2019 PROGRESS REPORT OF THE REPUBLIC OF LITHUANIA ON THE PROMOTION AND USE OF RENEWABLE ENERGY SOURCES

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Introduction

The 2019 Report of the Republic of Lithuania on progress in the promotion and use of renewable energy sources (hereinafter, the 'Report') covers the 2017-2018 period and has been drawn up in accordance with the Procedure for reporting to the European Commission on progress in the promotion and use of renewable energy sources¹, the provisions of Directive 2009/28/EC² and Directive (EU) 2015/1513³ and the template for Member State progress reports under Directive 2009/28/EC drawn up by the European Commission⁴ used to ensure that Member State reports are complete, cover all the requirements laid down in Article 22 of Directive 2009/28/C and are comparable with each other, over time and with National Renewable Energy Action Plans submitted by Member States in 2010.

In accordance with the Methodology for calculating the share of energy from renewable sources in gross final energy consumption⁵, the share of energy from renewable sources is calculated as the gross final consumption of energy from all energy sources, and the calculated gross final consumption of energy from all energy sources, and the calculated gross final consumption of energy from renewable sources is adjusted taking into account the statistical transfer between the Republic of Lithuania and other European Union Member States, the results of the implementation of joint projects with other Member States and third countries and joint support schemes with other Member States.

The Report relies on information and data provided or published by the Ministry of Energy of the Republic of Lithuania, the Ministry of the Environment of the Republic of Lithuania, the Ministry of Transport and Communications of the Republic of Lithuania, the Ministry of Education, Science and Sport of the Republic of Lithuania, the Ministry of the Economy and Innovation of the Republic of Lithuania and the Ministry of Agriculture of the Republic of Lithuania and enterprises, institutions and organisations subordinate to them, Statistics Lithuania, and electricity, heat and biofuel producers.

¹The Procedure for reporting to the European Commission on progress in the promotion and use of renewable energy sources, as approved by Resolution No <u>1314</u> of the Government of the Republic of Lithuania of 15 September 2010 approving the Procedure for reporting to the European Commission on progress in the promotion and use of renewable energy sources

²Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC (OJ L $\underline{140}$, 5.6.2009, p. 16)

³Directive (EU) 2015/1513 of the European Parliament and of the Council of 9 September 2015 amending Directive 98/70/EC relating to the quality of petrol and diesel fuels and amending Directive 2009/28/EC on the promotion of the use of energy from renewable sources (OJ L239, 15.9.2015, p. 1)

⁴https://tinyurl.com/y58smlkt

⁵The Methodology for calculating the share of energy from renewable sources in gross final energy consumption, as approved by Order No <u>1-170</u> of the Minister for Energy of the Republic of Lithuania approving the Methodology for calculating the share of energy from renewable sources in gross final energy consumption

1. Sectoral and overall shares and actual consumption of energy from renewable sources in the preceding two years $(Article\ 22(1)(a)\ of\ Directive\ 2009/28/EC)$

Table 1: The sectoral (electricity, heating and cooling, and transport) and overall shares of energy from renewable sources (%)⁶

Indicator	2017	Change
Energy from renewable sources: heating and cooling ⁷ (%)	46.50	45.25
Energy from renewable sources: electricity ⁸	18.25	18.41
Energy from renewable sources: transport ⁹	4.29	4.33
Overall share of energy from renewable sources ¹⁰ (%)	26.04	25.03
Overall share of energy from renewable sources, taking into account statistical transfers between countries	-	24.21

Table 1a: Calculation table for the renewable energy contribution of each sector to final energy consumption (ktoe)¹¹

Indicator	2017	2018
(A) Gross final consumption of energy from renewable sources for heating and cooling	1,185.6	1,166.9
(B) Gross final consumption of electricity from energy from renewable sources	191.0	197.6
(C) Gross final consumption of energy from renewable sources in transport	73.6	79.8
(D) Gross total consumption of energy from renewable sources 12	1,450.2	1,444.4
(E) Overall share of energy from renewable sources, taking into account statistical transfers between countries	-	1,397.1

Table 1.b: Total actual contribution (installed capacity, gross electricity generation) from each renewable energy technology in Lithuania to meet the binding 2020 targets and the indicative interim trajectory for the shares of energy from renewable resources in electricity 13

Indicator.	20	17	2018	
Indicator	MW	GWh	MW	GWh
Hydro ¹⁴ :	877.0	446.3	877.0	451.8
non-pumped ¹⁵	117	602.4	117	431.0
<1MW	19	73.9	19	49.0
1MW-10 MW	8	33.3	8	18.3

⁶Facilitates comparison with Table 3 and Table 4a of the National Renewable Energy Action Plan (the 'NREAP').
⁷Share of energy from renewable sources in heating and cooling: gross final consumption of energy from renewable sources for heating and cooling (as defined in Articles 5(1)b) and 5(4) of Directive 2009/28/EC) divided by gross final consumption of energy for heating and cooling.

⁸Share of renewable energy in electricity: gross final consumption of electricity from renewable sources (as defined in Articles 5(1)(a) and 5(3) of Directive 2009/28/EC) divided by total gross final consumption of electricity. The same methodology as in Table 3 of the NREAP applies.

⁹Share of renewable energy in transport: Final consumption of energy from renewable sources in transport (see Article 5(1)(c) and 5(5) of Directive 2009/28/EC) divided by the consumption in transport of 1) petrol; 2) diesel; 3) biofuels used in road and rail transport and 4) electricity in land transport (as reflected in row 3 of Table 1). The same methodology as in Table 3 of the NREAP applies.

¹⁰Share of renewable energy in gross final energy consumption. The same methodology as in Table 3 of the NREAP applies.

¹¹Facilitates comparison with Table 4 of the NREAP.

¹²In accordance with Article 5(1) of Directive 2009/28/EC, gas, electricity and hydrogen from renewable energy sources shall only be considered once. No double counting is allowed.

¹³Facilitates comparison with Table 10a of the NREAP.

¹⁴Normalised in accordance with Directive 2009/28/EC and Eurostat methodology.

¹⁵Non-pumped electricity generation data (GWh) are reported as non-normalised in accordance with Directive 2009/28/EC and the Eurostat methodology. As explained by Statistics Lithuania, Eurostat's tool SHARES is used to compile the information. As of 2017, Eurostat has made changes and is no longer detailing hydropower data, so it is not possible to estimate more detailed normalised hydropower without the SHARES tool.

I. J. attack	20	17	2018		
Indicator	MW	GWh	MW	GWh	
>10MW	90	495.2	90	363.7	
pumped					
mixed ¹⁶	-	-	-	-	
Geothermal	-	-	-	-	
Solar:	73.8	68.0	82.0	86.6	
photovoltaic	73.8	68.0	82.0	86.6	
concentrated solar power	-	-	-	-	
Tide, wave, ocean	-	-	-	-	
Wind:	518.0	1,224.7	533.0	1,240.7	
onshore	518.0	1,224.7	533.0	1240.7	
offshore	-	-	-	-	
Biomass ¹⁷ :	70.0	430.5	76.0	495.0	
solid biomass	45.0	303.3	51.0	355.1	
biogas	25.0	127.2	25.0	139.9	
bioliquids	-	-	-	=	
TOTAL:	1,538.8	2,169.5	1,568.0	2,274.1	
of which in combined heat and power	-	430.5	-	495.0	

Table 1c: Total actual contribution (final energy consumption 18) from each renewable energy technology in Lithuania to meet the binding 2020 targets and the indicative interim trajectory for the shares of energy from renewable resources in heating and cooling (ktoe) 19

Indicator	2017	2018
Geothermal (excluding low temperature geothermal heat in heat pump applications)	0.4	0.0
Solar	_	_
Biomass ²⁰ :	1,168.8	1,157.0
solid biomass	1,158.5	1,145.9
biogas	10.3	11.1
bioliquids	-	-
Renewable energy from heat pumps:		
- of which aerothermal		
- of which geothermal	_	-
- of which aerothermal		
TOTAL:	1,169.2	1,157.0
- of which district heating ²¹	47.6%*	46.7%*
of which biomass in households ²²	39.7%*	39.4%*

¹⁶In accordance with new Eurostat methodology.

¹⁷Take into account only those complying with applicable sustainability criteria (cf. Article 5(1) last subparagraph of Directive 2009/28/EC).

¹⁸Direct use and district heat as defined in Article 5(4) of Directive 2009/28/EC.

¹⁹Facilitates comparison with Table 11a of the NREAP.

²⁰Take into account only those complying with applicable sustainability criteria (cf. Article 5(1) last subparagraph of Directive 2009/28/EC).

²¹District heating and/or cooling from total renewable heating and cooling consumption.

²²From the total renewable heating and cooling consumption.

Table 1d: Total actual contribution from each renewable energy technology in Lithuania to meet the binding 2020 targets and the indicative interim trajectory for shares of energy from renewable resources in the $\frac{1}{2}$ in

Indicator	2017	2018
- Bioethanol	8.3	8.0
- Biodiesel (FAME)	63.5	69.8
- Hydrotreated vegetable oil	-	-
- Biomethane	-	-
- Fischer-Tropsch diesel	-	-
- Bio-ETBE	-	-
- Bio-MTBE	-	-
- Bio-DME	-	-
- Bio-TAEE	-	-
Biobutanol	-	-
- Biomethanol	-	-
- Pure vegetable oil	-	-
Total sustainable biofuels	71.8	77.8
Of which:		
sustainable biofuels produced from feedstock listed in Annex IX Part A	71.8	77.8
other sustainable biofuels eligible for the target set out in Article $3(4)(e)$	-	-
sustainable biofuels produced from feedstock listed in Annex IX Part B	-	-
sustainable biofuels for which the contribution towards the renewable energy target is limited according to Article 3(4)(d)	-	-
imported from third countries	-	-
Hydrogen from renewables	-	-
Renewable electricity	1.84	2.02
Of which:		
consumed in road transport	0.90	0.93
consumed in rail transport	0.29	0.42
consumed in other transport sectors	0.65	0.67

²³For biofuels take into account only those compliant with the sustainability criteria, cf. Article 5(1) last subparagraph. ²⁴Facilitates comparison with Table 12 of the NREAP.

2. Measures taken in the preceding two years and/or planned at national level to promote the growth of energy from renewable sources taking into account the indicative trajectory for achieving the national RES targets as outlined in the National Renewable Energy Action Plan²⁵ (Article 22(1)(a) of Directive 2009/28/EC)

Table 2: Overview of all policies and measures of 2017-2018

Name and reference of measure	Type of measure	Expected result	Target group and/or activity	Ongoing or planned	Start and end dates of the measure		
Measures of general scope							
1. The National Energy Independence Strategy recast by Resolution No XIII-1288 of the Seimas of the Republic of Lithuania of 21 June 2018 amending Resolution No XI-2133 of the Seimas of the Republic of Lithuania of 26 June 2012 on the approval of the National Energy Independence Strategy. The share of energy from renewable sources in Lithuania's domestic energy production and total final energy consumption will be further increased, thus reducing dependence on fossil fuel imports and increasing local electricity-generating capacity. Article 14 of Law No IX-884 of the Republic of Lithuania on Energy The Plan of Measures for the implementation of the National Energy Independence Strategy, approved by Resolution No 1210 of the Government of the Republic of Lithuania of 5 December 2018 approving the Plan of Measures for the implementation of the National Energy Independence Strategy	Regulatory	The share of renewable energy sources in the country's gross final consumption of energy will increase: 30% by 2020; 45% by 2030; 80% by 2050.	Companies in the energy sector, energy consumers, public and local authorities, Lithuanian Electricity Association, drinking water suppliers	Ongoing	Since 2012		
 2. The National Strategy for the Development of Renewable Energy Sources, as approved by Resolution No 789 of the Government of the Republic of Lithuania of 21 June 2010 approving the National Strategy for the Development of Renewable Energy Sources. By increasing the share of renewable energy resources in the country's energy balance, to meet energy needs in the electricity, heating and transport sectors to an optimal extent using domestic resources, to phase out imported polluting fossil fuels, 	Regulatory	The share of energy from renewable sources in the country's gross final consumption of energy will reach	Companies in the energy sector, energy consumers, public and local authorities	Ongoing	2010-2020		

²⁵https://tinyurl.com/y2a2f4t7

Name and reference of measure	Type of measure	Expected result	Target group and/or activity	Ongoing or planned	Start and end dates of the measure
and thus to enhance energy security and energy independence and to contribute to international efforts in reducing greenhouse gas emissions. The 2010-2015 Plan of implementing measures for the National Strategy for the Development of Renewable Energy Sources, as approved by Order No 1-180 of the Minister for Energy of the Republic of Lithuania of 23 June 2010 approving the 2010-2015 Plan of implementing measures for the National Strategy for the Development of Renewable Energy Sources.		at least 23% in 2020			
3. Law No XI-1375 of the Republic of Lithuania on Energy from Renewable Sources. The legal basis for the public administration, regulation, supervision and control of the renewable energy sector of the Republic of Lithuania and the organisation of activities in this sector, as well as state regulation and supervision of operations of energy grid operators and producers of energy from renewable sources and their relations with controlling authorities have been established. The purpose is to ensure sustainable development of the use of renewable energy sources, promote further development and deployment of innovative technologies and consumption of generated energy. The main objective is to achieve a share of energy production from renewable sources of at least 38% in the country's gross final energy consumption by 2025, and that this share be further increased.	Regulatory	The share of energy from renewable sources in the country's gross final consumption of energy will reach at least 38% in 2025	Energy producers and consumers, public and local authorities	Ongoing	Since 2011
4. The 2012-2020 National Forest Sector Development Programme, as approved by Resolution No 569 of the Government of the Republic of Lithuania of 23 May 2012 approving the 2012-2020 National Forest Sector Development Programme. The purpose of the programme is to implement a long-term Lithuanian forestry policy that is consistent with other related policies and to set objectives and targets for the development of the forestry sector up to 2020.	Regulatory	Increased annual amount of felling waste and unsellable small timber used as biofuel: 500,000 m³ in 2020	State Enterprise State Forest Administration, private forest owners	Ongoing	2012-2020

Name and reference of measure	Type of measure	Expected result	Target group and/or activity	Ongoing or planned	Start and end dates of the measure
 5. Separation out of the biodegradable fraction of municipal and economic waste: (5.1.) Determination of the composition of mixed municipal wastes and assessment of the amounts of biodegradable municipal wastes. A procedure is laid down for assessing the composition of mixed municipal wastes and the composition and quantity of wastes being sent for disposal in regional non-hazardous waste landfills, and for reporting on the assessment of amounts of wastes. Article 7 of Law No XI-1375 of the Republic of Lithuania on Energy from Renewable Sources. The National Strategic Waste Management Plan, as approved by Resolution No 519 of the Government of the Republic of Lithuania of 12 April 2002 approving the National Strategic Waste Management Plan. The Procedure for determining the composition of mixed municipal wastes and assessing the amounts of biodegradable municipal wastes, as approved by Order No D1-661 of the Minister for the Environment of the Republic of Lithuania of 31 August 2011 approving the Procedure for determining the composition of mixed municipal wastes and assessing the amounts of biodegradable municipal wastes. 	Regulatory	Development of municipal waste use in energy production	Operators of waste sorting facilities, operators of regional non-hazardous waste landfills, legal entities established by one or several municipalities and tasked with the administration of the municipal waste management system, municipalities within the municipal waste management region, Environmental Protection Department under the Ministry of the Environmental Protection Agency	Ongoing	Since 2012
 (5.2.) Separation out of the biodegradable fraction of industrial and municipal waste having regard to the renewable part of the energy produced from industrial and municipal waste. A procedure is laid down for determining the biodegradable fraction of municipal and/or industrial waste (hereinafter, 'industrial and other economic activity waste') and solid recovered fuel used to produce energy from renewable sources. 	Regulatory	Development of the use of municipal and/or economic waste to produce energy	Economic operators producing and/or using biogas and solid recovered fuel from municipal and/or economic waste and operating	Ongoing	Since 2012

Name and reference of measure	Type of measure	Expected result	Target group and/or activity	Ongoing or planned	Start and end dates of the measure
Articles 7, 9, 10 and 27 of Law No XI-1375 of the Republic of Lithuania on Energy from Renewable Sources.			or supervising landfills		
Article 6 of Law No <u>I-2223</u> of the Republic of Lithuania on Environmental Protection.					
The Methodology for separating out the biodegradable fraction of industrial and municipal waste having regard to the renewable part of the energy produced from industrial and municipal waste, as approved by Order No D1-810 of the Minister for the Environment of the Republic of Lithuania of 4 October 2012 approving the Methodology for separating out the biodegradable fraction of industrial and municipal waste having regard to the renewable part of the energy produced from industrial and municipal waste.					
6. Training of specialists installing small-scale installations for producing energy from renewable sources and monitoring of the quality of their work:					
(6.1.) Training for certification of specialists installing installations for producing energy from renewable sources. The training procedure and conditions are laid down for the certification of specialists (installers) installing (including commissioning and adjustment) of small-scale (up to 100 kW nominal output capacity) biomass boilers and non-stonework heaters, geothermal systems and heat pumps, solar light installations and solar energy installations for producing heat energy, in accordance with the requirements of Directive 2009/28/EC. Articles 5 and 45 of Law No XI-1375 of the Republic of Lithuania on Energy from Renewable Sources. The Training Procedure for the certification of specialists installing installations for the production of energy from renewable sources, as approved by Order 1-329 of the Minister for Energy of the Republic of Lithuania of 30 December 2014 approving the	Regulatory	Training procedure and conditions for the certification of installers are laid down	Installers, establishments training them, the designated public authority	Ongoing	Since 2012
Training Procedure for the certification of specialists installing installations for the production of energy from renewable sources.					

Name and reference of measure	Type of measure	Expected result	Target group and/or activity	Ongoing or planned	Start and end dates of the measure
(6.2.) Certification of specialists installing installations for producing energy from renewable sources. The following is laid down for specialists installing installations for producing energy from renewable sources and other energy employees: 1) qualification and qualification improvement requirements; 2) lists of categories and areas of activities and work; 3) the main functions of participants in the certification process, the certification procedure and requirements for the register of their certificates; 4) dispute resolution arrangements. Articles 5 and 45 of Law No XI-1375 of the Republic of Lithuania on Energy from Renewable Sources. Articles 6 and 28 of Law No XI-884 of the Republic of Lithuania on Energy. The Certification Procedure for employees constructing and operating energy facilities and installations, as approved by Order No 1-220 of the Minister for Energy of the Republic of Lithuania of 7 November 2012 approving the Certification Procedure for employees constructing and operating energy facilities and	Regulatory	Procedure and conditions for the certification of specialists installing installations for producing energy from renewable sources and other energy employees are laid down	Energy employees, including installers, the State Energy Inspectorate under the Ministry of Energy ²⁶ , certification bodies, energy undertakings	Ongoing	Since 2012
installations. (6.3.) Procedure and conditions are laid down for the quality monitoring of installation operations performed by energy employees installing (including commissioning and adjustment) small-scale (up to 100 kW nominal output capacity) installations producing energy from renewable sources (biomass boilers and non-stonework heaters, geothermal systems and heat pumps, solar light installations and solar energy facilities for producing energy) ('installations' [invalid since 1 July 2019]. Articles 5 and 45 of Law No XI-1375 of the Republic of Lithuania on Energy from Renewable Sources.	Regulatory	Procedure and conditions are laid down for the quality monitoring of installation operations by installers	Installers, certification bodies, the supervisory authority	Ongoing	Since 2012

²⁶National Energy Regulatory Council since 1 July 2019

Name and reference of measure	Type of measure	Expected result	Target group and/or activity	Ongoing or planned	Start and end dates of the measure
The Quality Monitoring Procedure for installation operations of installations for the production of energy from renewable sources, as approved by Order No 1-330 of the Minister for Energy of the Republic of Lithuania of 30 December 2014 approving the Quality Monitoring Procedure for installation operations of installations for the production of energy from renewable sources [invalid since 1 July 2019]. Wider use of felling waste for energy production:					
(7.1.) More favourable conditions for preparing and storing felling waste. In order to create more favourable conditions for the preparation and storage of felling waste, the key biological, environmental and technological requirements for felling (wood preparation and extraction) in forests have been set out. Article 16 of Law No <u>I-671</u> of the Republic of Lithuania on Forests. The Rules on felling, as approved by Order No <u>D1-79</u> of the Minister for the Environment of the Republic of Lithuania of 27 January 2010 approving the Rules on felling.	Regulatory	Development of biomass use in energy production	Forest owners, managers and users	Ongoing	Since 2010
(7.2.) Promoting the use of felling waste. In order to promote the use of felling waste, the drawing up, coordination, approval, registration and quality control of all internal forest management projects of any form of ownership are regulated, and it is stipulated that the design part of an internal forest management project is to include an estimate of the amount of potentially usable felling waste. Article 14 of Law No I-671 of the Republic of Lithuania on Forests. The Rules for the drawing up of internal forest management projects, as approved by Order No D1-406 of the Minister for the Environment of the Republic of Lithuania of 1 September 2006 approving the Rules for the drawing-up of forest management schemes and the preparation of internal forest management projects.	Regulatory	Development of biomass use in energy production	Authors of the forest management project (authors of the forest management project and/or legal entities drawing up forest management projects)	Ongoing	Since 2011

Name and reference of measure	Type of measure	Expected result	Target group and/or activity	Ongoing or planned	Start and end dates of the measure
8. Trade in wood in the rough and felling residues produced in State-owned forests. The procedure for organising and administering trade in wood in the rough and felling residues produced in state forests (hereinafter, 'wood'), conditions for participation in wood sale auctions, procedure for awarding wood purchase and sale contracts, determining wood prices and assessing bid prices, concluding purchase and sale contracts and paying for wood have been established. Article 7 of Law No I-671 of the Republic of Lithuania on Forests. The Procedure for trade in wood in the rough and felling residues produced in State-owned forests, as approved by Resolution No 972 of the Government of the Republic of Lithuania of 30 November 2017 approving the Procedure for trade in wood in the rough and felling residues produced in State-owned forests.	Regulatory	Development of biomass use in energy production	Wood sellers (state forest managers), wood buyers (natural or legal persons buying wood)	Ongoing	Since 1 January 2018
9. Increasing the possibilities and methods of using geothermal energy. To increase the contribution of geothermal energy to the country's energy resources, its rational and efficient use, the overall potential of geothermal resources in the country is assessed by identifying shallow and deep geothermal resources and their development guidelines and utilisation possibilities and methods. Article 4(1) of Law No I-1034 of the Republic of Lithuania on Subsoil. The 2016-2020 National Geological Survey Programme 'Geoenergy and Safe Environment', as approved by Order No D1-880 of the Minister for the Environment of the Republic of Lithuania of 3 December 2015 approving the 2016-2020 National Geological Survey Programme 'Geoenergy and Safe Environment'. The 2018 Plan of implementing measures for the 2016-2020 National Geological Survey Programme 'Geoenergy and Safe Environment', as approved by Order No D1-130 of the Minister for the Environment of the Republic of Lithuania of 20 February 2018 approving the 2018 Plan of implementing measures for the 2016-2020 National Geological Survey Programme 'Geoenergy and Safe Environment'.	Informational	The overall potential of the country's geothermal resources was evaluated and shallow and deep geothermal resources and the possibilities and methods of their utilisation were identified	Public authorities	Ongoing	2016-2020

