

## Country Presentation: Supporting Schemes - A detailed look on systems in place

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# A land of mountains, sun and rivers = potential for SHPP and PV plants

Ceská Rep

Czech Rep

Hrvatska

sterreich

Slovakia

Magyarország Hungary

> Srbija Serbia

> > Ελλάς

Greece

България Bulgaria

Approximately 285 sunny days per year

Wind potential in the central part

Беларусь Belarus

REPUBLIC

MACEDONIA

Lithuania

Türkiye Turkey

## General strategy of the supporting scheme

The main aim:

- to encourage investments in the optimal usage of available potential of RES,
- support to the accomplishment of the National mandatory goals on renewable energy sources participation in the total energy consumption, and
- support to conditions for environment protection and mitigation of climate changes.

#### FEED-IN TARIFF (FIT)

- Introduced in 2007
- The first PP to sell the produced electricity under FIT started operation in 2010

#### FEED IN PREMIUMS (FIPs)

# Introduced in accordance with the Law on Energy\*, since 2018

## General strategy of the supporting scheme

#### FEED-IN TARIFF (FIT)

#### FEED IN PREMIUMS (FIPs)

The FIT is a purchase price of electricity produced by a preferential electricity producer set by Government	The Premium tariff signifies additional amount above the price achieved of the preferential producer in selling of the produced electricity on the Electricity Market.
the manner of obtaining FIT specified by rulebook of the ERC, ERC implement procedure	granted based on a tender procedure involving auctions. The manner of conducting the tender procedure and auction for awarding premiums, concluding contracts and payment of premiums specified by the Decree of the Government, the Ministry will only implement the procedure.
the market operator distributes the costs paid to the preferential producers <u>to every</u> <u>licensed supplier</u> , according to their market share. Consumers are paying for 100% of the RE support	the funds for the premiums: <u>from the state budget</u>
Electricity Market Operator is <u>obliged to purchase the total of electricity produced by</u> the preferential producers in a period of 15 to 20 years, depending on the type of the <u>Power Plant</u> , following by conducting a power-purchase agreement (PPA)	the preferential producer who has acquired the right to use the premium is not guaranteed by the guaranteed purchase of the produced energy from the electricity market operator
the electricity market operator is balancing responsible party	balance responsible

# General strategy: Technological focus or prioritization

	Upper limit of installed	stalled		Prescribed to
Type of Power Plant	capacity of the Power Plant	Amount of preferential tariff use	preferential tariff use	installed capacity
Hydro Power Plant 10 MW		Monthly quantities of delivered electricity per blocks:		
	10 MW	<ul> <li>I. Block: 12,00 €¢/kWh</li> <li>(≤ 85.000 kWh)</li> <li>I. Block: 8,00 €¢/kWh</li> <li>(&gt; 85.000 kW ≤ 170.000 kWh)</li> </ul>	20 years	rc
		I.         Block: 6,00 €¢/kWh           (> 170.000 ⋈ ≤ 350.000 kWh)           I.         Block: 5,00 €¢/kWh		
		(> 350.000 µ ≤ 700.000 kWh) I. Block: 4,50 €¢/kWh (> 700.000 kWh)		

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Type of Power Plant	preferential tariff use	Prescribed total installed capacity
Wind Power Plant	20 years	/
Photovoltaic Power Plants	15 years	200 MW

FEED IN PREMIUMS (FIPs)

Wind Power Plant	50 MW	8,9 €¢/kWh	20 years	160 MW
	≤ 3 MW			
Biomass Thermal Power Plant	(to 30.06.2021)		15 years	10 MW
	≤ 1 MW	18 €¢/kWh		
	(from 1.07.2021)			
Biogas Thermal Power Plant	≤ 3 MW			
	(to 30.06.2021)	18 €¢/kWh	15 years	20 MW
	≤ 1 MW			
	(from 1.07.2021)			

# Portfolio of electricity produces from RES in the Republic of North Macedonia:

Large Hydro Power Plants (HPP),

Small sized Hydro Power Plants (SHPP) with installed capacity lower than

10 MW,

Wind Power Plants (WPP), Photovoltaic Power Plants (PVPP), Biogas Thermal Power Plants (BGPP) Biomass Thermal Power Plants

Type of	Number of Power	Installed	Share (%)	Production (GWb)	Share (%)
Power Plant	Plants	capacity (intr)		(0111)	
Total	352	2.117	100,00%	5.269	100,00%
Thermal PP	5	1.034	48,85%	2.105	39,96%
Cogeneration PP	3	287	13,58%	1.517	28,79%
Renewable energy sources	344	795	37,57%	1.646	31,25%
НРР	10	587	73,76%	1.132	68,75%
WPP	1	36,8	4,63%	103	6,26%
SHPP	107	119	14,97%	321	19,52%
PVPP	222	45	5,69%	36	2,19%
Biogas	3	7	0,88%	54	3,28%
Biomass	1	1	0,08%	0	0,00%

What is characteristic for 2021 is that for the first time after the introduction of feed-in tariffs as a measure to support renewable energy sources, the number of feed-in producers is on a downward trend.



Despite the reduced number and power of power plants that use feed-in tariffs, the annual production of these producers in 2021 has increased and is the largest since the beginning of the application of feed-in tariffs.



from October 2021, the average price at which electricity is purchased from preferential producers is lower than the average price on the wholesale electricity market.



months

9

# Supporting system: Positive/negative impacts/results

Positive:

Consumers had the opportunity to purchase electricity at a lower price than the market

Negative:

Having in mind the latest developments in the electricity market, we are facing:

- Reduced interest of potential investors to use feed-in tariffs as a measure of support
- Termination of contracts by the preferential producers

#### Future aspects: Supporting scheme in the future

In order to continue to use the full available potential of renewable energy sources, to protect the environment from harmful gas emissions and to ensure security of supply, it is necessary to continue the implementation of measures to support renewable energy sources.

What we have learned from recent developments is that support measures need to be more market-oriented.



## THANK YOU FOR YOUR ATTENTION!

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