regulators, 28 January 2020"
- [9] Regulation (EU) 2018/1999 of the European Parliament and of the Council of 11 December 2018 on the Governance of the Energy Union and Climate Action, amending Regulations (EC) No 663/2009 and (EC) No 715/2009 of the European Parliament and of the Council, Directives 94/22/EC, 98/70/EC, 2009/31/EC, 2009/73/EC, 2010/31/EU, 2012/27/EU and 2013/30/EU of the European Parliament and of the Council, Council Directives 2009/119/EC and (EU) 2015/652 and repealing Regulation (EU) No 525/2013 of the European Parliament and of the Council (Text with EEA relevance.), 11 December 2018, [https://ec.europa.eu/energy/topics/energy-strategy/clean-energy-all-europeans\\_en#documents](https://ec.europa.eu/energy/topics/energy-strategy/clean-energy-all-europeans_en#documents)
- [10] ANNUAL REPORT of the Energy and Water Services Regulatory Commission of the Republic of North Macedonia for 2018, April 2019, <https://www.erc.org.mk/pages.aspx?id=18>
- [11] European Commission, "Guidelines on State aid for environmental protection and energy 2014-2020", Official Journal of the European Union 2014/C 200/01
- [12] Energy Community Secretariat, "Policy Guidelines on the Reform of the Support Schemes for Promotion of Energy from Renewable Sources", PG 05/ 2015.
- [13] The Third National Action Plan on Energy Efficiency until 2020, [https://www.energy-community.org/implementation/North\\_Macedonia.html](https://www.energy-community.org/implementation/North_Macedonia.html)
- [14] Energy Community Secretariat, "2020 Annual Implementation Report", November 2020, <https://www.energy-community.org/implementation/IR2020.html>

## LIST OF ACRONYMS

ACER	European Union Agency for the Cooperation of Energy Regulators
Clean Energy Package	Winter Package of EU legislation on energy and climate, or Clean Energy for all Europeans
EnC	Energy Community
ERC	Regulatory Commission for Energy and Water Services of the Republic of North Macedonia
ESM	Power Plants of North Macedonia
EU	European Union
FIP	Feed-in Premium
FIT	Feed-in Tariff
GHG	Greenhouse Gases
IPCC	Intergovernmental Panel on Climate Change
MANU	Macedonian Academy of Sciences and Arts
MEMO	National Operator of the Organised Electricity Market in North Macedonia
MEPSO	North Macedonian Electricity Transmission System Operator
NDCs	Nationally Determined Contributions
NECP	National Energy and Climate Action Plan
NEEAP	National Energy Efficiency Action Plan
NEMO	Nominated Electricity Market Operator
RES	Renewable Energy Sources
SS	Support Schemes
Third Package	Third legislative package for the internal electricity and gas markets of the EU
TSO	Transmission System Operator

## AUTHORS



**Vesna Borozan** is a Professor of Power Systems at Ss. Cyril and Methodius University in Skopje, Faculty of Electrical Engineering and Information Technologies (UKIM/FEIT). She received her PhD in 1996 from the University of Belgrade. She was a Postdoctoral Fellow at North Carolina State University in 1997, Visiting Professor at Pontificia Universidad Catolica de Chile in 1999, and Honorary Professor at Vienna University of Technology in 2010-2012. Prof. Borozan was an MP during the mandate

period 2002 - 2006 and the Ambassador to the Republic of Austria, Slovak Republic, and Japan from 2006 to 2010.

In her career, besides the numerous scientific publications and professional studies, she notably had a leading role in the initial restructuring of the energy sector in North Macedonia and in the negotiations on signing the Energy Community Treaty in 2005. Since then, her efforts to encourage the energy transition in North Macedonia, as well as the South East Europe regional market integration, are constantly present in her research and educational work. Currently, Prof. Borozan is the leader of the UKIM/FEIT team in the EU Horizon 2020 CROSSBOW Project.



**Aleksandra Krkoleva Mateska** is associate professor at the Ss Cyril and Methodius University in Skopje, Faculty of Electrical Engineering and Information Technologies (UKIM/FEIT). She works in the field of power systems, focusing on Smart Grids, renewable sources integration in distribution grids and Microgrids, electricity markets and regulation related to these areas. She has had a number of study visits to other universities, including at the University of Manchester, UK, University of

Rostock, Germany, National Technical University in Athens, Greece. She is an author and co-author of more than sixty research papers. She has participated in several research projects financed by various programs of the European Commission as a member of the UKIM/FEIT team. She is a member of IEEE and CIGRE.



**Petar Krstevski** is an assistant professor at the Ss Cyril and Methodius University in Skopje, Faculty of Electrical Engineering and Information Technologies (UKIM/FEIT). He works in the field of power systems and his research interests include the regional integration of electricity markets and ancillary services markets, cross-border coordination of power system operation, market integration of renewable generation, and the regulation related to these areas.

He has actively participated in multiple international projects financed by the European Commission as well as the Kingdom of Norway, notably SEETSOC and CROSSBOW, as well as several national studies in his areas of expertise. In 2016, he concluded a study visit at the consultancy company THEMA in Oslo, Norway, where he worked on analyses of the electricity markets in South East Europe. He is the author or co-author of more than forty research papers.

## IMPRINT

Friedrich-Ebert-Stiftung  
Office Skopje  
bul. 8 September 2/2-5 1000  
Skopje, Republic of North Macedonia

Responsible:  
Eva Ellereit, Director  
Phone.: +389 2 3093-181

[www.fes-skopje.org](http://www.fes-skopje.org)

Contact:

[contact@fes-skopje.org](mailto:contact@fes-skopje.org)

**FRIEDRICH  
EBERT  
STIFTUNG**

The views expressed in this publication are not necessarily those of the Friedrich-Ebert-Stiftung or of the organization for which the authors work. Commercial use of all media published by the Friedrich-Ebert-Stiftung (FES) is not permitted without the written consent of the FES.

Translation: Natalija Kunovska Cingarska

Design and print:

 **KONTURA**  
design, graphic projects  
and printing factory

# GAP ANALYSIS BETWEEN THE LEGISLATIVE FRAMEWORK OF THE ELECTRICITY SECTOR IN THE REPUBLIC OF NORTH MACEDONIA AND THE EUROPEAN LEGISLATION



With an intention to critically analyse the current accommodation of the electricity sector legislation in the Republic of North Macedonia to the international legal framework, this publication affirms, first of all, the basic state strategic and geopolitical determinations of the country and taking into consideration the ratified international agreements that are relevant to the sector. The short introductory review instantly locates the strategic interest of our country within the political sphere of the EU as well as the need for a consistent harmonization of the national law.



Similarly, it is easily perceived that the path to “EU harmonization” in the electricity sector goes across cooperation and fulfilment of the obligations undertaken with the Energy Community Treaty. This Treaty is especially important for North Macedonia because of the fact that it is the first legally binding agreement that the country has signed with the EU.



Regular accomplishment of the requirements as well as the attitude of the competent institutions and of the professional and broader public in North Macedonia against this Treaty reflects a picture of the overall readiness and seriousness of the reform process towards the EU accession.