Name and reference of measure	Type of measure	Expected result	Target group and/or activity	Ongoing or planned	Start and end dates of the measure
The 2017 Plan of implementing measures for the 2016-2020 National Geological Surveys Programme 'Geoenergy and Safe Environment', as approved by Order No D1-191 of the Minister for the Environment of the Republic of Lithuania of 2 March 2017 approving the 2017 Plan of implementing measures for the 2016-2020 National Geological Surveys Programme 'Geoenergy and Safe Environment'.					
10. Simplification of the building permit issuance procedures for installations generating energy from renewable energy sources. As of 1 January 2017, to simplify the building permit issuance procedures for installations, including those generating energy from renewable energy sources, the following was established: 1) classification of structures by their intended use; 2) a list of structures classified under the category of special structures; 3) a list of simple structures and the features and technical parameters of buildings classified as simple structures and simple structures of engineering facilities. Articles 4 and 24 of Law No XI-1240 of the Republic of Lithuania on Construction. Technical Construction Regulation STR 1.01.03:2017 'Classification of structures', as approved by Order No D1-713 of the Minister for the Environment of the Republic of Lithuania of 27 October 2016 approving Technical Construction Regulation STR 1.01.03:2017 'Classification of structures'.	Regulatory	Improved procedures for issuing building permits	Producers of energy from renewable energy sources	Ongoing	Since 2017
11. Nearly zero energy buildings where a major proportion of energy comes from renewable energy sources. As of 1 January 2017, the design of new buildings (parts thereof) is to consider using engineering systems that are high-efficiency and/or ensure the use of renewable energy sources, giving the main reasons justifying the selected design solutions. Articles 8 and 51 of Law No I-1240 of the Republic of Lithuania on Construction. Technical Construction Regulation STR 2.01.02:2016 'Design and certification of energy performance of buildings', as approved by Order No D1-754 of the Minister for the Environment of the Republic of Lithuania of 11 November 2016 approving	Regulatory	Increased use and efficiency improvement of energy from renewable sources	Designers and investors	Ongoing	Since 2017

Name and reference of measure	Type of measure	Expected result	Target group and/or activity	Ongoing or planned	Start and end dates of the measure
Technical Construction Regulation STR 2.01.02:2016 'Design and certification of energy performance of buildings'.					
12. Renewable energy sources for industry LT+ (Measure No 04.2.1-LVPA-K-836 of the 2014-2020 EU Funds' investments in Lithuania). Installing the capacity for producing energy from renewable energy sources and developing new more efficient technologies and installing them at industrial enterprises in order to use energy for the internal needs of the enterprises and ensuring the supply of excess energy to other industrial enterprises or its transfer to centralised energy networks. Subparagraph 6.2.7 of the Rules on the distribution of responsibilities and functions between institutions with regard to the implementation of the 2014-2020 Operational Programme for European Union Funds' Investments, as approved by Resolution No 528 of the Government of the Republic of Lithuania of 4 June 2014 on the distribution of responsibilities and functions between institutions with regard to the implementation of the 2014-2020 Operational Programme for European Union Funds' Investments, and project 2, Priority 4 of the Annex to these Rules. The Schedule of conditions for the financing of projects for Measure No 04.2.1-LVPA-K-836 'Renewable energy sources for industry LT+' of Priority 4 'Promoting energy efficiency and renewable energy production and use' of the 2014-2020 Operational Programme for European Union Funds' Investments, as approved by Order No 4-647 of the Minister for the Economy of the Republic of Lithuania of 20 October 2016 on the Schedule of conditions for the financing of projects for Measure No 04.2.1-LVPA-K-836 'Renewable energy sources for industry LT+' of Priority 4 'Promoting energy efficiency and renewable energy sources for industry LT+' of Priority 4 'Promoting energy efficiency and renewable energy production and use' of the 2014-2020 Operational Programme for European Union Funds' Investments.	Financial	Reduced energy intensity in industrial enterprises by increasing the use of renewable energy sources, additional capacity of energy produced from renewable sources: 48 MW (59 MW by 31 December 2023)	Industrial enterprises	Ongoing	2014-2020 Call I (25.10.2016- 25.1.2017); Calls II and III (24.7.2017- 15.12.2017) (separately for SMEs and large industrial enterprises); Call IV ((scheduled for 2019 Q4)

Name and reference of measure	Type of measure	Expected result	Target group and/or activity	Ongoing or planned	Start and end dates of the measure
13. Promoting high-efficiency cogeneration in Vilnius City (Measure No 04.1.1-LVPA-V-108 of the 2014-2020 EU Funds' investments in Lithuania). Development of the use of energy from renewable sources for efficient heat and power production at the CHP plant in Vilnius. Subparagraph 6.2.7 of the Rules on the distribution of responsibilities and functions between institutions with regard to the implementation of the 2014-2020 Operational Programme for European Union Funds' Investments, as approved by Resolution No 528 of the Government of the Republic of Lithuania of 4 June 2014 on the distribution of responsibilities and functions between institutions with regard to the implementation of the 2014-2020 Operational Programme for European Union Funds' Investments.	Financial	The share of energy from renewable sources in the final energy balance: 23%; additional production capacity for energy from renewable sources: 228 MW	Lietuvos energija, UAB ²⁷ ; UAB Vilniaus kogeneracinė jėgainė (Vilnius Combined Heat and Power Plant)	Ongoing	2014-2023
The Schedule of conditions for the financing of projects for Measure No 04.1.1-LVPA-V-108 'Promoting high-efficiency cogeneration in Vilnius city' of Priority 4 'Promoting energy efficiency and renewable energy production and use' of the 2014-2020 Operational Programme for European Union Funds' Investments, as approved by Order No 1-108 of the Minister for the Economy of the Republic of Lithuania of approving Schedule No 1 of conditions for the financing of projects for Measure No 04.1.1-LVPA-V-108 'Promoting high-efficiency cogeneration in Vilnius city' of Priority 4 'Promoting energy efficiency and renewable energy production and use' of the 2014-2020 Operational Programme for European Union Funds' Investments.					
14. Development of municipal waste incineration capacity (Measure No <u>05.2.1-LVPA-V-022</u> of the 2014-2020 EU Funds' investments in Lithuania). Construction of facilities for incinerating (use for energy generation) of municipal waste.	Financial	The share of landfilled municipal waste: 30%; the developed capacity to generate energy from municipal	UAB Vilniaus kogeneracinė jėgainė	Ongoing	2014-2023

²⁷State-controlled group of energy undertakings UAB Ignitis grupė since 2019

Name and reference of measure	Type of measure	Expected result	Target group and/or activity	Ongoing or planned	Start and end dates of the measure
Subparagraph 6.2.7 of the Rules on the distribution of responsibilities and functions between institutions with regard to the implementation of the 2014-2020 Operational Programme for European Union Funds' Investments, as approved by Resolution No 528 of the Government of the Republic of Lithuania of 4 June 2014 on the distribution of responsibilities and functions between institutions with regard to the implementation of the 2014-2020 Operational Programme for European Union Funds' Investments. Paragraph 65 of the Administration Rules for the 2014-2020 Operational Programme		waste: 160,000 tonnes per year			
for European Union Funds' Investments, as approved by Resolution No 1090 of the Government of the Republic of Lithuania of 3 October 2014 approving the Administration Rules for the 2014-2020 Operational Programme for European Union Funds' Investments.					
The Schedule of conditions for the financing of projects for Measure 05.2.1-APVA-V-022 'Development of municipal waste incineration capacity' of Priority 5 'Environmental protection, sustainable use of natural resources and adapting to climate change' of the 2014-2020 Operational Programme for European Union Funds' Investments, as approved by Order No D1-224 of the Minister for the Environment of the Republic of Lithuania of 15 March 2017 approving the Schedule of conditions for the financing of projects for Measure 05.2.1-APVA-V-022 'Development of municipal waste incineration capacity' of Priority 5 'Environmental protection, sustainable use of natural resources and adapting to climate change' of the 2014-2020 Operational Programme for European Union Funds' Investments.					
15. Promotion of small-scale biofuel cogeneration (Measure No 04.1.1-LVPA-K-110 of the 2014-2020 EU Funds' investments in Lithuania). The installation of new biofuel-based high-efficiency cogeneration units (with an electrical power of up to 5 MW and a rated thermal input not exceeding 20 MW) in district heating systems (except in Vilnius and Kaunas). Subparagraph 6.2.7 of the Rules on the distribution of responsibilities and functions between institutions with regard to the implementation of the 2014-2020 Operational	Financial	The share of energy from renewable sources in the final energy balance: 23%; additional production capacity for energy from	Heat suppliers and (potential) independent heat producers	Ongoing	2014-2023

Name and reference of measure	Type of measure	Expected result	Target group and/or activity	Ongoing or planned	Start and end dates of the measure
Programme for European Union Funds' Investments, as approved by Resolution No 528 of the Government of the Republic of Lithuania of 4 June 2014 on the distribution of responsibilities and functions between institutions with regard to the implementation of the 2014-2020 Operational Programme for European Union Funds' Investments.		renewable sources: 18 MW			
Schedule No 1 of conditions for the financing of projects for Measure 04.1.1-LVPA-K-110 'Promotion of small-scale biofuel cogeneration' of Priority 4 'Promoting energy efficiency and renewable energy production and use' of the 2014-2020 Operational Programme for European Union Funds' Investments, as approved by Order No 1-338 of the Minister for Energy of the Republic of Lithuania of 30 December 2016 approving Schedule No 1 of conditions for the financing of projects for Measure 04.1.1 -LVPA-K-110 'Promotion of small-scale biofuel cogeneration' of Priority 4 'Promoting energy efficiency and renewable energy production and use' of the 2014-2020 Operational Programme for European Union Funds' Investments.					
16. Targeted research in smart specialisation (Measure No 01.2.2-LMT-K-718 of the 2014-2020 EU Funds' investments in Lithuania). Research carried out by high-level groups of researchers to produce results in line with the themes of R&D activities relevant to the economic sectors, which could subsequently be commercialised. Attracting researchers from abroad to carry out research aimed at producing results in line with the themes of R&D activities relevant to economic sectors, which could subsequently be commercialised. R&D activities of parallel laboratories to produce results corresponding to the themes of R&D activities relevant to economic sectors, which could subsequently be commercialised.	Financial	Results of research into the development of the use of energy from renewable sources which could subsequently be commercialised	Science and higher education institutions; university hospitals	Ongoing	2014-2023
Subparagraph 6.2.7 of the Rules on the distribution of responsibilities and functions between institutions with regard to the implementation of the 2014-2020 Operational Programme for European Union Funds' Investments, as approved by Resolution No 528 of the Government of the Republic of Lithuania of 4 June 2014 on the distribution of responsibilities and functions between institutions with regard to the					

Name and reference of measure	Type of measure	Expected result	Target group and/or activity	Ongoing or planned	Start and end dates of the measure
implementation of the 2014-2020 Operational Programme for European Union Funds' Investments. Schedule No 1 of conditions for the financing of projects for Measure 01.2.2-LMT-K-718 'Targeted research in smart specialisation' of Priority 1 'Promoting research, experimental development and innovation' of the 2014-2020 Operational Programme for European Union Funds' Investments, as approved by Order No V-237 of the Minister for Education and Science of the Republic of Lithuania of 10 April 2017 approving Schedule No 1 of conditions for the financing of projects for Measure 01.2.2-LMT-K-718 'Targeted research in smart specialisation' of Priority 1 'Promoting research, experimental development and innovation' of the 2014-2020 Operational Programme for European Union Funds' Investments.					
17. The 2014-2020 Lithuanian Rural Development Programme, as approved by Decision No C(2015)842 of the European Commission of 13 February 2015. One of programme's priorities/target areas is facilitating the supply and use of renewable energy sources, by-products, waste and other non-food raw materials for bio-economy purposes. Support is provided for investments in the use of waste from primary agricultural production for obtaining biogas, through the installation of biogas plants using generated heat and electricity solely for agricultural needs, and investment in forestry technologies for the production of biomass and promoting the use of forest management and felling waste. Total investments in renewable energy production amount to EUR 81,306,344.21 (target value for 2023). Support is also provided for investments in the creation, improvement or development of all types of small-scale infrastructure, including investments in renewable energy production and energy saving. The Financial Plan for the 2014-2020 Lithuanian Rural Development Programme, as approved by Decision No C(2015)842 of the European Commission of 13 February 2015.	Financial	Development of renewable energy production from agricultural and forestry resources	Farmers and forest managers	Ongoing	Since 2014

Name and reference of measure	Type of measure	Expected result	Target group and/or activity	Ongoing or planned	Start and end dates of the measure
The Administration Rules for the 2014-2020 Lithuanian Rural Development Programme, as approved by Order No 3D-507 of the Minister for Agriculture of the Republic of Lithuania of 26 August 2014 approving the Administration Rules for the 2014-2020 Lithuanian Rural Development Programme.					
18. The 2014-2020 Operational Programme for the Lithuanian Fisheries Sector. The 2014-2020 Operational Programme for the Lithuanian Fisheries, as approved by Decision No C(2015)5897 of the European Commission of 17 August 2015. Reducing the dependence of aquaculture enterprises on energy sources by using renewable energy sources and promoting energy efficiency. This Operational Programme encourages investment in the improvement of energy efficiency and the use of renewable energy sources. The Lithuanian Aquaculture Sector Development Plan for 2014-2020, as approved by Order No 3D-393 of the Minister for Agriculture of the Republic of Lithuania of 1 July 2014 approving the Lithuanian Aquaculture Sector Development Plan for 2014-2020. Most of the objectives and targets of this plan will be implemented through the 2014-2020 Lithuanian Fisheries Sector Operational Programme. Measures for the implementation of the plan are financed with appropriations from the Lithuanian national budget and the resources of the European Maritime and Fisheries Fund.	Financial	Development of the use of renewable energy sources	Pond aquaculture farms and CSA enterprises (enterprises developing closed-system aquaculture)	Ongoing	Since 2014
19. Measures and appropriations for the use of renewable energy sources in all sectors of the national economy. The Inter-institutional Action Plan implementing the goals and objectives of the National Strategy for Climate Change Management Policy identifies, inter alia, measures for the use of renewable energy sources in all sectors of the national economy (energy, industry, transport, agriculture, etc.) and appropriations for implementing these measures, and aims to ensure inter-institutional cooperation.	Regulatory	Increased use and efficiency improvement of energy from renewable sources	Public authorities, local authorities, Research Council of Lithuania, AB Energijos skirstymo operatorius, state science and higher education institutions	Ongoing	Since 2013

Name and reference of measure	Type of measure	Expected result	Target group and/or activity	Ongoing or planned	Start and end dates of the measure
The Inter-institutional Action Plan implementing the goals and objectives of the National Strategy for Climate Change Management Policy, as approved by Resolution No 366 of the Government of the Republic of Lithuania of 23 April 2013 approving the Inter-institutional Action Plan implementing the goals and objectives of the National Strategy for Climate Change Management Policy.					
20. Investments in forestry technologies (Measure of the 2014-2020 Lithuanian Rural Development Programme). Facilitating the supply and use of renewable energy sources, by-products, wastes, residues and other non-food raw material for the purposes of bio-economy. The activity supported under the measure includes, inter alia, the modernisation of forestry, the deployment of felling, round wood logging and wood biofuel production technologies, and the provision of services in the forestry sector. The 2014-2020 Lithuanian Rural Development Programme, as approved by Decision No C(2015)842 of the European Commission of 13 February 2015. The Financial Plan for the 2014-2020 Lithuanian Rural Development Programme, as approved by Decision No C(2015)842 of the European Commission of 13 February 2015. The Administration Rules for the 2014-2020 Lithuanian Rural Development Programme, as approved by Order No 3D-507 of the Minister for Agriculture of the Republic of Lithuania of 26 August 2014 approving the Administration Rules for the 2014-2020 Lithuanian Rural Development Programme.	Financial	Development of the use of renewable energy sources	Private forest managers, local authorities and micro and small enterprises	Ongoing	2014-2020
21. The Climate Change Programme. The funds of this Programme are used, inter alia, to promote the use of renewable energy sources and to introduce environment-friendly technologies, including high-efficiency cogeneration. Article 10 of Law No XI-329 of the Republic of Lithuania on Financial Instruments for Climate Change Management.	Financial	Development of the use of renewable energy sources	Producers of energy from renewable energy sources	Ongoing	Since 2010

Name and reference of measure	Type of measure	Expected result	Target group and/or activity	Ongoing or planned	Start and end dates of the measure
The Procedure for the use of funds from the Climate Change Programme, as approved by Order No D1-275 of the Minister for the Environment of the Republic of Lithuania of 6 April 2010 approving the Procedure for the use of funds from the Climate Change Programme.					
22. Research on the development forecast, efficient use and social impact of renewable energy sources. The purpose of the long-term research and experimental development programme entitled 'Research on the development forecast, efficient use and social impact of renewable energy sources' is to examine development trends in the production of renewable energy sources, forecast the prospects for their use, assess environmental problems and analyse the priorities and principles of the National Strategy for Sustainable Development, combining environmental and energy objectives. Subparagraph 4.2, Annex 6 to Order No V-273 of the Minister for Education and Science of the Republic of Lithuania of 24 April 2017 approving long-term research and experimental development programmes for 2017-2021.	Informational	18 publications in WoS journals ²⁸ , 5 articles in popular science magazines, presentation of results at 5 international and 7 national conferences, etc.	Public and local authorities, companies in the energy sector, energy consumers, other stakeholders	Ongoing	2017-2021
23. 'Renewable energy sources in Lithuania' website. The website presents up-to-date information on the legal framework for renewable energy sources in Lithuania and the funding mechanisms. It offers calculators that help determine possible energy outputs from specific renewable energy sources (RES) and estimate the energy demand. The website has an interactive map of the RES power plants operating in Lithuania. It also provides statistics on RES use in Lithuania and the European Union. http://www.avei.lt	Informational	Raising public awareness	Energy producers and consumers, science and higher education institutions, public and local authorities	Ongoing	Since 2011
	Electricity				
24. Priority transport of electricity from renewable energy sources in electricity transmission and distribution networks.	Regulatory	Increase in electricity generation from	Producers of electricity from renewable energy	Ongoing	Since 2011

²⁸foreign journals with a citation index included in the Thomson-Reuters Web of Science (WoS) bases

Name and reference of measure	Type of measure	Expected result	Target group and/or activity	Ongoing or planned	Start and end dates of the measure
Electricity grid operators (or transmission system operators) must give priority to the acceptance, transmission and/or distribution at transparent and non-discriminatory rates of the full amount of electricity from renewable energy sources offered by a producer that complies with the provisions of Article 3(2)(1) of the Law of the Republic of Lithuania on Energy from Renewable Sources. Article 17 of Law No XI-1375 of the Republic of Lithuania on Energy from Renewable Sources. Articles 31(2) and 39(2) of Law No VIII-1881 of the Republic of Lithuania on Electricity.		renewable energy sources	sources, and operators of electricity transmission systems and electricity distribution networks		
25. Reduced grid connection rates for power plants using renewable energy sources. The price for power plant connection to the power grid is equal to the price of the work performed by the successful tenderer in the public procurement procedure for producer power plant connection to the power grid. The person that has constructed or installed a power plant pays, in accordance with the procedure laid down by the Government or an institution authorised by it, the actual grid connection costs: 1) 40% of the grid connection costs, where the installed capacity of the power plant exceeds 350 kW; 2) 20% of the grid connection costs, where the installed capacity of the power plant is not above 350 kW. These provisions do not apply when the person constructing or installing the power plant performs the grid connection work himself in accordance with the statutory procedure. Article 21 of Law No XI-1375 of the Republic of Lithuania on Energy from Renewable Sources The Procedure for promoting the use of renewable energy sources to produce energy, as approved by Resolution No 827 of the Government of the Republic of Lithuania of 4 July 2012 approving the Procedure for promoting the use of renewable energy sources to produce energy.	Financial	Increase in electricity generation from renewable energy sources	Producers of electricity from renewable energy sources	Ongoing	Since 2011

Name and reference of measure	Type of measure	Expected result	Target group and/or activity	Ongoing or planned	Start and end dates of the measure
The Methodology for determining grid connection rates for electrical installations, as approved by Resolution No O3-235 of the National Control Commission for Prices and Energy of 29 July 2011 approving the Methodology for determining grid connection rates for electrical installations.					
26. Tariffs for the buying-in of electricity from renewable energy sources. A procedure has been approved for setting the maximum level of fixed tariff (hereinafter, 'maximum tariffs') for producers participating in the auction which produce electricity from renewable energy sources and for the fixing of feed-in tariffs for excess electricity, with a view to establishing transparent, objective and non-discriminatory principles for setting feed-in tariffs and maximum tariffs. Note. In fact, the procedure was in place until 2015, as there was no longer a free promotion quota afterwards. Article 11(1) of Law No XI-1375 of the Republic of Lithuania on Energy from Renewable Sources. The Methodology for setting tariffs for electricity generated from renewable energy sources, as approved by Resolution No O3-233 of the National Control Commission for Prices and Energy of 29 July 2011 approving the Methodology for setting tariffs for electricity generated from renewable energy sources [invalid since 21 May 2019]	Financial	Increase in electricity generation from renewable energy sources	Producers of electricity from renewable energy sources	Ongoing	Since 2011
27. Ensuring power grid access and grid optimisation. Services of public interest cover the connection of the power plants of renewable energy sources to power grids and the optimisation, development and/or reconstruction of the power grids by the grid operator, ensuring the development of production using renewable energy sources. Requirements have been laid down for grid operators to have in place a procedure for grid use enabling producers of electricity from renewable energy sources to use operators' grids, without undermining the principles of transparency, objectivity and non-discrimination. Articles 21 and 14(7) of Law No XI-1375 of the Republic of Lithuania on Energy from Renewable Sources.	Regulatory	Improved access to the electricity grid for installations generating electricity from renewable energy sources	Transmission systems and distribution system operators	Ongoing	Since 2011

Name and reference of measure	Type of measure	Expected result	Target group and/or activity	Ongoing or planned	Start and end dates of the measure
The Procedure for providing public-interest services in the electricity sector and determining their scope, as approved by Resolution No 916 of the Government of the Republic of Lithuania of 18 July 2012 approving the Procedure for providing public-interest services in the electricity sector and determining their scope. Requirements relating to the Procedure for power grid access, as approved by Resolution No 03-193 of the National Control Commission for Prices and Energy of 25 July 2011 approving the Requirements relating to the Procedure for power grid access.					
28. Reservation of power grid capacity and transfer capability. One of the measures promoting the use of renewable energy sources is the reservation of energy grid or system capacity and transfer capability or other relevant technical parameters for connecting installations using renewable energy resources. Articles 3 and 20 of Law No XI-1375 of the Republic of Lithuania on Energy from Renewable Sources.	Financial	Ensuring electricity grid capacity for the transport of electricity generated from renewable energy sources	Electricity grid operators, producers of electricity from renewable energy sources	Ongoing	Since 2012
The Procedure for promoting the use of renewable energy sources to produce energy, as approved by Resolution No 827 of the Government of the Republic of Lithuania of 4 July 2012 approving the Procedure for the use of renewable energy sources to produce energy. Resolution No 03-49 of the National Control Commission for Prices and Energy of 18 February 2016 endorsing the AB LITGRID procedure for the use of power grids by power generators [invalid since 13 June 2019].					
Resolution No O3E-362 of the National Control Commission for Prices and Energy of 11 August 2017 amending Resolution No O3-201 of the National Control Commission for Prices and Energy of 27 July 2012 endorsing the AB LESTO procedure for the use of electricity grids by power generators.					

Name and reference of measure	Type of measure	Expected result	Target group and/or activity	Ongoing or planned	Start and end dates of the measure
29. Balancing of electricity and reservation of electricity generating capacity where renewable energy sources are used. One of the measures promoting the use of renewable energy sources is the exemption of electricity producers from responsibility for the balancing of electricity generated and/or reservation of power plant capacity during the promotional period. Articles 3 and 20 of Law No XI-1375 of the Republic of Lithuania on Energy from Renewable Sources.	Regulatory	Increase in electricity generation from renewable energy sources	Producers of energy from renewable energy sources, electricity grid operator	Ongoing	Since 2012
The Procedure for promoting the use of renewable energy sources to produce energy, as approved by Resolution No 827 of the Government of the Republic of Lithuania of 4 July 2012 approving the Procedure for the use of renewable energy sources to produce energy.					
30. Guarantees of origin for electricity generated from renewable energy sources. Guarantees of origin for energy (electricity and heat or cooling energy) produced from renewable energy sources are issued, transferred and cancelled in accordance with the procedure and conditions established by the Ministry of Energy of the Republic of Lithuania, based on objective, transparent and non-discriminatory principles.	Regulatory	Issue of guarantees of origin for electricity generated from renewable energy sources	Electricity producers; electricity suppliers; the electricity transmission system operator;	Ongoing	Since 2011
Articles 5, 28 and 29 of Law No XI-1375 of the Republic of Lithuania on Energy from Renewable Sources. Paragraph 1 of Resolution No 1217 of the Government of the Republic of Lithuania of 19 October 2011 on granting authorisations in implementing the Law of the Republic			electricity distribution network operators; other participants in the electricity		
of Lithuania on Energy from Renewable Sources. Order No 1-298 of the Minister for Energy of the Republic of Lithuania of 14 November 2016 approving the Rules on the issue, transfer and cancellation of guarantees of origin for electricity produced from renewable energy sources and the recognition in the Republic of Lithuania of guarantees of origin issued in other Member States.			market which are registered in the guarantee of origin database		

Name and reference of measure	Type of measure	Expected result	Target group and/or activity	Ongoing or planned	Start and end dates of the measure
31. Authorisations for activity in the electricity sector. The existing capacity for generating electricity from renewable energy sources may be developed or new capacity installed on a new site subject to an authorisation for the development of capacity for generating electricity from renewable energy sources, unless such authorisation is not required. The procedure and conditions for the issue of these authorisations, their validity periods and the procedure and conditions for the extension of their validity periods are set forth in the Law on Electricity. Articles 16 and 49 of Law No XI-1375 of the Republic of Lithuania on Energy from Renewable Sources. Articles 5 of Law No IX-884 of the Republic of Lithuania on Energy. Articles 6 and 16 of Law No VIII-1881 of the Republic of Lithuania on Electricity. The Rules for granting authorisations for activity in the electricity sector, as approved by Order No 1-212 of the Minister for Energy of the Republic of Lithuania of 22 October 2013 approving the Rules for granting authorisations for activity in the electricity sector [invalid since 9 August 2019].	Regulatory	Legally regulated issuance of authorisations for electricity-related activities in the renewable energy sector	Producers of electricity using renewable energy sources to produce electricity	Ongoing	Since 2013
32. Promoting the use of renewable energy sources for electricity production. The production of electricity from renewable energy sources and the balancing of, and centralised trade in, such electricity is a service of public interest. The production of electricity from renewable energy sources is promoted by paying the difference between the fixed tariffs set for the producer and the price of electricity sold by this producer. Where an electricity producer sells electricity on the electricity exchange, the production of electricity from renewable energy sources is promoted by paying the difference between the fixed tariff set for that producer and the price of electricity sold by that producer on the electricity exchange. Article 20 of Law No XI-1375 of the Republic of Lithuania on Energy from Renewable Sources.	Financial	Promoting the use of renewable energy sources for electricity production	Producers of electricity from renewable energy sources	Ongoing	Since 2011

Name and reference of measure	Type of measure	Expected result	Target group and/or activity	Ongoing or planned	Start and end dates of the measure
Resolution No <u>810</u> of the Government of the Republic of Lithuania of 4 July 2012 approving quotas for promoting the use of renewable energy sources to generate electricity and approving auction regions [invalid since 1 May 2019]. The Procedure for promoting the use of renewable energy sources to produce energy, as approved by Resolution No <u>827</u> of the Government of the Republic of Lithuania of 4 July 2012 approving the Procedure for the use of renewable energy sources to produce energy.					
33. Developing the activities of consumers producing electricity from renewable energy sources. Consumers producing electricity from renewable energy sources have the right to install solar, wind and biomass power plants. Article 20(1) of Law No XI-1375 of the Republic of Lithuania on Energy from Renewable Sources. Articles 2(9) and 16(26)(4) of Law No VIII-1881 of the Republic of Lithuania on Electricity.	Regulatory	Promoting the use of renewable energy sources for electricity production	Consumers producing electricity from renewable energy sources	Ongoing	Since 2018
34. Support mechanisms for electricity generated from renewable energy sources by promoting introduction of the most efficient technologies. As of 2011, the National Control Commission for Prices and Energy drafted and approved legal acts implementing the provisions of the Law of the Republic of Lithuania on Energy from Renewable Sources. The main legal acts are: 1) Resolution No O3-279 of 28 September 2012 approving the Methodology for the pricing of public-interest services in the electricity sector; 2) Resolution No O3-249 of 26 September 2011 determining the maximum level of the fixed tariff; 3) Resolution No O3-235 of 29 July 2011 approving the Methodology for determining grid connection rates for electrical installations; 4) Resolution No O3-233 of 29 July 2011 approving the Methodology for setting tariffs for electricity generated from renewable energy sources [invalid since 21 May 2019];	Financial	Increase in electricity generation from renewable energy sources	Producers of electricity from renewable energy sources	Ongoing	Since 2011

Name and reference of measure	Type of measure	Expected result	Target group and/or activity	Ongoing or planned	Start and end dates of the measure
5) Resolution No O3-229 of 29 July 2011 approving the Regulations governing auctions held for the allocation of promotion quotas for electricity production from renewable sources.					
35. Exemption from excise duty. The following is exempt from excise duty on electricity: 1) electricity produced from renewable energy sources; 2) electricity, including electricity produced from renewable energy sources, exported or supplied to another Member State. Article 48 of Law No IX-569 of the Republic of Lithuania on Excise Duty.	Financial	Increase in electricity generation from renewable energy sources	Producers, exporters and suppliers of electricity from renewable energy sources	Ongoing	Since 2010
Heat	ing and cooling				
36. Promotion of the use of renewable energy sources in the production of heating and cooling energy. The State/municipalities promote, in the manner and under the conditions laid down in the Law of the Republic of Lithuania on Energy from Renewable Sources and the Law on the Heat Sector and implementing legislation, the production of heat and cooling energy from renewable energy sources, inter alia, by planning and developing the heat and cooling energy production capacity and ensuring the mandatory connection of heat energy production facilities to the heat transmission system and the buying-in of heat energy produced from renewable energy sources on a priority basis. Articles 1, 3, 7, 12 and 23 to 27 Law No XI-1375 of the Republic of Lithuania on Energy from Renewable Sources. Articles 4 and 10 of Law No XI-1565 of the Republic of Lithuania on the Heat Sector. The Procedure for promoting the use of renewable energy sources to produce energy, as approved by Resolution No 827 of the Government of the Republic of Lithuania	Regulatory	Wider use of renewable energy sources for heat and cooling energy production	Heating and cooling energy producers and consumers, public and local authorities	Ongoing	Since 2012

Name and reference of measure	Type of measure	Expected result	Target group and/or activity	Ongoing or planned	Start and end dates of the measure
of 4 July 2012 approving the Procedure for the use of renewable energy sources to produce energy.					
37. By reconstructing existing or constructing new cogeneration capacities, to ensure that the Vilnius district heating system is additionally equipped with installations using renewable and/or indigenous energy sources (municipal waste). The new Vilnius Combined Heat and Power Plant (CHP) will be able to produce around 40% of centrally supplied heat in Vilnius. The total electrical capacity of the power plant will be about 92 MW and the thermal capacity will be about 229 MW. Articles 2 and 7 of Law No IX-1565 of the Republic of Lithuania on the Heat Sector. The 2015-2021 National Programme for heat sector development, as approved by Resolution No 284 of the Government of the Republic of Lithuania of 18 March 2015 approving the 2015-2021 National Programme for heat sector development.	Economic	Vilnius district heating system would be additionally equipped with installations with electric capacity of about 92 MW/ heat generating capacity of about 229 MW using renewable and/or indigenous energy resources (municipal waste)	State-controlled group of energy undertakings UAB Ignitis, UAB Vilniaus kogeneracinė jėgainė	Ongoing	Since 2015
38. By reconstructing existing or constructing new cogeneration capacities, to ensure that the Kaunas district heating system is additionally equipped with installations using renewable and/or indigenous energy sources (municipal waste). Kaunas started building a new high-efficiency waste-fired cogeneration power plant with electrical capacity of around 24 MW and heat generating capacity of about 70 MW. Such capacity will enable the production of approximately 500 GWh of heat and 170 GWh of electricity per year. Articles 2 and 7 of Law No IX-1565 of the Republic of Lithuania on the Heat Sector. The 2015-2021 National Programme for heat sector development, as approved by Resolution No 284 of the Government of the Republic of Lithuania of 18 March 2015 approving the 2015-2021 National Programme for heat sector development.	Economic	The Kaunas district heating system would be additionally equipped with installations with electrical capacity of about 24 MW/ heat generating capacity of about 70 MW using renewable and/or indigenous energy resources	State-controlled group of energy undertakings Ignitis group [holds a 51% stake in the company building the power plant] and the energy company Fortum Heat Lietuva [49% stake]	Ongoing	Since 2015

Name and reference of measure	Type of measure	Expected result	Target group and/or activity	Ongoing or planned	Start and end dates of the measure
		(municipal waste)			
39. By constructing new cogeneration capacities, to ensure that the district heating systems of other cities are additionally equipped with 43 MW electric capacity cogeneration units powered by biofuels and/or biogas. The measure is aimed at reducing heating prices and environmental pollution by giving priority to renewable and/or indigenous energy sources in the fuel mix used for heat production. Articles 2 and 7 of Law No IX-1565 of the Republic of Lithuania on the Heat Sector. The 2015-2021 National Programme for heat sector development, as approved by Resolution No 284 of the Government of the Republic of Lithuania of 18 March 2015 approving the 2015-2021 National Programme for heat sector development.	Regulatory	District heating systems of other cities to be additionally equipped with biofuel and/or biogas cogeneration units with electrical capacity of 43 MW	Legal entities	Planned	Since 2015
40. To install new or upgrade existing heat generation installations using renewable energy resources. It is planned to build new installations or to adapt the capacity of the existing installations or to connect the existing installations to district heating, which are compliant with the requirements of Directive 2010/75/EU. Articles 2 and 7 of Law No IX-1565 of the Republic of Lithuania on the Heat Sector. The 2015-2021 National Programme for heat sector development, as approved by Resolution No 284 of the Government of the Republic of Lithuania of 18 March 2015 approving the 2015-2021 National Programme for heat sector development.	Regulatory	New or upgraded existing heat generation installations using renewable energy resources	Legal entities	Ongoing	Since 2015
41. Development of cogeneration in the district heating sector by focusing on electricity and heat production from renewable energy resources. Regular revision, and, where appropriate, amendment or drafting of new legislation in order to ensure the economically viable development of cogeneration in the district	Regulatory	Legislation reviewed, amended or new legislation drafted	Public and local authorities	Ongoing	Since 2015

Name and reference of measure	Type of measure	Expected result	Target group and/or activity	Ongoing or planned	Start and end dates of the measure
heating sector compatible with the strategic lines of development of the electricity sector by focusing on electricity and heat production from renewable energy resources.					
Articles 2 and 7 of Law No <u>IX-1565</u> of the Republic of Lithuania on the Heat Sector.					
The 2015-2021 National Programme for heat sector development, as approved by Resolution No <u>284</u> of the Government of the Republic of Lithuania of 18 March 2015 approving the 2015-2021 National Programme for heat sector development.					
42. Promoting the use of biofuel for heat production (Measure No <u>04.1.1-LVPA-K-109</u> of the 2014-2020 EU Funds' investments in Lithuania).	Financial	The share of energy from renewable sources in the	Heat suppliers and independent heat producers operating heat production	Ongoing	2014-2023
Installation of biofuel-based heat production installations (with heat generating capacity of up to 10 MW) in reconstructed or new boiler facilities by replacing fossil fuel in the production of centrally supplied heat.		final energy balance: 23%; additional	installations using fossil fuels		
Subparagraph 6.2.7 of the Rules on the distribution of responsibilities and functions between institutions with regard to the implementation of the 2014-2020 Operational Programme for European Union Funds' Investments, as approved by Resolution No 528 of the Government of the Republic of Lithuania of 4 June 2014 on the distribution of responsibilities and functions between institutions with regard to the implementation of the 2014-2020 Operational Programme for European Union Funds' Investments.		capacity for energy production from renewable sources: 70 MW	energy production from renewable		
Schedule No 1 of conditions for the financing of projects for Measure 04.1.1-LVPA-K-112 'Replacement of heat production facilities using biofuel' of Priority 4 'Promoting energy efficiency and renewable energy production and use' of the 2014-2020 Operational Programme for European Union Funds' Investments, as approved by Order No 1-143 of the Minister for Energy of the Republic of Lithuania of 22 September 2017 approving Schedule No 1 of conditions for the financing of projects for Measure 04.1.1-LVPA-K-112 'Replacement of heat production facilities using biofuel' of Priority 4 'Promoting energy efficiency and renewable energy production					

Name and reference of measure	Type of measure	Expected result	Target group and/or activity	Ongoing or planned	Start and end dates of the measure
and use' of the 2014-2020 Operational Programme for European Union Funds' Investments.					
43. Replacement of heat production installations using biofuel (Measure No 04.1.1-LVPA-K-112 of the 2014-2020 EU Funds' investments in Lithuania). Replacement of obsolete heat production installations using biofuel with new ones (with heat generating capacity of up to 10 MW) in district heating systems. Subparagraph 6.2.7 of the Rules on the distribution of responsibilities and functions between institutions with regard to the implementation of the 2014-2020 Operational Programme for European Union Funds' Investments, as approved by Resolution No 528 of the Government of the Republic of Lithuania of 4 June 2014 on the distribution of responsibilities and functions between institutions with regard to the implementation of the 2014-2020 Operational Programme for European Union Funds' Investments. Schedule No 1 of conditions for the financing of projects for Measure 04.1.1-LVPA-K-112 'Replacement of heat production facilities using biofuel' of Priority 4 'Promoting energy efficiency and renewable energy production and use' of the 2014-2020 Operational Programme for European Union Funds' Investments, as approved by Order No 1-247 of the Minister for Energy of the Republic of Lithuania of 22 September 2017 approving Schedule No 1 of conditions for the financing of projects for Measure 04.1.1-LVPA-K-112 'Replacement of heat production facilities using biofuel' of Priority 4 'Promoting energy efficiency and renewable energy production and use' of the 2014-2020 Operational Programme for European Union Funds' Investments.	Financial	The share of energy from renewable sources in the final energy balance is 23%; the rated (nominal) thermal input of replaced (new) biofuel facilities is 35 MW	Heat suppliers and independent heat producers	Ongoing	2014-2023
44. Boiler replacement in households (Measure No 04.3.2-LVPA-V-111 of the 2014-2020 EU Funds' investments in Lithuania). Replacement of inefficient biomass-based boilers with more efficient technologies using energy from renewable sources for heat production (new efficient biofuel	Financial	Households with increased renewable energy efficiency: 4,200 households	Households that use biomass for heat generation inefficiently	Ongoing	2014-2023

Name and reference of measure	Type of measure	Expected result	Target group and/or activity	Ongoing or planned	Start and end dates of the measure
boilers; heat pumps) in households, which are not connected to the district heating system.					
Subparagraph 6.2.7 of the Rules on the distribution of responsibilities and functions between institutions with regard to the implementation of the 2014-2020 Operational Programme for European Union Funds' Investments, as approved by Resolution No 528 of the Government of the Republic of Lithuania of 4 June 2014 on the distribution of responsibilities and functions between institutions with regard to the implementation of the 2014-2020 Operational Programme for European Union Funds' Investments.					
Schedule No 1 of conditions for the financing of projects for Measure 04.3.2-LVPA-V-111 'Replacement of boilers in households' of Priority 4 'Promoting energy efficiency and renewable energy production and use' of the 2014-2020 Operational Programme for European Union Funds' Investments, as approved by Order No 1-12 of the Minister for Energy of the Republic of Lithuania of 17 January 2019 approving Schedule No 1 of conditions for the financing of projects for Measure 04.3.2-LVPA-V-111 'Replacement of boilers in households' of Priority 4 'Promoting energy efficiency and renewable energy production and use' of the 2014-2020 Operational Programme for European Union Funds' Investments.					
Biofuc	els (for transport)				
45. Compensation for the purchase/cultivation of raw materials for the production of biofuels. Under the Rules, State aid ('aid') is granted from the State budget to reimburse for part of the price of rapeseed oil intended for the production of rapeseed methyl (ethyl) ester and rapeseed and cereal grain purchased for the production of dehydrated ethanol. Article 10(1) and (2)of Law No XI-1375 of the Republic of Lithuania on Energy	Financial	Increase in agricultural produce used in the production of biofuels	Biofuel producers	Ongoing	Since 2008
from Renewable Sources. The Funding Rules on developing the production of biofuels for transport, as approved by Order No 3D-417 of the Minister for Agriculture of the Republic of					

Name and reference of measure	Type of measure	Expected result	Target group and/or activity	Ongoing or planned	Start and end dates of the measure
Lithuania of 25 July 2008 approving the Funding Rules on developing the production of biofuels for transport.					
46. Compulsory blending of biofuels into mineral fuels. To ensure compulsory blending of biofuels into mineral fuels, appropriate requirements are laid down in respect of fuels sold at points of sale and on the domestic market. Articles 17 and 39 of Law No XI-1375 of the Republic of Lithuania on Energy from Renewable Sources. The Rules for trade in petroleum products, as approved by Order No 1-346 of the Minister for Energy of the Republic of Lithuania of 14 December 2010 approving the Rules for trade in petroleum products. The Mandatory Quality Parameters for petroleum products, biofuels and liquid fuel consumed in the Republic of Lithuania, as approved by Order No 1-348/D1-1014/3-742 of the Minister for Energy, the Minister for the Environment and the Minister for Transport and Communications of the Republic of Lithuania of 22 December 2010 approving the Mandatory Quality Parameters for petroleum products, biofuels and liquid fuel consumed in the Republic of Lithuania.	Regulatory	Growth in the use of renewable energy sources in the transport sector	Suppliers of petroleum products; fuel vendors	Ongoing	Since 2011
47. Exemption of energy products from excise duty and excise duty relief on energy products. Dehydrated ethyl alcohol intended for the production of biofuels for transport and/or their components and/or biofuel is exempt from excise duty. Excise duty relief for energy products manufactured from materials of biological origin or with their additives is subject to a fixed-rate excise duty, reduced by the share corresponding pro rata to the share of biological extenders (in percentage) in the mixture of biofuels for transport and fuels. Articles 27 and 40 of Law No IX-569 of the Republic of Lithuania on Excise Duty.	Financial	Promoting a growth in the production of energy products containing materials of biological origin	Producers of energy products	Ongoing	Since 2010

Name and reference of measure	Type of measure	Expected result	Target group and/or activity	Ongoing or planned	Start and end dates of the measure
48. Concession in respect of the tax on pollution from mobile sources of pollution Natural and legal persons polluting the environment from vehicles powered by biofuels meeting relevant standards are exempt from the tax on pollution from mobile source upon producing supporting documentary evidence. Article 5(3)(4) of Law No VIII-1183 of the Republic of Lithuania on Pollution Tax.	Financial	Promoting the growth of consumption of biofuels	Biofuel consumers (polluting from mobile sources of pollution)	Ongoing	Since 2003
	Biogases				
49. Promoting the use of renewable energy sources for gas production. The production of biogas and the connection of biogas production facilities to the gas system are granted the status of services of public interest. When establishing natural gas transmission and distribution tariffs, application of these tariffs must be non-discriminatory in respect of biogas. Gas system operators must create conditions for the supply of biogas to gas systems. Biogas production installations must be connected to gas systems if the producers of biogas comply with established technical, quality and other requirements. The connection of biogas production installations is subject to a discount of 40% of the connection price. Articles 3, 6, 20(1), 30 to 32 and 34 to 36 of Law No XI-1375 of the Republic of Lithuania on Energy from Renewable Sources. The Procedure for promoting the use of renewable energy sources to produce energy, as approved by Resolution No 827 of the Government of the Republic of Lithuania of 4 July 2012 approving the Procedure for the use of renewable energy sources to produce energy.	Regulatory	Promoting biogas production	Biogas producers	Ongoing	Since 2012
50. Support for biogas production from agricultural and other wastes (Measure of the 2014-2020 Lithuanian Rural Development Programme). To facilitate the supply and use of renewable energy sources, by-products, wastes, residues and other non-food raw material for the purposes of bio-economy, support is granted for:	Financial	Development of biogas production	Producers of biogas from renewable energy sources	Ongoing	2014-2020

Name and reference of measure	Type of measure	Expected result	Target group and/or activity	Ongoing or planned	Start and end dates of the measure
1) the production of biogas from animal and bird manure and other biodegradable waste; 2) the production and compression of biomethane; 3) the production of heat and power in biogas production facilities; 4) the production de-aerated substrate. The 2014-2020 Lithuanian Rural Development Programme, as approved by Decision No C(2015)842 of the European Commission of 13 February 2015. The Financial Plan for the 2014-2020 Lithuanian Rural Development Programme, as approved by Decision No C(2015)842 of the European Commission of 13 February 2015. Implementing Rules for Activity 'Support for biogas production from agricultural and other wastes' of Measure 'Economic and business development' of the 2014-2020 Lithuanian Rural Development Programme, as approved by Order No 3D-632 of the Minister for Agriculture of the Republic of Lithuania of 11 August 2015					
approving the Implementing Rules for Activity 'Support for biogas production from agricultural and other wastes' of Measure 'Economic and business development' of the 2014-2020 Lithuanian Rural Development Programme.					
51. Production of biogas at a livestock farm from farm waste (Measure of the 2014-2020 Lithuanian Rural Development Programme). Support under the activity of the measure is granted for the production of biogas at a livestock farm from farm waste. Biogas and heat and power produced can be used only for the needs of the holding (not for sale). Biogas can be used to produce heat and electricity in a cogeneration plant, but the share of heat consumed will make up at least 50% of the total energy produced. The 2014-2020 Lithuanian Rural Development Programme, as approved by Decision No C(2015)842 of the European Commission of 13 February 2015.	Financial	Development of the use of renewable energy sources	Persons engaged in agricultural activity and having registered a farmer's farm and agricultural holding in their own name	Ongoing	2014-2020

Name and reference of measure	Type of measure	Expected result	Target group and/or activity	Ongoing or planned	Start and end dates of the measure
The Financial Plan for the 2014-2020 Lithuanian Rural Development Programme, as approved by Decision No C(2015)842 of the European Commission of 13 February 2015. The Implementing Rules applicable as of 2015 for Activity 'Support for investments in agricultural holdings' of Measure 'Investments in tangible assets' of the 2014-2020 Lithuanian Rural Development Programme, as approved by Order No 3D-302 of the Minister for Agriculture of the Republic of Lithuania of 21 April 2015 approving the Implementing Rules applicable as of 2015 for Activity 'Support for investments in agricultural holdings' of Measure 'Investments in tangible assets' of the 2014-2020 Lithuanian Rural Development Programme.					
Biof	uel (for heating)				
52. Creating transparent, competitive and low-concentration market for producers and suppliers of indigenous and renewable energy sources. This measure makes it possible to trade in different types of sustainable indigenous and renewable energy resources (stumps, peat, lignin, etc.) and to ensure the optimal price of biofuel for heat producers and establishes a legal framework for the organisation, administration, regulation, monitoring and control of the Lithuanian market in energy resources, and governs relations between stakeholders in the centralised trading of biofuel and the trade in natural gas and secondary instruments safeguarding against energy price fluctuations. Law No XI-2023 of the Republic of Lithuania on the Market in Energy Sources. The 2015-2021 National Programme for heat sector development, as approved by Resolution No 284 of the Government of the Republic of Lithuania of 18 March 2015 approving the 2015-2021 National Programme for heat sector development. The Rules for centralised trade in biofuel, as approved by Order No 1-182 of the Minister for Energy of the Republic of Lithuania of 20 September 2012 approving the Rules for centralised trade in biofuel.	Regulatory	A transparent, competitive and low-concentration market of producers and suppliers of indigenous and renewable energy resources is created	Producers and suppliers using indigenous and renewable energy sources	Ongoing	Since 2015

Name and reference of measure	Type of measure	Expected result	Target group and/or activity	Ongoing or planned	Start and end dates of the measure
The Energy Exchange Regulation, as approved by Resolution No <u>O3-201</u> of the National Control Commission for Prices and Energy approving the National Exchange Regulation.					
53. Concession in respect of the tax on pollution from stationary sources of pollution. Natural and legal persons polluting from stationary sources of pollution who have produced documents confirming the consumption of biofuel are exempt from the pollution tax within the limits indicated in the integrated pollution prevention and control permit or the pollution permit in respect of emissions resulting from the use of biofuel. Article 5(4) of Law No VIII-1183 of the Republic of Lithuania on Pollution Tax.	Financial	Promoting a growth in the consumption of biofuel	Biofuel consumers (polluting from stationary sources of pollution)	Ongoing	Since 2006
54. Support for the planting of short rotation coppice. The planting of short rotation coppice is supported under Activity 'Support for investments in agricultural holdings' of Measure 'Investments in tangible assets' of the 2014-2020 Lithuanian Rural Development Programme. The 2014-2020 Lithuanian Rural Development Programme, as approved by Decision No C(2015)842 of the European Commission of 13 February 2015. The Implementing Rules applicable as of 2015 for Activity 'Support for investments in agricultural holdings' of Measure 'Investments in tangible assets' of the 2014-2020 Lithuanian Rural Development Programme, as approved by Order No 3D-302 of the Minister for Agriculture of the Republic of Lithuania of 21 April 2015 approving the Implementing Rules applicable as of 2015 for Activity 'Support for investments in agricultural holdings' of Measure 'Investments in tangible assets' of the 2014-2020 Lithuanian Rural Development Programme.	Financial	Increase in the areas of short rotation coppice	Persons owning agricultural land and/or persons leasing agricultural land, managing it on loan-for-use or other basis	Ongoing	Since 2014
55. Support for energy plants for biofuel production A procedure and requirements are laid down for allocating support to agricultural operators cultivating energy plants (agricultural plants: cereal grain, rapeseed, sugar	Financial	Development of the use of renewable energy sources	Cultivators, purchasers and processors of raw material for biofuel	Ongoing	Since 2007

Name and reference of measure	Type of measure	Expected result	Target group and/or activity	Ongoing or planned	Start and end dates of the measure
beetroot, maize, perennial grasses, trees and bushes of short vegetation (osiers,					
willows, poplars, aspens and grey alders) to produce raw material for biofuel and to					
undertakings purchasing and processing them.					
Article 9(2) of Law No IX-987 of the Republic of Lithuania on Agricultural, Food					
Sector and Rural Development.					
The Administration and Control Rules on support for energy plants intended for					
biofuel production, as approved by Order No <u>3D-223</u> of the Minister for Agriculture					
of the Republic of Lithuania of 5 May 2007 approving the Administration and					
Control Rules on support for energy plants intended for biofuel production.					

2.a Information on the progress made in evaluating and improving administrative procedures to remove regulatory and non-regulatory barriers to the development of energy from renewable sources (Article 22(1)(e) of Directive 2009/28/EC)

The main legal acts were adopted and/or amended in the 2017-2018 period to remove regulatory and non-regulatory barriers to the development of energy from renewable sources:

- 1. Law No XI-1375 of the Republic of Lithuania on Energy from Renewable Sources:
- 1.1. Law No XIII-406 amending Articles 1, 2, 6, 38 and 58 of Law No XI-1375 of the Republic of Lithuania on Energy from Renewable Sources and the Annex thereto (1 June 2017). The main provisions are:
- 1) it is established that the maximum combined share of biofuels and bioliquids must not exceed 7% of the final energy consumption by the transport sector and that the target share of biofuels produced from raw materials and of other fuels must not be below 0.5% of the final energy consumption by the transport sector;
- 2) the definition of electric vehicle has been updated in accordance with Directive 2014/94/EU²⁹;
- 3) the Ministry of Energy of the Republic of Lithuania has the competence to approve the Methodology for calculating the share of renewable energy sources in the total final energy consumption.
- 1.2. Law No XIII-605 amending Articles 2, 3, 5, 6, 11, 13, 14, 15, 17, 18, 19, 20, 21, 30, 40, 41, 42, 49, 54, 56, 58 and 65 and the title of Chapter Eight and repealing Article 33 of Law No XI-1375 of the Republic of Lithuania on Energy from Renewable Sources (4 July 2017). The main provisions are:
- 1) once the total installed capacity of power plants laid down by the law has been reached, the auctions opened and not completed are terminated;
- 2) the electricity grid operator provides the State Energy Inspectorate under the Ministry of Energy, on a monthly basis, with information on connection conditions issued to electricity generating customers intending to expand (install) power plants using renewable energy sources which do not require authorisation to develop electricity generating capacity;
- 3) centralised trade in electricity from renewable energy sources is a service of public interest;
- 4) the installed capacity of the power plant is increased to 100 kW for the generating customer, where he is a legal person;
- 5) one of the sources of financing the implementation of the National Renewable Energy Development Programme is revenue obtained through agreements on statistical transfers of energy between the Republic of Lithuania and other Member States or joint projects between the Republic of Lithuania, other Member States and foreign states. These funds are used for the purposes set out in the agreements on statistical transfers of energy relating to the development of renewable sources of energy, the improvement of energy efficiency and research in the sector of energy from renewable sources.
- 1.3. Law No XIII-613 amending Articles 2, 5, 13, 16 and 22 of Law No XI-1375 of the Republic of Lithuania on Energy from Renewable Sources (11 July 2017). The main provisions: this Law provides new legal regulation of the use of the territorial sea of the Republic of Lithuania and/or the exclusive economic zone of the Republic of Lithuania in the Baltic Sea for the development and operation of power plants using renewable energy sources:
- 1) the Government of the Republic of Lithuania carries out investigations and takes a decision on development;
 - 2) responsibility for grid connection is vested in the developer;
- 3) participating in the tender procedure involves presentation of the performance guarantee and the conditions for its repayment, etc.

²⁹Directive 2014/94/EU of the European Parliament and of the Council of 22 October 2014 on the deployment of alternative fuels infrastructure (OJ L <u>307</u>, 28.10.2014, p. 1)

- 1.4. Law No XIII-1078 amending Article 20 of Law No XI-1375 of the Republic of Lithuania on Energy from Renewable Sources and adding Article 20(1) thereto (12 April 2018). The main provisions are:
- 1) in the cases where electricity is traded on the electricity exchange, its production from renewable energy sources is promoted in accordance with the procedure for the provision of public-interest services in the electricity sector;
- 2) new legal regulation is established on the development of the activities of consumers generating electricity from renewable energy sources and their pricing;
- 3) the total installed capacity of power plants using solar light, wind and biomass energy must not exceed 100 MW, of which:
 - 1) 70 MW capacity is allocated to natural persons other than farmers;
 - 2) 30 MW capacity is allocated to legal persons and farmers.
- 1.5. Law No XIII-1451 amending Articles 22 and 51 of Law No XI-1375 of the Republic of Lithuania on Energy from Renewable Sources (30 June 2018). The main provisions: the newly established public institution Lithuanian Energy Agency:
- 1) carries out surveys of the territorial sea of the Republic of Lithuania and of the exclusive economic zone of the Republic of Lithuania in the Baltic Sea and other actions necessary for the development and operation of power plants using renewable energy sources;
- 2) carries out educational activities on the practical opportunities and benefits of developing and using energy from renewable sources.
- 1.6. Law No XIII-1890 amending Articles 1, 2, 3, 5, 11, 13, 14, 17, 20 and 20(1) of Law No XI-1375 of the Republic of Lithuania on Energy from Renewable Sources, adding Article 63(1) to the Law and repealing Article 15 thereof (20 December 2018). The main provisions are:
- 1) the new main objective of this Law is to achieve a share of energy production from renewable sources of at least 38% in the country's gross final energy consumption by 2025, and that this share be further increased, by using the latest and most efficient technologies for the use of renewable energy sources and promoting energy efficiency;
- 2) to increase the share of electricity produced from renewable energy sources in the country's gross final consumption of electricity to at least 38% in 2025;
- 3) to increase the share of district heating produced from renewable energy sources in the heat balance to at least 70% in 2020;
- 4) new regulation has been established for the promotion of the use of renewable energy sources by applying the established support scheme consisting of one or more specified incentive measures. The new measures include a price premium (instead of a fixed tariff) and a redefinition of the exemption from liability of specified electricity generators for balancing the produced electricity and/or reserving the generating capacity during the promotion period;
- 5) also, new and detailed regulation has been established for the development of the use of renewable energy sources for electricity production, which is recognised as one of strategic goals of the State energy policy, and the promotion of such use, and allocation of the costs of connecting power plants to the electricity grid. New regulation has been established for the auction for the allocation of promotion quotas between the Republic of Lithuania and other Member States, announced and organised by the National Control Commission for Prices and Energy³⁰. The characteristics of this auction are as follows: it is a technologically neutral auction, organised according to a pre-determined schedule, in which a price premium is competed for; its winners sell electricity on the market and it may be attended by other Member States which have concluded an agreement with the Republic of Lithuania. It has been established that the National Control Commission for Prices and Energy publishes on its website information on the planned action for the allocation of promotion quotas for 0.3 TWh of electricity from renewable sources on 2 September 2019.

³⁰National Energy Regulatory Council since 1 July 2019

- 2. Law No VIII-1881 of the Republic of Lithuania on Electricity:
- 2.1. Law No XIII-604 amending Articles 2, 3, 4, 6, 7, 9, 10, 16, 18, 31, 34, 39, 40, 41, 43, 44, 49, 51, 52, 58, 67, 70, 71, 72, 74 and 75 of, and the Annex to, Law No VIII-1881 of the Republic of Lithuania on Electricity and adding Article 39(1) thereto (4 July 2017). The main provisions relating to the development of energy from renewable sources are:
- 1) the following terms and/or their definitions have been replaced and supplemented: consumer producing electricity from renewable energy sources; long-term planning; services of public interest;
- 2) State management, regulation, supervision and control of activities in the electricity sector are supplemented by a new general principle, i.e. the principle of promoting the development of the use of renewable energy sources in the electricity sector;
- 3) cases have been identified in which no authorisation is required for the production of electricity in installations for the production of electricity from renewable energy sources and the development of electricity production capacity from renewable energy sources;
- 4) a new Article 39¹ is added on distribution network development planning, which sets out requirements for the distribution network operator to draw up a distribution network development, upgrade, modernisation and investment plan, specifies what needs to be considered and what has to be included in that plan. The National Control Commission for Prices and Energy is tasked with the monitoring of the distribution network development, upgrade, modernisation and investment plan.
- 4) electricity produced from renewable energy sources is purchased centrally from the electricity generators subject to a fixed tariff. All purchased electricity produced from renewable energy sources is traded in accordance with the methods, procedure and conditions laid down in the Electricity Trade Rules, as approved by Order No 1-244 of the Minister for Energy of the Republic of Lithuania of 9 December 2009 (hereinafter, the 'Electricity Trade Rules') and in accordance with the principles of cost-effectiveness and the minimum financial burden for electricity consumers and for the payers of funds for public-interest services. Centralised trading of electricity from renewable energy sources is carried out by a public supplier and/or a designated undertaking. Purchased electricity may be supplied to the customers of both the public supplier and the designated undertaking;
- 5) services of public interest in the electricity sector include balancing of electricity from renewable energy sources and its centralised trade, carried out in accordance with the procedure established by the Government of the Republic of Lithuania or an institution authorised by it, as well as optimisation, development and/or reconstruction of electricity networks by the electricity grid operator, ensuring the development of electricity production from renewable energy sources. Services of public interest are charged for the amount of electricity generated by producers from renewable energy sources and consumed in the course of their economic activities. Funds for services of public interest may only be used to finance services of public interest (including the aforementioned services related to energy from renewable sources) and to cover the costs of administering funds for services of public interest.
- 2.2. Law No XIII-614 amending Article 16 of Law No VIII-1881 of the Republic of Lithuania on Electricity (11 July 2017). The main provisions relating to the development of energy from renewable sources:
- 1) permits to produce electricity in power plants installed in the part of the territorial sea of the Republic of Lithuania and/or the exclusive economic zone of the Republic of Lithuania in the Baltic Sea are issued on the basis of a valid permit, issued in accordance with the procedure laid down by the Law on Energy from Renewable Sources, to use the part of the territorial sea of the Republic of Lithuania and/or the exclusive economic zone of the Republic of Lithuania in the Baltic Sea for the development and operation of renewable energy power plants and are valid until the end of the period of validity of this permit;
- 2) a permit to develop electricity generation capacity is not necessary if the person has been granted a permit to use part of the Lithuanian territorial sea and/or the Lithuanian exclusive

economic zone in the Baltic Sea for the development and operation of renewable energy plants in accordance with the procedure laid down by the Law on Energy from Renewable Sources.

2.3. Law No XIII-1079 amending Article 67 of Law No VIII-1881 of the Republic of Lithuania on Electricity (12 April 2018).

This Law stipulates that the National Control Commission for Prices and Energy, in accordance with the provisions of the Law on Energy from Renewable Sources, approves the methodology for calculating the price of electricity grid access services for electricity generating customers and determines the price of electricity grid access services for electricity generating customers.

- 2.4. Law No XIII-1456 amending Articles 2, 12, 15, 23, 38, 39, 39(1), 40, 41, 43, 44, 46, 51, 58, 61, 67, 68, 69, 74, 75 and 75(2) of Law No VIII-1881 of the Republic of Lithuania on Electricity and adding Article 74(1) to the Law (30 June 2018). The main provisions relating to the development of energy from renewable sources:
- 1) the planning of the development of distribution networks has been supplemented by the provision that the 10-year distribution network development, upgrade, modernisation and investment plan prepared by the distribution system operator is based, inter alia, on network optimisation opportunities.
- 2) centralised trading of electricity from renewable energy sources is carried out by the distribution system operator and/or the designated undertaking. Purchased electricity may be supplied to the customers of both the indicated distribution system operator and the designated undertaking. The requirements previously applicable to the designated undertaking were also clarified.
- 2.5. Law No XIII-1891 amending Articles 2, 16, 22, 34, 40, 46, 67 and 74 of Law No VIII-1881 of the Republic of Lithuania on Electricity and adding Article 21(1) thereto (20 December 2018). The main provisions relating to the development of energy from renewable sources:
- 1) an additional new provision, which, among other things, applies only to producers of electricity from renewable energy sources when issuing them with permits for the production of electricity, who have submitted a written commitment to demolish or dismantle the power plant in accordance with the procedure established by the Government of the Republic of Lithuania or an institution authorised by it, when the decision of the State Energy Inspectorate under the Ministry of Energy to revoke the permit for the production of electricity enters into force. A power plant may not be demolished or dismantled if it is intended to be used for other purposes complying with the regulatory requirements;
- 2) an obligation on the network operator to connect the power plant of producers of electricity from renewable energy sources to the electricity grid and to ensure the reliable transmission and distribution of the electricity produced therein within a time limit which may not exceed the time limits specified in the Law on Energy from Renewable Sources;
- 3) the production of electricity from renewable energy sources and the balancing of this electricity, which is produced by market participants operating a power plant of less than 500 kW, are carried out in accordance with the procedure established by the Government of the Republic of Lithuania or an institution authorised by it;
- 4) in the event of a change in the support scheme, a provision is established that market participants who, before the entry into force of this Law [1 May 2019], acquired the right to use a fixed tariff for electricity from renewable energy sources in accordance with the procedure and conditions laid down in the Law on Energy from Renewable Sources, and their electricity production from renewable energy sources, the balancing of this electricity and its centralised trading are considered to be services of public interest.

3. Law No IX-1565of the Republic of Lithuania on the Heat Sector:

Law No XIII-1062 amending Articles 2, 10, 20 and 32 of Law No IX-1565 of the Republic of Lithuania on the Heat Sector and adding Article 10(1) thereto (29 March 2018). The main provisions relating to the development of energy from renewable sources:

The Law has been supplemented by general principles on the production and/or buyingin of heat by auction, one of which is giving priority to the lowest bid offered, when producing and/or buying heat. In the case of the same heat price, the order of priority is established. In the first places:

- a) high-efficiency cogeneration units using renewable energy sources or incinerating waste;
- b) combined heat and power (cogeneration) units using renewable energy sources or incinerating waste;
 - c) heat generation installations using renewable energy sources or incinerating waste.
 - 4. Law No IX-884 of the Republic of Lithuania on Energy:

Law No XIII-1449 amending Articles 6 and 9 of Law No IX-884 of the Republic of Lithuania on Energy and adding an Article 13(1) thereto (30 June 2018). The main provisions relating to the development of energy from renewable sources:

The Public Institution Lithuanian Energy Agency:

- 1) administers the process of training for the certification of specialists installing installations for producing energy from renewable sources;
- 2) carries out promotion and publicity activities related to the use of energy from renewable sources;
- 3) monitors the implementation of the use of energy from renewable sources in transport;
- 4) carries out, reviews and/or updates the investigations of the territorial sea of the Republic of Lithuania and the exclusive economic zone of the Republic of Lithuania in the Baltic Sea and other actions necessary for the adoption of the Government resolution on the parts of the territorial sea of the Republic of Lithuania and/or the exclusive economic zone of the Republic of Lithuania in the Baltic Sea where it is appropriate to organise a tendering procedure/tendering procedures for the development and operation of renewable energy power plants and for the determination of the installed capacity of renewable energy power plants.
- 2.b Information on the measures in ensuring the transmission and distribution of electricity produced from renewable energy sources and in improving the framework or rules for bearing and sharing of costs related to grid connections and grid reinforcements ($Article\ 22(1)f$) of $Directive\ 2009/28/EC$)

Transmission and distribution of electricity

- 1. The issues of transmission and distribution of electricity generated from renewable energy sources are regulated by the legal acts of the Republic of Lithuania:
- 1.1. The Law of the Republic of Lithuania on Energy from Renewable Sources³¹ stipulates that the electricity grid operator must, within 30 calendar days from the date of submission of the application for signing a letter of intent, sign the letter of intent with the person planning to build or install a power plant, who intends to participate in the auction for the allocation of promotion quotas.

Electricity grid operators (or, in specified cases, transmission system operators) must give priority to the acceptance, transmission and/or distribution at transparent and non-discriminatory rates of the total amount of electricity offered by an electricity producer which complies with the relevant provisions of this Law applicable to the producer.

³¹Law No XI-1375 of the Republic of Lithuania on Energy from Renewable Sources

The transport of electricity produced from renewable energy sources through electricity grids may be restricted or suspended in the manner prescribed by legislation in the event of an emergency in the energy system or for other technical reasons where the capacity of electricity grids is restricted on a non-discriminatory basis. The electricity grid operator takes all reasonable measures to optimise, expand and/or reconstruct the networks managed by the grid operator, including the installations and facilities necessary for grid operation, and to increase electricity grid capacity in order to ensure safe and reliable acceptance, transmission and distribution of electricity generated from renewable energy sources.

- 1.2. The Law of the Republic of Lithuania on Electricity³² has established duties for the transmission system operator and the distribution network operator: they must ensure, in the order of priority set out below, the preferential acceptance and transmission of electricity through transmission networks (the transmission system operator) and distribution networks (distribution network operator), produced from:
 - 1) renewable energy sources by high-efficiency cogeneration;
 - 2) renewable energy sources not by cogeneration or high-efficiency cogeneration;
 - 3) non-renewable energy sources by high-efficiency cogeneration;
 - 4) non-renewable energy sources not by cogeneration or high-efficiency cogeneration.
- 1.3. The Procedure for promoting the use of renewable energy sources to produce energy³³ regulates the reservation of power grid capacity and transfer capability. Power grid operators reserve transfer capability, under the established procedure and conditions, in the power grids, which they manage, to the extent required for the connection of power plants that use renewable energy sources and for the transport of electricity generated at such plants.

Power grid operators reserve power grid capacity and transfer capability for the relevant auction for the allocation of promotion quotas as of the date of the first letter of intent signed by the auctioneer with the power grid operator.

In cooperation with the distribution network operator, the electricity transmission system operator publishes on its website and updates regularly relevant data about the exiting available capacity and transfer capabilities of electricity transmission networks.

During the promotional period referred to in the aforementioned Procedure, all electricity produced from renewable energy sources supplied to power grids is transported on a priority basis.

Sharing the costs of grid connection

The sharing of grid connection costs is regulated by the legal acts of the Republic of Lithuania:

1. The Law of the Republic of Lithuanian on Energy from Renewable Sources stipulates that connection of power plants to power grids is a public-interest service, and costs related to the connection of power plants to power grids are distributed between the person holding the incentive provided under this Law and the power grid operator, having regard to power grid ownership boundaries.

The person that has constructed or installed a power plant bears the actual costs of connection of power plants to the power grid:

- 1) 40% of the grid connection costs, where the installed capacity of the power plant exceeds 350 kW;
- 2) 20% of the grid connection costs, where the installed capacity of the power plant does not exceed 350 kW.

³²Law No VIII-1881 of the Republic of Lithuania on Electricity

³³Procedure for promoting the use of renewable energy sources to produce energy, as approved by Resolution No 827 of the Government of the Republic of Lithuania of 4 July 2012 approving the Procedure for promoting the use of renewable energy sources to produce energy

These provisions do not apply when the person constructing or installing the power plant performs the work of connecting the power plant to the power grid himself in accordance with the procedure prescribed by legislation.

2. The Procedure for promoting the use of renewable energy sources to produce energy regulates the compensation for the costs of connecting power plants to the power grid. It has been established that the costs of connecting power plants using renewable energy sources to the power grid are compensated to the persons planning to build or install a power plant, who are subject to a fixed rate, by allocating those costs to the person planning to build or install the power plant and to the power grid operator.

The persons planning to build or install a power plant are subject to such compensation conditions for connecting power plants using renewable energy sources to the power grid which are in force on the day of the issuance of the authorisation for the development of electricity production capacity.

Compensation for grid connection costs for power plants using renewable energy sources to produce electricity is deemed to be a service of public interest provided by the grid operator in the electricity sector.

- 3. Other legislation regulating the sharing of grid connection costs:
- 3.1. The Methodology for determining grid connection rates for electrical installations³⁴:
 - 3.2. Requirements for the procedure for power grid access³⁵.

3. Information on the support schemes and other measures currently in place that are applied to promote energy from renewable sources and report on any developments in the measures used with respect to those set out in the National Renewable Energy Action Plan ($Article\ 22(1)(b)\ of\ Directive\ 2009/28/EC$)

The Law of the Republic of Lithuania on Energy from Renewable Sources stipulates that the use of renewable energy sources is promoted in accordance with the procedure and conditions established by this Law and other legislation.

The use of renewable energy sources is promoted by applying the specified support scheme consisting of one or several incentives. Incentives include the following:

- 1) fixed tariff;
- 2) buying-in of energy from renewable energy sources;
- 3) reimbursement for the costs of connection of renewable energy installations to energy grids or systems;
- 4) reservation of energy grid or system capacity and transfer capability or other relevant technical parameters for connecting renewable energy installations;
 - 5) priority transport of energy from renewable energy sources;
- 6) exemption of electricity producers from responsibility for the balancing of generated electricity and/or reservation of electricity generating capacity during the promotion period. Until 1 November 2017, this provision was applied to all producers of electricity from renewable energy sources, whereas since 1 November 2017 only those producers that have been granted authorisations to develop electricity generation capacity after 1 November 2017 and operate power plants with an installed capacity equal to or greater than 500 kW, or wind farm pilot projects with an installed capacity equal to or greater than 3 MW or with power plants

³⁴The Methodology for determining grid connection rates for electrical installations, as approved by Resolution No <u>O3-235</u> of the National Control Commission for Prices and Energy of 29 July 2011 approving the Methodology for determining grid connection rates for electrical installations

³⁵Requirements relating to the procedure for power grid access, as approved by Resolution No <u>O3-193</u> of the National Control Commission for Prices and Energy of 25 July 2011 approving the Requirements relating to the procedure for power grid access.

with 3 or more electricity generating installations are excluded from the scope of this incentive measure;

- 7) support for the production and processing of agricultural produce, i.e. raw materials for the production of biofuels for heating, biofuels for transport, biolubricants and bio-oils;
- 8) requirements in respect of the mandatory use of renewable energy sources for energy production and/or mandatory consumption of energy from renewable sources, and requirements for the use of biofuels for transport;
 - 9) support of investments in renewable energy technologies;
 - 10) other privileges established by law.

A decision on the exemption of electricity producers from responsibility for the balancing of generated electricity and/or reservation of electricity generating capacity after the promotion period is taken by the Government of the Republic of Lithuania using the available infrastructure and installations for this purpose in relation to all producers.

The procedure and conditions for the application of incentives, to the extent not regulated by this Law and/or other laws, is established by the Government of the Republic of Lithuania in accordance with the requirements of this Law. Also, the development of environmentally friendly technologies using renewable energy sources for energy production may be granted the status of a pilot project by the resolution of the Government of the Republic of Lithuania.

This section of the Report describes in more detail the following financial support schemes and measures to promote the development of the use of renewable energy sources:

- 1) services of public interest;
- 2) EU structural support in 2014-2020;
- 3) the 2014-2020 Lithuanian Rural Development Programme;
- 4) the Climate Change Programme;
- 5) pollution tax concessions;
- 6) exemption of energy products from excise duty and excise duty relief on energy products;
 - 7) funding of the production development of biofuels for transport.

Services of public interest

The Procedure for providing public-interest services in the electricity sector and determining their scope³⁶ lays down the procedure for providing public-interest services in the electricity sector (hereinafter, 'public-interest services'), the procedure for determining the scope of provision for these services, obligations to provide these services, the compensation procedure for the services and the procedure for selecting the providers of the public-interest services set out in the Procedure.

Public-interest services, inter alia, include:

- 1) the generation of electricity from renewable energy sources, the balancing of this electricity and its centralised trading;
 - 2) the connection of power plants using renewable energy sources to the electricity grid;
- 3) the optimisation, development and/or renewal of electricity grids by the electricity grid operator, ensuring the development of electricity production from renewable energy sources.

The afore-mentioned general-interest services are provided by the following persons:

- 1) producers of electricity from renewable energy sources;
- 2) transmission system operators and distribution system operators providing services of public interest and balancing electricity production from renewable energy sources.

These persons must provide public-interest services in accordance with the public interest in the electricity sector and the principle of the lowest cost.

³⁶The Procedure for providing public-interest services in the electricity sector and determining their scope, as approved by Resolution No <u>916</u> of the Government of the Republic of Lithuania of 18 July 2012 approving the Procedure for providing public-interest services in the electricity sector and determining their scope

Fixed tariffs

In the field of renewable energy sources, the National Control Commission for Prices and Energy organises auctions for the allocation of promotion quotas and calculates the maximum level of fixed tariffs for producers participating in the auction. According to the amounts of promotion quota established in the Law on Energy from Renewable Sources there are no promotion quotas available as of 2015.

As of 1 March 2016, the National Control Commission for Prices and Energy carries out a half-yearly evaluation of the development of electricity production from renewable energy sources and reviews the maximum levels of fixed tariffs for electricity produced from renewable energy sources for producers participating in auctions ('maximum tariffs') and the feed-in tariffs for excess electricity ('feed-in tariffs'). While setting maximum tariffs and feed-in tariffs, the Lithuanian and EU renewable energy market and changes in the parameters of fixed tariff input are analysed in order to assess the development of investment costs on a transparent, objective and non-discriminatory basis.

In subsequent years, keeping in mind that the development of electricity production from renewable energy sources did not take place due to the exhaustion of quotas, the National Control Commission for Prices and Energy maintained in force the tariffs previously set.

The fixed tariffs applied to producers of electricity from renewable energy sources in 2017-2018, as approved by the resolutions of the National Control Commission for Prices and Energy³⁷, are provided in Table 3.

Table 3: Fixed tariffs for electricity producers using renewable energy sources, EUR/kWh (without VAT), 2017 and 2018

Name	2017 Half- year I	2017 Half- year II	2018 Half- year I	2018 Half- year II			
	Resolution	Resolution	Resolution	Resolution			
Ammorrad have	No O3-406 of	No O3E-165	No O3E-558 of	No O3E-171			
Approved by	29 November	<u>of 31 May</u>	30 November	of 31 May			
	<u>2016</u>	<u>2017</u>	<u>2017</u>	2018			
H	ydropower pla	nts					
IC* ≤ 10 excess energy feed-in tariff	0.059	0.059	0.059	0.059			
$10 < IC \le 1,000$ maximum tariff	0.053	0.053	0.053	0.053			
IC > 1,000 maximum tariff	0.047	0.047	0.047	0.047			
	Wind power						
IC ≤ 10 excess energy feed-in tariff	0.052	0.052	0.052	0.052			
10 < IC ≤350 maximum tariff	0.050	0.050	0.050	0.050			
IC > 350 maximum tariff	0.041	0.041	0.041	0.041			
Biomass power plant	s (construction	of a new power	r plant)				
IC ≤ 10 excess energy feed-in tariff	0.066	0.066	0.066	0.066			
$10 < IC \le 5,000$ maximum tariff	0.057	0.057	0.057	0.057			
IC > 5,000 maximum tariff	0.051	0.051	0.051	0.051			
Biomass power plants (reconstruction of an existing power plant)							
$IC \le 10$ excess energy feed-in tariff	0.046	0.046	0.046	0.046			
$10 < IC \le 5,000$ maximum tariff	0.040	0.040	0.040	0.040			
IC > 5,000 maximum tariff	0.035	0.035	0.035	0.035			

³⁷(1) Resolution No <u>O3-406</u> of the National Control Commission for Prices and Energy of 29 November 2016 setting tariffs for electricity produced from renewable energy sources for the first half-year of 2017;

⁽²⁾ Resolution No <u>O3E-165</u> of the National Control Commission for Prices and Energy of 31 May 2017 setting tariffs for electricity produced from renewable energy sources for the 2017 Quarter II;

⁽³⁾ Resolution No <u>O3-558</u> of the National Control Commission for Prices and Energy of 30 November 2017 setting tariffs for electricity produced from renewable energy sources for the first half-year of 2018;

⁽⁴⁾ Resolution No <u>O3E-171</u> of the National Control Commission for Prices and Energy of 31 May 2018 setting tariffs for electricity produced from renewable energy sources for the second half-year of 2018.

Name	2017 Half-	2017 Half-	2018 Half-	2018 Half-			
Name	year I	year II	year I	year II			
Biogas power plants pr	oducing electri	city from landf	ill biogas				
IC ≤ 10 excess energy feed-in tariff	0.111	0.111	0.111	0.111			
$10 < IC \le 500$ maximum tariff	0.106	0.107	0.107	0.107			
IC > 500 maximum tariff	0.086	0.086	0.086	0.086			
Biogas power plants producing electricity	from biogas ge	nerated anaero	bically or otherw	ise treating			
	le organic waste		·	C			
IC ≤ 10 excess energy feed-in tariff	0.134	0.134	0.134	0.134			
$10 < IC \le 500$ maximum tariff	0.122	0.122	0.122	0.122			
500 < IC ≤ 1000 maximum tariff	0.116	0.116	0.116	0.116			
$1,000 < IC \le 2,000$ maximum tariff	0.110	0.110	0.110	0.110			
IC > 2,000 maximum tariff	0.107	0.107	0.107	0.107			
Solar power pla	nts (not integra	ted in a buildin	(g)				
IC ≤ 10 excess energy feed-in tariff	0.136	0.136	0.136	0.136			
$10 < IC \le 100$ maximum tariff	0.124	0.124	0.124	0.124			
100 < IC ≤350 maximum tariff	0.115	0.115	0.115	0.115			
IC > 350 maximum tariff	0.122	0.122	0.122	0.122			
Solar power plants (integrated in a building**)							
IC ≤ 10 excess energy feed-in tariff	0.169	0.169	0.169	0.169			
10 < IC ≤ 100 maximum tariff	0.152	0.152	0.152	0.152			
$100 < IC \le 350$ maximum tariff	0.141	0.141	0.141	0.141			
IC > 350 maximum tariff	0.148	0.148	0.148	0.148			
*IC. in at all all a managine LIV							

^{*}IC: installed capacity, kW

Production of supported electricity from renewable energy sources (MWh) and support (EUR thousand) allocated thereto in 2017-2018, according to <u>data</u> from BALTPOOL UAB, an administrator of the funds of services of public interest ('SPI'), are shown in Table 4.

Table 4: Production of electricity from renewable energy sources and support allocated thereto in 2017-2018

	20	17	2018		
Type of network/power plant	Production, MWh	Support, EUR thousand	Production, MWh	Support, EUR thousand	
Transmission network (wind power plants)	1,186,185	53,133	992,354	31,709	
Distribution network:	629,456	49,901	586,734	49,139	
Small-hydropower plants	106,815	3,952	66,263	2,337	
Small wind power plants	144,612	6,759	125,389	5,233	
Small solar power plants	65,299	21,318	75,753	24,658	
Large biofuel power plants	102,235	4,968	101,990	4,504	
Small biofuel/biogas power plants	210,495	12,905	217,339	12,407	
Total	1,815,641	103,034	1,579,088	80,848	

Auctions for the allocation of promotion quotas

One way of promoting the use of renewable energy sources for electricity generation is promotion quotas.

The Law of the Republic of Lithuania on Energy from Renewable Sources stipulates that quotas for promoting the use of renewable energy sources to produce electricity for power plants with a capacity greater than 10 kW and achieving the targets set in the Law on Energy from Renewable Sources shall be allocated by auction. Promotion quotas and auction regions

^{**}solar power plants integrated in a building are power plants which are used as part of the building surface fully replacing a respective patch of the building roof or wall

and the procedure for allocating promotion quotas for power plants with an installed capacity of no more than 10 kW shall be established and approved by the Government of the Republic of Lithuania.

Auctions shall be organised in electricity grid connection regions separately for each group of persons planning to construct or install power plants within the time limits and in accordance with the procedure laid down by the National Control Commission for Prices and Energy no later than within 180 calendar days from the date of submission of the person's request to organise the auction for a particular group of persons planning to construct or install the power plants in a specified region.

The successful bidder shall be an auction participant having indicated the lowest fixed tariff preferred given that the largest installed capacity of the group of power plants within one auction zone cannot amount to more than 40% of the maximum permitted capacity of sources that may be connected in the region. If the offers submitted by two or more auction participants for the fixed tariff preferred coincide, the successful bidder shall be the participant having offered the range of power plants with a higher capacity. Where offers also coincide in respect of the capacity of the power plants, the promotion quota at the respective connection point shall be distributed among such auction participants in proportion to their capacity offers.

The auction winner must apply to the State Energy Inspectorate under the Ministry of Energy for the issuance and obtaining of an authorisation to develop electricity generation capacity in accordance with the procedure laid down by the Law on Energy from Renewable Sources and the Law on Electricity within three months of the winning of an auction. In the event that the auction winner does not apply for the authorisation to develop electricity generation capacity or such authorisation is denied, ceases to be in force or is revoked on the grounds set out in the Law on Energy and the Law on Electricity, the auction winner shall, within one month of the occurrence of any of the specified circumstances, be removed from the list of winners of the auction. The resulting promotion quota shall be allocated by means of a new auction.

The maximum levels of installed total capacity of electricity from renewable energy sources produced by wind (onshore and offshore) plants, solar photovoltaic plants, hydropower plants and biofuel plants connected to electricity grids (promotion quotas are set according to them) up to 2020 are set by the Law on Energy from Renewable Sources:

- 1) up to 500 MW for promoted wind farms;
- 2) up to 10 MW for solar photovoltaic power plants;
- 3) up to 128 MW for hydropower plants;
- 4) up to 105 MW for promoted biofuel power plants. Also, up to the optimal capacity of biofuel power plants, established in the National Programme for heat sector development, for biofuel power plants, the installation of which is promoted by funds other than public-interest services and which are not covered by the promotion provided for in Article 20 of this Law.

When the total installed capacity of at least one of the provided types of power plants reaches the afore-mentioned installed capacity levels, the promotion quota allocation initiated and not completed for that type of power plant shall be terminated.

In 2015, the maximum promotion quotas set in accordance with maximum levels of total installed capacity of electricity from renewable energy sources produced by wind power plants, solar photovoltaic power plants, hydropower plants and biofuel power plants connected to electricity grids, as established by the Law on Energy from Renewable Sources, were reached, so no auctions were organised.

The promotion quotas set in the Law of the Republic of Lithuania on Energy from Renewable Sources were detailed by the Resolution³⁸ of the Government of the Republic of Lithuania of 2012 establishing that:

³⁸Resolution No <u>810</u> of the Government of the Republic of Lithuania of 4 July 2012 approving quotas for promoting the use of renewable energy sources to generate electricity and approving auction regions [<u>invalid</u> since 1 May 2019]

- 1) the auction region for promotion quotas for wind power plants is the whole of the Republic of Lithuania. The promotion quota for the auction region is 260 MW (including 210 MW for power plants to be connected to the transmission system and 50 MW for power plants to be connected to the distribution system), excluding small power plants with an installed capacity of 30 kW or less;
- 2) the auction region for promotion quotas for photovoltaic power plants is the whole of the Republic of Lithuania. The promotion quota for the auction region is 10 MW, excluding small power plants with an installed capacity of 30 kW or less;
- 3) the auction region for promotion quotas for hydropower plants is the whole of the Republic of Lithuania. The promotion quota for the auction region is 14 MW;
- 4) the auction region for promotion quotas for power plants burning liquid and solid biofuels is the whole of the Republic of Lithuania. The promotion quota for the auction region is 230 MW (if auctions are attended by power plants planning to incinerate suitable industrial and/or municipal waste to produce energy, the capacity corresponding to biofuel use is calculated as the product of the power plant's installed capacity and the percentage biodegradable fraction of the waste);
- 5) the auction region for promotion quotas for biogas power plants is the whole of the Republic of Lithuania. The promotion quota for the auction region is 75 MW.

The Procedure for promoting the use of renewable energy sources to produce energy stipulates that the auctioning of promotion quota allocation is organised in accordance with the procedure established by the National Control Commission for Prices and Energy (with the exception of the electricity producers specified in the Procedure).

By its 2011 Resolution³⁹, the National Control Commission for Prices and Energy approved the Regulations governing auctions held for the allocation of promotion quotas for electricity production from renewable sources, which regulate general principles and procedure for the allocation of promotion quotas, the announcement and organisation of auctions for the allocation of promotion quotas for electricity production from renewable energy sources and the selection of the winner or winners.

Producers that are the successful bidders in an auction for the allocation of promotion quotas must, within three months from being recognised as such, apply to the State Energy Inspectorate under the Ministry of Energy for the issue of authorisation to develop electricity generation capacity.

The State Energy Inspectorate under the Ministry of Energy publishes information on total installed capacities assigned and free promotion quotas available. The 2018 information on this is provided in Table 5.

Table 5: Information on the total installed capacities assigned and free promotion quotas available (2018 data)

Power plants/persons	Total installed capacities assigned, MW	Total installed capacities used, MW	Total free capacities (MW)
Wind power plants	500		_
Solar light power plants	10		_
Hydropower plants	128		_
Biofuel power plants	105		-
Solar light, wind and biomass energy power plants of electricity producing customers	100	11.604	88.396
Capacity assigned to natural persons	70	7.516	61.430

³⁹Resolution No O3-229 of the National Control Commission for Prices and Energy of 29 July 2011 approving the Regulations governing auctions held for the allocation of promotion quotas for electricity production from renewable sources

Power plants/persons	Total installed capacities assigned, MW	Total installed capacities used, MW	Total free capacities (MW)
Capacity of producing customers whose			
electricity installations have an installed		1.054	
capacity not exceeding 5 kW (data from AB		1.034	
Energijos skirstymo operatorius)			
Capacity assigned to legal persons	30	3.025	26.966
Capacity of producing customers whose			
electricity installations have an installed		0.009	
capacity not exceeding 5 kW (data from AB		0.009	
Energijos skirstymo operatorius)			

Note. In fact, the procedure was in place until 2015, as there was no longer a free promotion quota afterwards.

The 2014-2020 EU support

This part of the Report further describes in more detail the 2014-2020 EU support intended for or related to the development of the use of renewable energy sources:

Renewable energy sources for industry LT+

(Measure No 04.2.1-LVPA-K-836) of the 2014-2020 EU Funds' investments in Lithuania)

Installing the capacity for producing energy from renewable energy sources and developing new more efficient technologies and installing them at industrial enterprises in order to use energy for the internal needs of the enterprises and ensuring the supply of excess energy to other industrial enterprises or its transfer to centralised energy networks.

Potential applicants: SMEs and large industrial enterprises.

Funding granted: EUR 23,977,716.00 from EU Structural Funds.

Information on the results is presented in Table 6.

Table 6: Overview of indicators attained by the measure 'Renewable energy sources for industry LT+' in 2017-2018

	Tar	get value			Financina
Indicator	Unit of measure ment	Contracted	Value attained	Date of attainment	Financing allocated (EUR)
Number of enterprises receiving subsidies	enterprise	96	90	31 December 2018	
Private investment matching public support to enterprises (subsidies)	EUR	17,193,503.35	3,827,347.5 1	31 December 2018	21,209,568.25
Additional capacity for the production of energy from renewable sources	MW	48.44	8.23	31 December 2018	

Expected results after implementation of the measure (31 December 2023):

- 1) energy intensity in industrial enterprises: 152.90 kg of oil equivalent/EUR 1,000;
- 2) additional capacity for energy production from renewable sources: 42.45 MW;
- 3) number of enterprises receiving subsidies: 93 enterprises;
- 4) private investment matching public support to enterprises (subsidies): EUR 16,477,854.

Promoting high-efficiency cogeneration in Vilnius City

(Measure No <u>04.1.1-LVPA-V-108</u> of the 2014-2020 EU Funds' investments in Lithuania)

Development of the use of energy from renewable sources for efficient heat and power production at the combined heat and power plant in Vilnius.

Potential applicant: UAB Vilniaus kogeneracinė jėgainė.

Potential partner: Lietuvos energija, UAB.

Funding granted: EUR 94,500,000.00 from EU Structural Funds.

Information on the results is presented in Table 7.

Table 7: Overview of indicators attained by the measure 'Promoting high-efficiency cogeneration in Vilnius City' in 2017-2018

	Tar	get value			Financina
Indicator	Unit of measur ement	Contracted	Value attained	Date of attainment	Financing allocated (EUR)
Installed electrical capacity of newly installed high-efficiency cogeneration units	MW	70.00	0.00	31 December 2018	
Rated (nominal) heat input of newly installed high-efficiency cogeneration units	MW	158.00	0.00	31 December 2018	90,858,950.00
Additional capacity for the production of energy from renewable sources	MW	228.00	0.00	31/12/2018	

Expected results after implementation of the measure (31 December 2023):

- 1) share of energy from renewable sources in the final energy balance: 23%;
- 2) additional capacity for energy production from renewable sources: 228 MW;
- 3) total annual greenhouse gas savings: 310,000 tonnes of CO₂ equivalent;
- 4) rated (nominal) heat output of newly installed high-efficiency cogeneration units: 158 MW;
- 5) installed electrical capacity of newly installed high-efficiency cogeneration units: 70 MW.

Development of municipal waste incineration capacity

(Measure No 05.2.1-APVA-V-022 of the 2014-2020 EU Funds' investments in Lithuania)

Construction of facilities for incinerating (use for energy generation) of municipal waste.

Potential applicant: UAB Vilniaus kogeneracinė jėgainė

Funding granted: EUR 48.55 million from EU Structural Funds

The project 'Establishment of municipal waste use capacity for energy recovery in Vilnius City' (List No 05.2.1-APVA-V-022-01-0001) envisages the establishment of capacity to recover energy from municipal waste remaining after treatment, non-recyclable waste and energy waste in Vilnius city municipality by installing a high-efficiency cogeneration plant with a capacity of 160,000 tonnes of waste incinerated per year, and the total installed capacity for heat production (60 MW), electrical capacity (19 MW). The Vilnius municipal waste incineration plant with energy recovery was planned in accordance with national and EU strategic objectives, waste generation and management forecasts and the EU Circular Economy Guidelines. The main activity of the project is the installation and construction of a high-efficiency incineration (energy recovery) plant for municipal waste. The project will create the still missing technical link in the waste management system in Vilnius and Utena regions, i.e.

infrastructure will be installed for the use (for energy recovery) of combustible waste generated in municipal waste treatment plants operating in these regions. The waste incineration plant will be able to generate around 413 GWh of heat and around 158 GWh of power per year.

Information on the indicator regarding implementation of the measure is provide din Table 8.

Table 8: Overview of indicators attained by the measure 'Development of municipal waste incineration capacity' in 2017-2018

	Targe	et value			Financina	
Indicator	Unit of measurem ent	Contracted	Value attained	Date of attainment	Financing allocated (EUR)	
Developed capacity to recover energy from municipal waste	tonnes/yea r	160,000.00	0.00	31 December 2018	48,553,044.00	

Expected results after implementation of the measure (31 December 2023):

- 1) share of landfilled municipal waste: 30%;
- 2) the developed capacity to recover energy from municipal waste: 160,000 tonnes per year.

Promotion of small-scale biofuel cogeneration

(Measure No 04.1.1-LVPA-K-110 of the 2014-2020 EU Funds' investments in Lithuania)

The installation of new biofuel-based high-efficiency cogeneration units (with an electrical power of up to 5 MW and a rated thermal input not exceeding 20 MW) in district heating systems (except in Vilnius and Kaunas).

Potential applicants: heat suppliers and (potential) independent heat producers.

Funding allocated: EUR 12,000,000.00 from EU Structural Funds.

Under measure No 04.1.1-LVPA-K-110 'Small-scale cogeneration', two calls were launched and four applications were received in total, but no contracts were signed and no projects were implemented.

Expected results after implementation of the measure (31 December 2023):

- 1) share of energy from renewable sources in the final energy balance: 23%;
- 2) additional capacity for energy production from renewable sources: 18 MW;
- 3) total annual greenhouse gas savings: 12,000 tonnes in CO₂ equivalent;
- 4) rated (nominal) electric power of newly installed high-efficiency cogeneration units: 6 MW.

Promoting the use of biofuel for heat production

(Measure No 04.1.1-LVPA-K-109 of the 2014-2020 EU Funds' investments in Lithuania)

Installation of biofuel-based heat production installations (with heat input of up to 10 MW) in reconstructed or new boiler facilities by replacing fossil fuel in the production of centrally supplied heat.

Potential applicants: heat suppliers and independent heat producers operating heat production installations using fossil fuels.

Funding allocated: EUR 17,040,000.00 from EU Structural Funds.

Information on the results is presented in Table 9.

Table 9: Overview of indicators attained by the measure 'Promoting the use of biofuel for heat production' in 2017-2018

	Targe	t value			Enn din a	
Indicator	Unit of measureme nt	Contracted	Value attained	Date of attainment	Funding allocated (EUR)	
Additional capacity for the production of energy from renewable sources	MW	72.02	0.00	31 Decemb er 2018	1,0759,703.13	

Expected results after implementation of the measure (31 December 2023):

- 1) share of energy from renewable sources in the final energy balance: 23%;
- 2) additional capacity for energy production from renewable sources: 70 MW;
- 3) total annual greenhouse gas savings: 72,000 tonnes of CO₂.

Replacement of heat production installations using biofuel

(Measure No 04.1.1-LVPA-K-112 of the 2014-2020 EU Funds' investments in Lithuania)

Replacement of obsolete heat production installations using biofuel with new ones (with heat generating capacity of up to 10 MW) in district heating systems.

Potential applicants: heat suppliers and independent heat producers.

Funding allocated: EUR 10,000,000.00 from EU Structural Funds.

Information on the results is presented in Table 10.

Table 10: Overview of indicators attained by the measure 'Replacement of heat production installations using biofuel' in 2017-2018

	Tar	get value			Funding	
Indicator	Unit of measure ment	Contracted	Value attained	Date of attainment	allocated (EUR)	
Rated (nominal) thermal input of replaced (new) biofuel facilities	MW	39.59	5.00	8 December 2018	110,8885.60	

Expected results after implementation of the measure (31 December 2023):

- 1) share of energy from renewable sources in the final energy balance: 23%;
- 2) rated (nominal) thermal input of replaced (new) biofuel facilities: 35 MW.

Boiler replacement in households

(Measure No 04.3.2-LVPA-V-111 of the 2014-2020 EU Funds' investments in Lithuania)

Replacement of inefficient biomass-based boilers with more efficient technologies using energy from renewable sources for heat production (new efficient biofuel boilers, heat pumps) in households, which are not connected to the district heating system.

Potential applicants: budgetary authority.

Funding allocated: EUR 15,000,000.00 from EU Structural Funds.

Expected results after implementation of the measure (31 December 2023): households with increased renewable energy efficiency: 4,200 households.

Targeted research in smart specialisation

(Measure No <u>01.2.2-LMT-K-718</u> of the 2014-2020 EU Funds' Investments in Lithuania)

Research carried out by high-level groups of researchers to produce results in line with the themes of R&D [research and development] activities relevant to the economic sectors, which could subsequently be commercialised.

Attracting researchers from abroad to carry out research aimed at producing results in line with the themes of R&D activities relevant to economic sectors, which could subsequently be commercialised.

R&D activities of parallel laboratories to produce results corresponding to the themes of R&D activities relevant to economic sectors which could subsequently be commercialised.

Potential applicants: science and higher education institutions, and university hospitals. Funding allocated: EUR 53,670,830.00 from EU Structural Funds.

In 2017-2018, in implementing this measure, the Ministry of Education and Science of the Republic of Lithuania (now, the Ministry of Education, Science and Sport of the Republic of Lithuania) together with the Research Council of Lithuania twice invited science and higher education institutions and university hospitals to submit applications under the activities of this measure 'Research carried out by high-level groups of researchers' and 'Attracting researchers from abroad to carry out research'. In 2017, four projects in the field of renewable energy sources were selected and allocated EUR 2.25 million; and in 2018, two projects were selected and allocated EUR 1.5 million. The aforementioned projects were in line with the priorities 'Energy and fuel production from biomass/waste, and waste treatment, storage and disposal' and 'Solar installations and technologies for their use in the production of electricity, heat and cooling' of the priority area 'Energy and sustainable environment', as approved by the 2014 Resolution of the Government of the Republic of Lithuania⁴⁰.

2014-2020 Lithuanian Rural Development Programme

The 2014-2020 Lithuanian Rural Development Programme⁴¹, as approved by the Decision of the European Commission in 2015, under which support is granted from the European Agricultural Fund for Rural Development. Between 2017 and 2018, amendments to the 2014-2020 Lithuanian Rural Development Programme were approved by the decisions of the European Commission⁴².

One of the priorities/target areas of the 20142020 Lithuanian Rural Development Programme is facilitating the supply and use of renewable energy sources, by-products, waste and other non-food raw materials for bio-economy purposes. Total investments in renewable energy production amount to EUR 81,306,344.21 (which is the target value for 2023).

1. Support for biogas production from agricultural and other wastes

The Implementing Rules for Activity 'Support for biogas production from agricultural and other wastes' of Measure 'Economic and business development' of the 2014-2020 Lithuanian Rural Development Programme⁴³, applicable where support is requested for the operation and/or development of existing or newly established profit-making micro and small enterprises or for the operation and/or development of non-agricultural businesses of farmers without establishing an enterprise under Activity 'Support for biogas production from

⁴⁰Resolution No <u>411</u> of the Government of the Republic of Lithuania of 30 April 2014 approving the Programme on the implementation of the priority areas of research and (socio-cultural) development and innovation (smart specialisation) and their priorities

⁴¹The 2014-2020 Lithuanian Rural Development <u>Programme</u>, as approved by Decision No <u>C(2015)842</u> of the European Commission of 13 February 2015

⁴²European Commission's:

¹⁾ Decision C(2017)1167 of 14 February 2017

²⁾ Decision C(2017)5998 of 28 August 2017

³⁾ Decision C(2018)3841 of 12 June 2018

⁴⁾ Decision C(2018)8637 of 6 December 2018

⁴³ The Implementing Rules for Activity 'Support for biogas production from agricultural and other wastes' of Measure 'Economic and business development' of the 2014-2020 Lithuanian Rural Development Programme, as approved by Order No <u>3D-632</u> of the Minister for Agriculture of the Republic of Lithuania of 11 August 2015 approving the Implementing Rules for Activity 'Support for biogas production from agricultural and other wastes' of Measure 'Economic and business development' of the 2014-2020 Lithuanian Rural Development Programme.

agricultural and other wastes' of Measure 'Economic and business development' of the 2014-2020 Lithuanian Rural Development Programme.

Facilitating the supply and use of renewable energy sources, by-products, waste and other non-food raw materials for bio-economy purposes is one of the target areas of Activity 'Support for biogas production from agricultural and other wastes' of Measure 'Economic and business development' (hereinafter, 'activity of the measure').

Support under the activity of the aforementioned measure is granted for:

- 1) the production of biogas from animal and bird manure and other biodegradable waste;
- 2) the production and compression of biomethane;
- 3) the production of heat and power in biogas production facilities;
- 4) the production de-aerated substrate.

According to data from the Lithuanian Ministry of Agriculture, a total of nearly EUR 16.8 million were allocated for Activity 'Support for biogas production from agricultural and other wastes' (biogas produced for sale) in 2015-2019. The maximum amount of support per applicant is EUR 1.6 million and the maximum possible aid intensity is up to 60% of eligible project costs.

Between 2015 and 2017, 15 applications were received (4 applications were withdrawn by the applicants themselves, 1 application was rejected, and 1 application is still under evaluation) and 9 contracts were signed (EUR 14.1 million). In 2017, 2 applications were submitted (the requested support amount was EUR 3.2 million) and no applications were accepted in 2018. In 2019, 8 contracts were terminated at the request of the beneficiaries. In 2019, 4 applications were submitted (the requested amount of support is EUR 6.4 million). Currently, 1 project is being administered and 5 projects are being evaluated.

2. Support for investments in agricultural holdings

The Implementing Rules applicable as of 2015 for Activity 'Support for investments in agricultural holdings' of Measure 'Investments in tangible assets' of the 2014-2020 Lithuanian Rural Development Programme⁴⁴.

Facilitating the supply and use of renewable energy sources, by-products, waste and other non-food raw materials for bio-economy purposes is one the target areas of the activity of the aforementioned measure.

Support under the activity of the measure is, inter alia, granted for:

1) the production of biogas at a livestock farm from farm waste. Biogas and heat and power produced can be used only for the needs of the holding (not for sale). Only animal and poultry manure and/or other biodegradable waste from the applicant's livestock farm is used for the production of biogas. Biogas can be used to produce heat and electricity in a cogeneration plant, but the share of heat consumed has to make up at least 50% of the total energy produced.

The amount of support granted is calculated on the basis of the eligible project costs net of value added tax ('VAT'). Up to 50% of the total eligible project costs are covered. The aid intensity is increased by 20 percentage points in the cases specified in the aforementioned rules. The maximum level of cross-compliance (joint support) is up to 70% of the total eligible costs of the project.

According to the information provided by the Lithuanian Ministry of Agriculture, no applications were received for the production of biogas at a livestock farm from farm waste in the previous 2015-2016 period under Activity 'Support for investments in agricultural holdings' of Measure 'Investments in tangible assets' of the 2014-2020 Lithuanian Rural Development

⁴⁴The Implementing Rules applicable as of 2015 for Activity 'Support for investments in agricultural holdings' of Measure 'Investments in tangible assets' of the 2014-2020 Lithuanian Rural Development Programme, as approved by Order No 3D-302 of the Minister for Agriculture of the Republic of Lithuania of 21 April 2015 approving the Implementing Rules applicable as of 2015 for Activity 'Support for investments in agricultural holdings' of Measure 'Investments in tangible assets' of the 2014-2020 Lithuanian Rural Development Programme

Programme, so no applications were collected and no support was granted for this activity in the subsequent years 2017-2018;

2) cultivation of short rotation coppice. Support is granted for the planting of short rotation coppice with a maximum duration of five years between two cuttings. Short rotation coppice include: osiers, willows *Salix* spp.; poplars, aspens and artificial hybrids of their species *Populus* spp; grey alders *Alkanus incana* L. The planted area has to be at least 1 ha of agricultural land. The applicant must submit a project approved by the authorised authority for the planting of short rotation coppice for energy purposes.

The amount of support granted is calculated on the basis of the eligible project costs net of value added tax ('VAT'). Up to 40% of the eligible project costs are covered. The aid intensity is increased by 20 percentage points in the cases specified in the aforementioned rules. The maximum level of cross-compliance (joint support) is up to 70% of the total eligible costs of the project. For operators planting short rotation coppice, the maximum amount of support for a project must not exceed EUR 30,000.

According to the information provided by the Lithuanian Ministry of Agriculture, no applications were received for the planting of short rotation coppice in the previous 2015-2016 period under Activity 'Support for investments in agricultural holdings' of Measure 'Investments in tangible assets' of the 2014-2020 Lithuanian Rural Development Programme, so no applications were collected and no support was granted for this activity in the subsequent years 2017-2018.

3. Investments in forestry technologies

Implementing Rules for Activity 'Investments in forestry technologies' of Measure 'Investments in forest area development and forest viability improvement' of the 2014-2020 Lithuanian Rural Development Programme⁴⁵.

Facilitating the supply and use of renewable energy sources, by-products, waste and other non-food raw materials for bio-economy purposes is one the target areas of the activity 'Investments in forestry technologies' of the aforementioned measure.

The activity supported under the measure includes, inter alia, the modernisation of forestry, the deployment of round wood logging and wood biofuel production, and the provision of services in the forestry sector.

The maximum aid amount per beneficiary under the activity of the measure:

- 1) must not exceed EUR 100,000 for a project;
- 2) must not exceed EUR 200,000 in the 2014-2020 period.

Aid intensity is 50% of the total eligible project costs (unless a lower aid intensity is requested).

According to the data of the Lithuanian Ministry of Agriculture, for the whole activity 'Investments in forestry technologies':

- 1) 30 support applications for EUR 1.26 million were received and 19 grant agreements for EUR 0.83 million signed in 2017;
- 2) 48 support applications for EUR 4.45 million were received and 25 grant agreements for EUR 2.44 million signed in 2018;
 - 3) 48 support applications for EUR 4.37 million were received in 2019.
- 4. Other information on projects under the measures of the 2014-2020 Lithuanian Rural Development Programme.

⁴⁵Implementing Rules for Activity 'Investments in forestry technologies' of Measure 'Investments in forest area development and forest viability improvement' of the 2014-2020 Lithuanian Rural Development Programmer, as approved by Order No <u>3D-659</u> of the Minister for the Economy of the Republic of Lithuania of 21 August 2015 approving the Implementing Rules for Activity 'Investments in forestry technologies' of Measure 'Investments in forest area development and forest viability improvement' of the 2014-2020 Lithuanian Rural Development Programme

Further information on projects implemented in full or in part between 2017 and 2018 or implemented or planned in 2019, based on data from the National Paying Agency under the Ministry of Agriculture is provided in Table 11.

Table 11: Statistics on projects financed by the funds of the 2014-2020 Lithuanian Rural Development Programme, 2017-2018

Programme measure	Number of projects	Amount of support (EUR)
Local development strategies:	2	30,341
air-to-air pump, solar power plant	1	29,302
solar power plant	1	1,039
Economic and business development	5	21,527
geothermal heating (Activity 'Support for investments for the start-up and	1	12,149
development of economic activities')		
heat pump (Activity 'For business start-up in rural areas')	3	5,411
air-to-water heating system (Activity 'For business start-up in rural areas')	1	3,967
Total:	7	51,868

Climate Change Programme

The Climate Change Programme is implemented in accordance with the Procedure for the use of funds from the Climate Change Programme⁴⁶, which sets out the procedure for the targeted use of Climate Change Programme funds and the requirements for project selection, funding, monitoring, reporting, etc.

The Procedure is applied to projects, financed through the aforementioned Programme in the form of loans, grants for investments in the shares of companies and compensatory payments, related to climate change mitigation (reduction of greenhouse gas emissions) and adaptation to climate change.

The funds of the Programme are used, inter alia, to promote the use of renewable energy sources and to introduce environment-friendly technologies, including high-efficiency cogeneration.

The funds of the Programme are used in accordance with the annual estimate for the use of funding under the aforementioned Programme, which, after discussion with the National Climate Change Committee and the Committee on Environment Protection of the Seimas of the Republic of Lithuania, is approved by the order of the Minister for the Environment:

- 1) The 2017 estimate for the use of funding under the Special Climate Change Programme⁴⁷;
- 2) The 2018 estimate for the use of funding under the Special Climate Change Programme⁴⁸.

The plan detailing the aforementioned annual estimates approved by the order of the Minister for the Environment of the Republic of Lithuania:

⁴⁶The Procedure for the use of funds from the Climate Change Programme, as approved by Order No D1-275 of the Minister for the Environment of the Republic of Lithuania of 6 April 2010 approving the Procedure for the use of funds from the Climate Change Programme

⁴⁷The 2017 estimate for the use of funding under the Special Climate Change Programme, as approved by Order No D1-279 of the Minister for the Environment of the Republic of Lithuania of 6 April 2017 approving the 2017 estimate for the use of funding under the Special Climate Change Programme

⁴⁸The 2018 estimate for the use of funding under the Special Climate Change Programme, as approved by Order No D1-328 of the Minister for the Environment of the Republic of Lithuania of 25 April 2018 approving the 2018 estimate for the use of funding under the Special Climate Change Programme

- 1) Plan detailing the 2017 estimate for the use of funding under the Special Climate Change Programme⁴⁹;
- 2) Plan detailing the 2018 estimate for the use of funding under the Special Climate Change Programme⁵⁰.

The funds of the Programme are used to finance projects provided for in the Law of the Republic of Lithuania on Financial Instruments for Climate Change Management, of which at least 40% are used for promoting the use of renewable energy sources and deploying environmentally friendly technologies, including efficient energy production by cogeneration. Some of the Programme's funds are used to finance other projects that have not resulted in a quantifiable reduction in greenhouse gas emissions, such as information and education for the public, research and its dissemination, advice and training for operators and other individuals on the most relevant issues of climate change policy management and implementation, energy efficiency improvement, the use of renewable energy sources and deployment of environmentally friendly technologies.

The maximum subsidy per applicant not engaged in business activity is EUR 1.45 million; the maximum amount per applicant engaged in business activity is EUR 200,000; however, the amount of subsidy for a project must not exceed 80% of the total eligible project costs. The annual estimate or a plan detailing the estimate for the use of funding under the Climate Change Programme may specify another amount of subsidy to be allocated.

In the case of projects whose implementation has resulted in a quantifiable reduction in greenhouse gas emissions, except for small-scale projects, the maximum amount of subsidy allocated is limited by an environmental performance criterion: the amount of funding must not exceed EUR 0.15 per one kg in CO₂ equivalent reduced by the project. A plan detailing the estimate for the use of funding under the Special Climate Change Programme may specify another environmental performance criterion limiting the amount of subsidy.

Summary information on the 2017-2018 projects implemented according to the aforementioned plan detailing the 2017 estimate for the use of funding under the Special Climate Change Programme for 2017, received from the Environmental Project Management Agency of the Ministry of the Environment of the Republic of Lithuania, is provided in Table 12.

Table 12: Information on the projects implemented with the funds of the Climate Change Programme in 2017-2018

Project implemented	Indicator	2017	2018			
Measure 'Use of renewable energy sources (solar, wind, geothermal energy, etc., excluding biofuel) in public and residential buildings (for persons from different social groups)'						
Installation of heat pumps	MW	0.086	0.274			
Installation of heat pumps	Pcs.	5	14			
Measure 'Installation of biofuel boilers of the capacity of up to 500 kW in public buildings'						
Installation of biofuel boilers	MW	2.13	1,120			

⁴⁹The Plan detailing the 2017 estimate for the use of funding under the Special Climate Change Programme, as approved by Order No D1-450 of the Minister for the Environment of the Republic of Lithuania of 26 May 2017 approving the Plan detailing the 2017 estimate for the use of funding under the Special Climate Change Programme

⁵⁰The Plan detailing the 2018 estimate for the use of funding under the Special Climate Change Programme, as approved by Order No D1-467 of the Minister for the Environment of the Republic of Lithuania of 6 June 2018 approving the Plan detailing the 2018 estimate for the use of funding under the Special Climate Change Programme

Installation of biofuel boilers	Pcs.	18	4			
Measure 'Use of renewable energy sources (solar, wind, geothermal energy, biofuel, etc.) in one- or-two apartment houses of natural persons by replacing energy production using fossil fuel'						
Installation of biofuel boilers	MW	0.144	2.435			
Installation of biofuel boilers	Pcs.	6	126			
Installation of heat pumps	MW	1.034	3.984			
Installation of heat pumps	Pcs.	110	367			

In 2018, by means of an order⁵¹, the Minister for the Environment of the Republic of Lithuania allocated funding to 70 projects (the maximum amount of subsidy to all projects is EUR 3,198,806.10) under Measure 'Use of renewable energy sources (solar, wind, geothermal energy, etc., excluding biofuel) in public and residential buildings (for persons from different social groups' of subparagraph 1.2.1 of the Plan detailing the 2018 estimate for the use of funding under the Special Climate Change Programme.

Pollution tax concessions

The Law of the Republic of Lithuania on Pollution Tax stipulates that natural and legal persons polluting the environment from vehicles powered by biofuels meeting the established standards are exempt from the pollution tax for pollution from mobile sources of pollution (road, railway, air, water and other vehicles, non-road mobile machinery powered by an engine (motor) using petrol, fuel oil, liquefied petroleum gas, compressed natural gas, diesel and fuel for jet engines) provided that they produce supporting documentary evidence, while natural and legal persons having produced documents proving the consumption of biofuel are exempt from the pollution tax for pollution from stationary sources of pollution for the pollutant emissions generated from the use of biofuels and indicated in the integrated pollution prevention and control permit or the pollution permit.

The pollution tax:

- 1) from stationary sources of pollution is payable by natural and legal persons polluting the environment who in accordance with the procedure laid down by the Government of the Republic of Lithuania or institutions authorised by it must hold an integrated pollution prevention and control permit or a pollution permit with standard environmental pollution limits indicated therein:
- 2) from mobile sources of pollution is payable by natural and legal persons polluting the environment from mobile sources of pollution used for business activities.

The procedure for granting concessions in respect of the tax on pollution from mobile sources of pollution is laid down in the Procedure for calculating and paying the tax on pollution from mobile sources of pollution⁵². Under this Procedure, the use of biofuels in mobile sources of pollution is confirmed by accounting documents.

The procedure for granting concessions in respect of the tax on pollution from stationary sources of pollution is laid down in the Procedure for calculating and paying the tax on pollution from stationary sources of pollution. In accordance with this Procedure, persons using biofuel for the production of energy, including energy used in technological (production) facilities, may be exempt from the tax on environmental emissions which do not exceed the limits set in an

⁵¹Order No D1-949 of the Minister for the Environment of the Republic of Lithuania of 12 November 2018 allocating funding to projects under the funding measure 'Use of renewable energy sources (solar, wind, geothermal energy, etc., excluding biofuel) in public and residential buildings (for persons from different social groups'

⁵²The Procedure for calculating and paying the tax on pollution from mobile sources of pollution, as approved by Order No D1-370/1K-230 of the Minister for the Environment and of the Minister for Finance of the Republic of Lithuania of 9 July 2008 approving the Procedure for calculating and paying the tax on pollution

IPPC (integrated pollution prevention and control) and a pollution permit, provided that they hold the following documents confirming the use of biofuel:

- 1) biofuel acquisition documents (VAT invoices, invoices, purchase and sale agreements, etc.): when biofuel is acquired (purchased);
- 2) write-off statements, a report on waste management accounting and a report on energy production from the biodegradable fraction of waste, and a report on the generation of biodegradable waste in the process of production which may be burnt in fuel combustion installations: when by-products generating from the economic operator's production process are used and which are not treated with chemical substances and are not polluted (free from paint, varnish, impregnant, glue, etc.), i.e. biodegradable wastes which by their origin may be classified as biofuel (e.g. wood bark, residue from mechanical wood treatment (cuttings, sawdust, shaving, etc.), wood pellets, wood trays, boxes and any other packaging made of solid wood, parts and debris of these articles and stems, hulls or other parts of buckwheat or other plants, etc.).

Documents pertaining to biofuel acquisition and consumption for energy production are to be submitted during tax control at the enterprise, when so required by the environmental protection and/or tax inspectorate officer.

Exemption of energy products from excise duty and excise duty relief on energy products

The Law of the Republic of Lithuania on Excise Duty provides for excise duty relief for dehydrated ethyl alcohol intended for the production of biofuels for transport and/or its components and/or biofuels for heating in accordance with the procedure laid down by the Law of the Republic of Lithuania on Energy from Renewable Sources. The specific procedure for applying the indicated relief is set by the Government of the Republic of Lithuania or an institution authorised by it.

Excise duty relief for energy products from or with materials of biological origin applies to energy products made from the following products or containing one or several products indicated in this paragraph:

- 1) classified under Combined Nomenclature (CN) headings 1507 to 1518;
- 2) classified under CN subheadings 3824 90 55, 3824 90 80-3824 90 99 (this provision applies only to the part manufactured from biomass);
- 3) products classified under CN subheadings 2207 20 00 and 2905 11 00, except where the products are of synthetic origin;
- 4) products manufactured from biomass (as defined in the Law on Energy from Renewable Sources), including products classified under CN headings 4401 and 4402.

These provisions also apply where the above products contain water (CN heading 2201 and subheading 2851 00 10).

These provisions apply only to products that comply with the requirements laid down in the Law on Energy from Renewable Sources in respect of biofuels intended for transport and/or heating.

Biofuel and fuel blends complying with these requirements and the EN 14214 and CEN/TS 15293 standards approved by the European Committee for Standardization are subject to the rate of excise duty set in the Law on Excise Duty, reduced in proportion to the percentage of additives of biological origin in a biofuel and fuel blend.

Other products complying with these requirements are subject to the excise duty rate set in the Law on Excise Duty.

The aforementioned excise duty rate applies only to products produced by individuals who hold the appropriate permit issued in accordance with the procedure laid down by the central tax administrator (the State Tax Inspectorate under the Ministry of Finance of the Republic of Lithuania) and to products brought or imported from another Member State.

As indicated by the State Tax Inspectorate under the Ministry of Finance of the Republic of Lithuania, relief was granted to bioenergy products as follows:

- 1) a total of EUR 99,049 for biofuels for transport in 2017,
- 2) a total of EUR 163,523 for biofuels for transport 2018.

More detailed information on the 2017-2018 excise duty relief for energy products from or with the addition of materials of biological origin is given in Table 13.

Table 13: Excise duty relief for energy products produced from or with the addition of materials of biological origin, 2017-2018

No		Cariff group of nergy products	Tariff	energy product		Excise duty relief
140	Code (number)	Name	EUR/1	blend, l	calculated, EUR	granted, EUR
2017						
1.	640	Fatty acid methyl ester (FAME)	0.33017	957.00	0.00	316.00
2.	648	Automotive ethanol fuel (E85)	0.43443	290,108.00	27,299.00	98,733.00
			Total	291,065.00	27,299.00	99,049.00
			2018			
1.	648	Automotive ethanol fuel (E85)	0.43443 477,502.00		43,918.00	163,523.00
			Total	477,502.00	43,918.00	163,523.00
		Tota	al (2017-2018)	768,567.00	71,217.00	262,572.00

According to data from the State Tax Inspectorate under the Ministry of Finance of the Republic of Lithuania, no excise duty relief was applied to the energy product tariff group Fatty Acid Methyl Ester (RRME) in 2018 due to changed legal regulation⁵³.

Funding of the development of biofuel production

The Rules on the funding of the development of biofuel production ^{54,55} indicate the main objectives of funding the development of biofuel production: to promote the production of biofuels from raw materials grown in a sustainable and balanced manner, to diversify the use of agricultural production by providing opportunities and conditions for its use for non-food purposes and to reduce dependence on imported fuels and greenhouse gas emissions in transport. Under the Rules, State aid ('aid') is granted from the State budget to reimburse part of the price of rapeseed oil intended for the production of rapeseed methyl (ethyl) ester and rapeseed and cereal grain ('raw material') purchased for the production of dehydrated ethanol.

The beneficiaries are producers of rapeseed oil intended for the production of rapeseed methyl (ethyl) ester, producers of rapeseed methyl (ethyl) ester that produce rapeseed oil for

⁵³In order to save national budget resources and to ensure that all measures promoting biofuels are efficient and proportionate, excise duty relief was left only for biofuel and fuel blends of higher concentration, complying with EU standards (in practice these blends of biofuels and fuels are known as E85 (85% of ethanol and 15% of petrol) and B100 (fuel consisting of 100% concentration FAME and intended for diesel cars)). For all other products containing substances of biological origin, the exemption from excise duty has been abolished.
⁵⁴The Rules on the funding of the development of biofuel production, as approved by Order No 3D-417 of the Minister for Agriculture of the Republic of Lithuania of 25 July 2008 approving the Rules on the funding of the development of biofuel production

⁵⁵The aforementioned Rules were amended by Order No <u>3D-512</u> of the Minister for Agriculture of the Republic of Lithuania of 7 August 2018 amending Order No 3D-417 of the Minister for Agriculture of the Republic of Lithuania of 25 July 2008 approving the Rules on the funding of the development of biofuel production. The amendment was made in implementing the notification requirements of the biofuel aid scheme (the Decision of the European Commission of 15 December 2017), by which Lithuania undertakes to comply with the provisions of the Guidelines on State aid for environmental protection and energy. Under the current biofuel production aid scheme, support is granted from 1 January 2018 to 31 December 2020.

rapeseed methyl ester production and producers of dehydrated ethanol that meet the eligibility criteria listed in these Rules.

The total aid amount is envisaged in the State budget for each calendar year in implementing the minimum biofuel production targets laid down by the Law of the Republic of Lithuania on Energy from Renewable Sources.

Aid to each beneficiary is calculated taking into account the total rapeseed oil pressing and, respectively, dehydrated ethanol production capacity available to all beneficiaries on 31 December 2013 and the raw material quantity purchased by each beneficiary for the production of rapeseed methyl ester or dehydrated ethanol.

The share of dehydrated ethanol and rapeseed methyl ester in the overall quantity of biofuels in the current year is calculated in proportion to the ratio of diesel fuel and petrol used for transport purposes in Lithuania in the previous calendar year.

With a view to preventing over-compensation, the amount of aid is determined by analysing the beneficiary's economic and financial indicators for the previous year and taking into account the respective costs and prices of biofuels and mineral fuels and any other local, regional or national support measures providing compensation in respect of the same expenditure, however, the aid beneficiary's profitability must not exceed 5%.

Aid beneficiaries receive compensatory payments towards the raw material acquisition (cultivation) costs incurred between 16 November of the previous year and 15 November of the current year:

- 1) EUR/t 46.34 for rapeseed;
- 2) EUR/t 33.02 for cereal grain.

The largest reimbursable quantity of raw material is calculated for each aid beneficiary on the basis of his rapeseed oil pressing or dehydrated ethanol production capacity in tonnes/year, taking into account these lowest outputs:

- 1) 0.29 tonnes of bioethanol produced from one cereal grain tonne;
- 2) 0.32 tonnes of biodiesel from one rapeseed tonne;
- 3) 0.33 tonnes of rapeseed oil from one rapeseed tonne.

The largest reimbursable quantity of rapeseed and cereal grain acquired (cultivated) by all beneficiaries during the current calendar year in tonnes is approved by the order of the Minister for Agriculture of the Republic of Lithuania:

- 1) the largest reimbursable quantity of rapeseed and cereal grain acquired (cultivated) by all beneficiaries in 2017 approved by the 2017 order ⁵⁶: 169,931 tonnes of rapeseed and 39,518 tonnes of cereal grain;
- 2) the largest reimbursable quantity of rapeseed and cereal grain acquired (cultivated) by all beneficiaries in 2018, approved by the 2018 order⁵⁷: 171,568 tonnes of rapeseed and 37,233 tonnes of cereal grain.

According to the data presented by the Lithuanian Ministry of Agriculture:

- 1) in 2017, the aid of EUR 9.179 million covered the acquisition of 169,931 tonnes of rapeseed and 39,518 tonnes of cereal grain, which were used to produce 65,800 t of biofuels;
- 2) in 2018, the aid of EUR 9.18 million covered the acquisition of 171,568 tonnes of rapeseed and 37,233 tonnes of cereal grain, which were used to produce 65,500 t of biofuels;
- 3) in 2019, the support of EUR 9.18 million is foreseen for the acquisition of 171,257 tonnes of rapeseed and 37,668 tonnes of cereal grain, which are expected to produce around 65,500 tonnes of biofuels.

⁵⁶Order No <u>3D-633</u> of the Minister for Agriculture of the Republic of Lithuania of 11 October 2017 approving the largest reimbursable quantity of rapeseed and cereal grain acquired (cultivated) by all beneficiaries in 2017 ⁵⁷Order No <u>3D-672</u> of the Minister for Agriculture of the Republic of Lithuania of 21 September 2018 approving the largest reimbursable quantity of rapeseed and cereal grain acquired (cultivated) by all beneficiaries in 2018

3.1. Information on how supported electricity is allocated to final customers for purposes of Article 3(6) of Directive 2003/54/EC (Article 22(1)b) of Directive 2009/28/EC)

The Law of the Republic of Lithuania on Electricity stipulates that the conditions for electricity sale and purchase or service contracts concluded with electricity customers in accordance with the statutory procedure must be fair and known in advance. Such contracts, taking into account the specificities of individual subject matters of contracts, must inter alia specify the procedure for dispute settlement relating to contractual relations, information on consumer rights, etc.

Suppliers, associations of suppliers to which the relevant supplier belongs, and/or electricity exchange publish, at the customer's request, on the respective website comprehensive information about:

- 1) the contribution of each energy source to the overall fuel mix used by the supplier for generating the supplied electricity, including renewable energy sources, over the preceding year, where such information is available;
- 2) references to information sources which present comprehensible information on the environmental impact, including green-house gas emissions and the radioactive waste resulting from the electricity produced over the preceding year;
- 3) contact details of consumer organisations, associations, agencies or similar institutions, including website addresses, where information is available on possible energy efficiency measures, comparative descriptions of final customers and/or objective technical specifications for energy consuming equipment.

Where customers are provided with electricity traded in the electricity exchange or imported from persons outside the Member State, the above information may contain summary data for the previous year received from the exchange or the person outside the Member State.

The National Control Commission for Prices and Energy takes measures necessary to ensure the reliability of information provided to customers and that such information is made available on the national level, in a clearly comparable manner.

Suppliers also inform final customers about the electricity supplied pursuant to the Rules on the provision of information relating to energy activities to public and local authorities and bodies and/or other persons⁵⁸, which set out the procedure, extent and conditions for providing energy-related information and relations between requesters, suppliers and/or other persons (final energy customers, European Union institutions and bodies, Member States, third countries and international organisations). These Rules apply to energy undertakings, public and local authorities and bodies and other persons.

In accordance with the Rules, within their territory and remit suppliers provide final energy customers with information on energy supplied and services provided to final energy customers; the principles of concluding energy supply contracts and the rights of final energy customers; energy prices and tariffs; safe and efficient operation of energy facilities and installations; energy facilities and installations being constructed or reconstructed; other information laid down in Lithuanian legislation.

The control of information provided to final customers is the responsibility of the State Energy Inspectorate under the Ministry of Energy.

4. Information on how, where applicable, the support schemes have been structured to take into account RES applications that give additional benefits, but may also have higher costs, including biofuels made from wastes, residues, non-food cellulosic material, and ligno-cellulosic material ($Article\ 22(1)(c)\ of\ Directive\ 2009/28/EC$)

⁵⁸The Rules on the provision of information relating to energy activities to public and local authorities and bodies and/or other persons, as approved by Order No <u>1-145</u> of the Minister for Energy of the Republic of Lithuania of 19 May 2010 approving the Rules on the provision of information relating to energy activities to public and local authorities and bodies and/or other persons

Not applicable

5. Information on the functioning of the system of guarantees of origin for electricity and heating and cooling from RES, and the measures taken to ensure reliability and protection against fraud of the system (*Article 22(1)d of Directive 2009/28/EC*)

The Law of the Republic of Lithuania on Energy from Renewable Sources defines the foundations for the system of guarantees of origin for energy from renewable sources.

It is established that the Government of the Republic of Lithuania or an institution authorised by it lays down the procedure for issuing, transferring and revoking guarantees of origin.

For the purposes of proving to final customers the share or quantity of energy from renewable sources in an energy supplier's energy mix, a guarantee of origin is issued per unit of electricity produced from renewable energy sources and supplied to the electricity grid and per unit of heat produced from renewable energy sources and supplied to the heat system.

An energy supplier provides final customers with information on the share or the amount of energy from renewable sources in the energy supplied by the supplier. This share or amount of supplied energy is calculated on the basis of the amount of energy from renewable energy sources for which a guarantee of origin has been issued.

Guarantees of origin are issued, transferred and cancelled in accordance with the procedure and under the conditions laid down by the Government of the Republic of Lithuania or an institution authorised by it, based on objective, transparent and non-discriminatory principles.

The Government of the Republic of Lithuania or an institution authorised by it designates the institution or institutions responsible for issuing, transferring and cancelling guarantees of origin and for supervising and controlling the use of guarantees of origin. The designated competent bodies must not have overlapping geographical responsibilities, and must be independent of production, trade and supply activities

Guarantees of origin are issued at the request of producers of electricity, heat or cooling energy produced from renewable energy sources and submitted to that designated body. Guarantees of origin are issued, transferred and cancelled electronically. Guarantees of origin must be accurate, reliable and fraud-resistant.

A guarantee of origin is issued for one unit of energy, i.e. one MWh. Each unit of energy produced from renewable sources may be issued with not more than one guarantee of origin taking account of the same unit of energy only once. Any use of a guarantee of origin must take place within 12 months of the moment of production of the corresponding energy unit. A guarantee of origin not used within the specified period is cancelled;

Transfers of guarantees of origin, separately or together with the physical transfer of energy, do not affect the decision to use statistical transfers, joint projects or joint support schemes for interim national target compliance or on the calculation of the gross final consumption of energy from renewable sources.

Lithuania recognises guarantees of origin issued by other Member States. The decision on a guarantee of origin issued by another Member State is taken by the designated body.

In 2016, by means of an order⁵⁹, the Minister for Energy of the Republic of Lithuania appointed the operator of the electricity transmission system LITGRID AB as the designated body authorised to perform the functions of the issue, transfer and cancellation of guarantees

⁵⁹Order No <u>1-298</u> of the Minister for Energy of the Republic of Lithuania of 14 November 2016 approving the Rules on the issue, transfer and cancellation of guarantees of origin for electricity produced from renewable energy sources and the recognition in the Republic of Lithuania of guarantees of origin issued in other Member States

of origin for electricity produced from renewable energy sources and the recognition in the Republic of Lithuania of guarantees of origin issued in other Member States and instructed this designated body to participate in the Association of Issuing Bodies of EU and EEA Member States. In addition, in 2016, the Order of the Minister for Energy of the Republic of Lithuania ⁶⁰ approved the Rules on the issue, transfer and cancellation of guarantees of origin for electricity produced from renewable energy sources and the recognition in the Republic of Lithuania of guarantees of origin issued in other Member States, which establish the procedure for the registration of persons in the database of guarantees of origin, the issuance, transfer, recognition and cancellation of guarantees of origin for electricity produced from renewable energy sources, and their use and supervision.

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The designated body maintains an electronic database for guarantees of origin which registers, collects, stores and processes data relating to guarantees of origin for electricity produced from renewable energy sources. The database registers electricity producers, suppliers and other participants in the electricity market seeking to obtain guarantees of origin and/or to recognise in Lithuania guarantees of origin issued in a foreign state.

Participants (persons registered in the database for guarantees of origin) must provide the designated body with information on guarantees of origin used or transferred under bilateral agreements, and electricity grid operators must provide the designated body with information on the quantities of electricity produced from renewable energy sources and supplied to the grid by each producer connected to their grid.

At the request of the designated body, the participants, operators of electricity distribution networks and the State Energy Inspectorate under the Ministry of Energy must also provide other information necessary for the performance of the functions of the designated body.

The participants are responsible for the accuracy and reliability of the data provided. If they discover that they have supplied incorrect data, they must immediately inform the designated body and provide the revised data. On receipt of the revised data, the designated body must cancel the guarantees of origin issued on the basis of incorrect data. Based on the revised data, the designated body issues new guarantees of origin and updates information on the guarantees of origin issued on its website. Table 14 provides information on the 2017-2018 guarantees of origin issued according the data published on the website of the designated body LITGRID AB

Table 14: Guarantees of origin issued, used and included in the residual energy mix in Lithuania, 2017-2018 [LITGRID AB data]

GUARANTEES OF ORIGIN ISSUED FOR ELECTRICITY PRODUCTION IN LITHUANIA					
	2017	2018			
TWh	TOTAL	TOTAL			
Hydro	0.573	0.426			
Wind	1.350	1.134			
Solar	0.066	0.076			
Biomass	0.418	0.416			
GUARANTEES OF ORIGIN FO	OR ELECTRICITY PRODUCTION U	SED N LITHUANIA			
	2017	2018			
TWh	TOTAL	TOTAL			
Hydro	0.435	0.399			
Wind	0.000	0.002			
Solar	0.000	0.000			

⁶⁰Order No <u>1-298</u> of the Minister for Energy of the Republic of Lithuania of 14 November 2016 approving the Rules on the issue, transfer and cancellation of guarantees of origin for electricity produced from renewable energy sources and the recognition in the Republic of Lithuania of guarantees of origin issued in other Member States

Biomass	0.030	0.000
R	RESIDUAL ENERGY MIX*	
	2017	2018
TWh	TOTAL	TOTAL
Hydro	0.107	0.066
Wind	1.350	1.132
Solar	0.066	0.076
Biomass	0.388	0.416

^{*}residual energy mix means the total annual energy mix for a Member State, excluding the share covered by the cancelled guarantees of origin (Lithuanian producers which receive services of public interest + expired guarantees of origin)

The State Energy Inspectorate under the Ministry of Energy, during the planned inspections or at the request of the designated body, carries out the control of the quantity of electricity produced from renewable energy sources.

6. Information on the developments in the preceding two years in the availability and use of biomass resources for energy purposes $(Article\ 22(1)(g)\ of\ Directive\ 2009/28/EC)$

Table 15: Biomass supply for energy production in 2017 and 2018

Indicator	Amount of domestic raw material (*)		Primary energy from domestic raw material (ktoe)		domestic raw material imported from materials imported		omestic raw material imported from materials imported		materials nported from		y energy ed from aterials ed from U (ktoe)	
	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018
		Supply of	biomass for he	eating and elect	ricity produ	ction						
Direct supply of wood biomass from forests and other wooded land for energy generation:												
- felling waste from State forests	321.2	343.4										
- fuel wood from State forests	608.4	542.7										
Waste biomass (from domestic, industrial and other waste)												
	25,975.6 ⁶¹	0 ^{62,63}	1.336 ⁶⁴ 1.645 ⁶⁶	0.760 ⁶⁵ 1.558 ⁶⁷								
	271,308.768	263,376.0 ⁶⁹	2.31170 6.34872	2.225 ⁷¹ 6.305 ⁷³								
Biomass supply for transport:												
Crops for biofuels:												
- rapeseed	372	481	107.8	138.8								
- cereal grain *Quantity of raw material indicated: in thousand	55	62	11.0	12.3								

^{*}Quantity of raw material indicated: in thousand m³ from forestry, thousand tonnes from agriculture and fisheries

⁶¹landfilled biodegradable waste (municipal and from production and other economic activities)

⁶²landfilled biodegradable waste (municipal and from production and other economic activities)

⁶³The Lithuanian Ministry of Energy has indicated that data on biodegradable waste landfilled in 2018 are still being analysed and will be provided later

⁶⁴heat energy recovered from landfill biogas

⁶⁵heat energy recovered from landfill biogas

⁶⁶electrical energy recovered from landfill biogas

⁶⁷electrical energy recovered from landfill biogas

⁶⁸biodegradable fraction of other waste used for energy recovery

⁶⁹biodegradable fraction of other waste used for energy recovery

⁷⁰heat energy produced from the biodegradable fraction of other waste used for energy recovery

⁷¹heat energy produced from the biodegradable fraction of other waste used for energy recovery

⁷²electrical energy produced from the biodegradable fraction of other waste used for energy recovery

⁷³electrical energy produced from the biodegradable fraction of other waste used for energy recovery

In order to develop a whole tree chopping technology for main clear forest harvesting in stands of low economic value, thus creating more favourable legal preconditions for the use of stands of low economic value (grey alder, goat willow woods, etc.) for biofuel production, a research paper, *Viso medžio smulkinimo biokurui technologijos parengimas ir rekomendacijos šios technologijos įdiegimui Lietuvos miškų ūkyj*e (Development of a whole tree chopping technology for biofuel and recommendations for the implementation of that technology in the Lithuanian forest sector), was prepared in 2017 by order of the Lithuanian Ministry of the Environment.

The Lithuanian Ministry of Energy has indicated that data on biodegradable waste landfilled in 2018 are still being analysed and will be provided in December 2019. According to the 2017-2018 data, operators started to provide data through the Unified Information System for the Accounting of Goods, Packaging and Waste in 2019. The Report provides preliminary data that will be revised upon receipt of information from all operators.

Biogas quantities generated in landfills may not be fully in line with the quantity of biodegradable waste coming from municipal, production and other activities in the same year, as biogas may be generated by biodegradable waste landfilled during the previous year. Small biogas quantities generated at landfills are collected and flared without recovering energy.

The data provided also include energy produced from biogas extracted from old landfills that have been closed down, but it is impossible to estimate what amount of the biodegradable fraction of landfilled waste generates the respective quantity of biogas and energy.

Table 15A: Domestic agricultural land use for the production of crops intended for energy production, 2017-2018

Londwas	Surface a	rea (ha)
Land use	2017	2018
Land used for common crops (wheat, sugar beet, etc.) and oilseeds (rapeseed,		
sunflower etc.):		
- rapeseed	149,000	160,000
- cereal grain	16,000	18,000

7. Information on any changes in commodity prices and land use in the preceding two years associated with increased use of biomass and other forms of energy from renewable sources ($Article\ 22(1)(h)\ of\ Directive\ 2009/28/EC$)

In accordance with the estimation of the Lithuanian Ministry of Agriculture, there were no significant changes in commodity prices and land use between 2017 and 2018 associated with increased use of biomass and other forms of energy from renewable sources. In 2017-2016, as against the previous period, rapeseed and cereal crop areas in Lithuania changed insignificantly. The total rapeseed crop area (not only for energy production) covered 185,000 ha in 2017 and 209,00 ha in 2018.

The use of rapeseed for the production of biofuels did not have a major impact on changes in areas, taking into account the amount of biodiesel production in the country. It should be noted that the same farmers sell part of their rapeseed for biofuel production and part for food or feed use, which makes it impossible to assess to what extent their choice to grow rapeseed is due to the production of biodiesel. In addition, the support provided by the Lithuanian Ministry of Agriculture for the production of biofuels during the 2017-2020 period remains unchanged and represents about 40% of the necessary funds for the production of biofuels. Average rapeseed buy-in prices in Lithuania were about EUR 357 per tonne in 2017 and about EUR 355 per tonne in 2018. Prices fluctuated but they were influenced by global trends on rapeseed markets rather than by the use of rapeseed for fuel production.

8. Information on the development and share of biofuels made from wastes, residues, non-food cellulosic material, and ligno cellulosic material ($Article\ 22(1)\ i$) of $Directive\ 2009/28/EC$)

So far Lithuania has produced only first-generation biofuels whose raw materials may be used for the production of both food and feed (mainly rapeseed and cereal grain). Advanced fuels, i.e. biofuels made from wastes, residues, non-food cellulosic material and ligno-cellulosic material, are not produced due to the lack of industrial, economically viable technologies for the production of such biofuels. However, it is likely that such fuels may be available on the market after a couple of years. It should be noted that under the measures of the 2014-2020 Lithuanian Rural Development Programme, the Lithuanian Ministry of Agriculture supports the production of biogas from agricultural (mainly manure) and other waste, some of which could be purified and used as biomethane (biogas complying with natural gas standards) in transport. It should be noted that the Lithuanian Ministry of Energy initiated the setting up of a working group, which will establish guidelines and draw up an action plan for the development of alternative fuels and renewable energy sources in the transport sector and will coordinate its implementation.

9. Information on the estimated impacts of the production of biofuels and bioliquids on biodiversity, water resources, water quality and soil quality within Lithuania in the preceding two years $(Article\ 22(1)(j)\ of\ Directive\ 2009/28/EC)$

The Lithuanian Ministry of the Environment, obligated by the Resolution⁷⁴ of the Lithuanian Government of 2010 to provide, within its remit, the necessary information for the preparation of the Report on the estimated impacts of the production of biofuels and bioliquids on biodiversity, water resources, water quality and soil quality, did not provide such information.

10. Estimate of the net greenhouse gas emission savings due to the use of energy from renewable sources ($Article\ 22\ (1)(k)\ of\ Directive\ 2009/28/EC$)

The data provided by the Lithuanian Ministry of the Environment on the environmental aspects of greenhouse gas emissions related to the use of energy from renewable sources are specified in Table 16.

Table 16: Net greenhouse gas (GHG) emission savings due to use of energy from renewable sources ('000 tonnes CO_2eq), 2017-2018

Environmental aspects	2017	2018*	
Environmental aspects	'000 tonnes CO2eq		
Total net GHG emission saving due to the use of energy from renewable sources:	8,091.18	8,421.08	
net GHG emission saving from the use of electricity from renewable energy sources*	4,741.45	4,823.80	
net GHG emission saving from the use of energy from renewable sources in heating and cooling	3,055.39	3,267.40	
net GHG emission saving from the use of energy from renewable sources in transport	294.34	329.88	

^{*} Preliminary data for 2018

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⁷⁴Resolution No <u>1314</u> of the Government of the Republic of Lithuania of 15 September 2010 approving the Procedure for the submission to the European Commission of the Progress Report on the promotion and use of renewable energy sources

Compared 2017 and 2018, the total net greenhouse gas emission saving due to the use of energy from renewable sources increased 4.08%, from 8,091,180 t CO_2 eq to 8,421,080 t CO_2 eq.

11. Report on (for the preceding two years) and estimate (for the following years up to 2020) of the excess/deficit production of energy from renewable sources compared to the indicative trajectory which could be transferred to/imported from other Member States and/or third countries, as well as estimated potential for joint projects until 2020 (Article 22(1)(l) and (m) of Directive 2009/28/EC)

On 28 February 2011, Lithuania signed a memorandum of understanding with Luxembourg concerning cooperation in the sphere of energy from renewable sources including the opportunities for statistical transfers and joint projects.

In 2017, Lithuania did not make any statistical transfers or imports of energy from renewable sources to or from Member States and/or third countries (see Table 1a).

On 26 October 2017, Lithuania and Luxembourg signed a bilateral agreement on an interstate cooperation mechanisms in the field of renewable energy. This is the first such agreement between EU Member States to transfer the share of Lithuania's excess RES indicator to Luxembourg between 2018 and 2020. Financial benefits to Lithuania will amount to at least EUR 10 million. They will be invested in new renewable energy projects and research.

In 2018, the statistical transfer amounted to 47.3 ktoe.

The statistical excess of the amount of renewable energy sources is recorded each year in Lithuania and is further forecast. Table 17 shows the excess of the production of energy from renewable sources in Lithuania compared to the indicative trajectory which can be transferred to other Member States and/or third countries (%).

Table 17: Excess of the production of energy from renewable sources in Lithuania compared to the indicative trajectory which can be transferred to other Member States and/or third countries, %

Indicator	Year								
indicator	2010	2011	2012	2013	2014	2015	2016	2017	2018
The total expected									
share of energy									
from renewable	16	17	18	19	20	21	22	24	24
sources: indicative									
trajectory ⁷⁵									
Overall actual									
share of energy	19.72	20.23	21.72	22.95	23.86	25.77	25.46	26.04	25.03
from renewable	19.72	20.23	21.72	22.93	23.80	23.11	23.40	20.04	23.03
sources ⁷⁶									
Excess	3.72	3.23	3.72	3.95	3.86	4.77	3.46	2.04	1.03

11.1. Details of statistical transfers, joint projects, joint support schemes and promotion quota allocation decision rules

The Law of the Republic of Lithuania on Energy from Renewable Sources regulates statistical transfers between the Republic of Lithuania and other Member States, joint projects with other Member States, joint support schemes and allocation of promotion quotas by auction between the Republic of Lithuania and other Member States.

The Government of the Republic of Lithuania or an institution authorised by it may enter into agreements on statistical transfers of the set quantity of energy from renewable

⁷⁵National Renewable Energy Action Plan

⁷⁶Data from Statistics Lithuania

sources from the Republic of Lithuania to another Member State or from another Member State to the Republic of Lithuania.

Agreements on statistical transfers of energy are concluded in accordance with the procedure laid down by the Government of the Republic of Lithuania.

The Republic of Lithuania may carry out statistical transfers of energy from renewable sources to another Member State where the quantity of energy from renewable sources in the Republic of Lithuania exceeds the interim national targets set in the Law.

If the projected consumption of energy from renewable sources of the Republic of Lithuania is lower than the interim national targets set by the Law and there are no other ways and means of achieving these targets, the Seimas of the Republic of Lithuania may adopt a resolution authorising the Government of the Republic of Lithuania to carry out a statistical acceptance of the amount of energy from renewable sources from another Member State.

The agreements may have a duration of one or more years. Any agreements concluded are notified to the European Commission in accordance with the procedure laid down by the Government of the Republic of Lithuania no later than three months after the end of each year in which they have effect. The information sent to the European Commission contains, inter alia, the quantity and price of the energy involved.

Statistical transfers of energy are deemed completed only after all Member States involved in the transfer have notified the transfer to the European Commission.

The Government of the Republic of Lithuania or an institution authorised by it may initiate, carry out and/or participate in any joint projects between the Republic of Lithuania and another Member State or other Member States relating to the production of electricity, heating or cooling from renewable energy sources. Such joint projects with other Member States may also involve private persons.

Agreements on joint projects with other Member States are concluded in accordance with the procedure laid down by the Government of the Republic of Lithuania.

In accordance with the procedure laid down by the Government of the Republic of Lithuania, an institution authorised by it notifies the European Commission of the proportion or amount of electricity, heating or cooling from renewable energy sources produced by any joint project in the Republic of Lithuania that became operational after 25 June 2009, or by the increased capacity of an installation that was refurbished after that date, which is to be regarded as counting towards the national overall target of another Member State. Units of energy from renewable sources produced by increasing the capacity of installations are treated as if they were produced by a separate installation becoming operational at the moment at which the capacity was increased.

In cooperation with competent authorities of another Member State or other Member States, the Government of the Republic of Lithuania or an institution authorised by it may adopt decisions to join the national support scheme of the Republic of Lithuania with that of another Member State or other Member States or to partially coordinate the activities of such schemes.

The Government of the Republic of Lithuania or an institution authorised by it may conclude agreements with another Member State or other Member States, in accordance with the rules approved by the Government of the Republic of Lithuania on the preparation and conclusion of international agreements, authorising persons intending to build or install power plants in that Member State or Member States to participate in the auction referred to in the Law.

Agreements on participation in the auction are concluded with another Member State or other Member States if another Member State or other Member States has/have direct electricity connections with the Republic of Lithuania and if natural and/or legal persons and/or other organisations or their units of the Republic of Lithuania intending to build or install power plants in the Republic of Lithuania are entitled to participate in the distribution of aid organised in that Member State or those Member States.

12. Information on how the share for biodegradable waste in waste used for producing energy has been estimated, and what steps have been taken to improve and verify such estimates $(Article\ 22\ (1)(n)\ of\ Directive\ 2009/28/EC)$

The calculation of the biodegradable fraction of waste used for energy production, covering the guarantee of accuracy and verifications, is governed by the following legislation:

1. The purpose of the Methodology for separating out the biodegradable fraction of industrial and municipal waste having regard to the renewable part of the energy produced from industrial and municipal waste⁷⁷ is to establish a procedure for determining the biodegradable fraction of municipal and/or industrial waste, i.e. waste generated by manufacturing and other economic activity, and solid recovered fuel used to produce energy from renewable sources. The procedure laid down in this Methodology must be observed by economic operators producing biogas from municipal and/or industrial and other economic waste; producing solid recovered fuel from municipal and/or production and other economic waste; biogas, solid recovered fuel, municipal and/or industrial and other economic waste for energy production; regional landfills for non-hazardous waste and/or supervising closed landfills for non-hazardous waste accumulating landfill biogases; and economic operators using landfill biogas for energy production.

Economic operators using solid recovered fuel for energy production determine the biodegradable fraction therein by applying the calculation methods specified in Lithuanian Standard LST EN 15440:2011 'Solid recovered fuels - Method for the determination of biomass content', and economic operators using municipal waste and waste generated by manufacturing and other economic activities for energy production determine the biodegradable fraction therein by applying the calculation methods specified in Lithuanian Standard LST EN 15440:2011 'Solid recovered fuels - Method for the determination of biomass content'.

Economic operators operating regional non-hazardous waste landfills which collect landfill gases and economic operators supervising closed non-hazardous waste landfills which collect landfill gases provide information on the quantity of biogas collected and used for energy production and the quantity of energy produced in a report to the Ministry of the Environment of the Republic of Lithuania, in accordance with the procedure laid down in the Methodology for separating out the biodegradable fraction of industrial and municipal waste having regard to the renewable part of the energy produced from industrial and municipal waste.

Tests to determine the biodegradable fraction of municipal, production and other economic waste and solid recovered fuel in accordance with one or several test methods listed in Lithuanian Standard LST EN 15440:2011 'Solid recovered fuels - Method for the determination of biomass content' are to be performed by economic operators using solid recovered fuel, municipal and/or production and other economic waste for energy production. Having regard to seasonal changes influencing test results, these economic operators must organise tests to determine the biodegradable fraction of waste and solid recovered fuel at least four times per year.

2. The Procedure for determining the composition of mixed municipal wastes and assessing the amounts of biodegradable municipal wastes ⁷⁸ lays down the procedure for assessing the composition of mixed municipal wastes entering mechanical-biological and mechanical treatment and other waste sorting equipment, the composition of wastes being sent

⁷⁷The Methodology for separating out the biodegradable fraction of industrial and municipal waste having regard to the renewable part of the energy produced from industrial and municipal waste, as approved by Order No D1-810 of the Minister for the Environment of the Republic of Lithuania of 4 October 2012 approving the Methodology for separating out the biodegradable fraction of industrial and municipal waste having regard to the renewable part of the energy produced from industrial and municipal waste

⁷⁸The Procedure for determining the composition of mixed municipal wastes and assessing the amounts of biodegradable municipal wastes, as approved by Order No D1-661 of the Minister for the Environment of the Republic of Lithuania of 31 August 2011 approving the Procedure for determining the composition of mixed municipal wastes and assessing the amounts of biodegradable municipal wastes

for disposal in regional non-hazardous waste landfills or wastes remaining after treatment in mechanical-biological or mechanical treatment equipment and intended for disposal in regional non-hazardous waste landfills and the amounts of biodegradable municipal wastes disposed of therein, and reporting on the determination of the composition of the mixed wastes sent to mechanical-biological and/or mechanical treatment equipment and the assessment of amounts of biodegradable wastes, and reporting on the determination of the composition of mixed municipal wastes being disposed in regional non-hazardous waste landfills and the assessment of the amount of biodegradable municipal wastes disposed of therein.

The Procedure for determining the composition of mixed municipal wastes and assessing the amounts of biodegradable municipal wastes must be observed by operators of mechanical-biological treatment and mechanical treatment equipment, operators of other waste sorting equipment, operators of regional non-hazardous waste landfills, legal entities established by one or several municipalities tasked with the administration of the municipal waste management system, municipalities within the municipal waste management region, the Environment Protection department under the Ministry of the Environment, and the Environmental Protection Agency.

13. Amounts of biofuels and bioliquids in energy units (ktoe) corresponding to each category of feedstock group listed in part A of Annex VIII of Directive 2009/28/EC taken into account for the purpose of complying with the targets set out in Article 3(1) and (2), and in the first subparagraph of Article 3(4)

Table 18: Amounts of biofuels and bioliquids in energy units (000' t)

Feedstock group	2017	2018
Cereals and other starch-rich crops	17.0	19.0
Sugars	-	_
Oil crops	122.0	157.0

14. Number of operators producing energy from RES and the total capacity of electricity generating installations as compared with Lithuania's first progress report on the promotion and use of renewable energy sources

The number of plants producing electricity from renewable energy sources and the total capacity of electricity generating installations are shown in Table 19.

Table 19: Summary data on power plants producing energy from renewable energy sources 79,80

Period	Number of power plants producing electricity from renewable energy sources	Total capacity of electricity generating installations (MW)
Before 31 December 2010	195	313.51
Before 31 December 2011	233	357.37
Before 31 December 2012	474	434.01
Before 31 December 2013	2,203	556.82
Before 31 December 2014	2,275	562.97
Before 31 December 2015	2,474	570.71

⁷⁹Data from the National Energy Regulatory Council

⁸⁰The 2010-016 data updated, taking into account the number of producing customers

Period	Number of power plants producing electricity from renewable energy sources	Total capacity of electricity generating installations (MW)
Before 31	2.747	1264.34
December 2016	2,747	1204.34
Before 31	3,043	1.299.94
December 2017	3,043	1,299.94
Before 31	3,843	1,615.41
December 2018	3,043	1,013.41

There are 3,843 power plants producing energy from renewable energy sources as from Lithuania's first progress report on the promotion and use of renewable energy sources

The Kruonis Pumped Storage Plant (*Kruonio hidroakumuliacinė elektrinė*, 'KHAE') operated in Lithuania is the only power plant of its kind in the Baltic States. When demand is low and there is cheap excess energy, the KHAE is operated in a pump mode and raises water from the *Kauno marios* reservoir to an upper artificial reservoir of 303 ha which is 100 m higher. At day time, when the energy demand increases, the KHAE can operate as a usual hydroelectric power plant. In order to prevent or respond to system emergencies, the KHAE has to be able to provide reserve capacity rapidly: its full capacity can be connected to the grid in less than two minutes. The KHAE is ready to be automatically activated by the system's emergency automation to compensate for the power deficit. Other equally important functions of the KHAE are the ability to manage the imbalances in the system, regulate the voltage and frequency, and to restart operations after a systemic failure (black start).

15. Progress made in achieving the national target set in Article 1(5)(1) of the Law of the Republic of Lithuania on Energy from Renewable Sources and the difference between the national targets and recommended value and essential causes thereof

The provisions of Directive (EU) 2015/1513⁸¹, adopted and transposed into Article 1(5)(1) of the Law of the Republic of Lithuania on Energy from Renewable Sources, are provided as follows: 'To increase the share of energy from renewable sources in all modes of transport at least up to 10% as compared with the final energy consumption in transport in 2020. The maximum joint contribution from biofuels and bioliquids produced from cereal and other starch-rich crops, sugars and oil crops and from crops cultivated as main crops primarily for energy purposes on agricultural land shall be no more than7% of the final consumption of energy in transport, and the target share of biofuels produced from feedstocks and of other fuels specified in the list approved by the Minister for Energy of the Republic of Lithuania as referred to in Article 6(14) of this Law should account for no less than 0.5% of the final energy consumption in transport;'

The aforementioned provision of the Law of the Republic of Lithuania on Energy from Renewable Sources relating to the use of biofuels and bioliquids in transport entered into force in Lithuania only on 1 July 2017.

The Methodology for calculating the share of renewable energy sources in the total final energy consumption⁸² contains a list of biofuels produced from feedstocks and other fuels which account for at least 0.5% of the final energy consumption in transport:



⁸¹Directive (EU)2015/1513 of the European Parliament and of the Council of 9 September 2015 amending Directive 98/70/EC relating to the quality of petrol and diesel fuels and amending Directive 2009/28/EC on the promotion of the use of energy from renewable sources (OJ L <u>239</u>, 15.9.2015, p. 1)

⁸²The Methodology for calculating the share of renewable energy sources in the total final energy consumption, as approved by Order No <u>1-170</u> of the Minister for Energy of the Republic of Lithuania of 28 June 2017 approving the Methodology for calculating the share of renewable energy sources in the total final energy consumption

- 12. Feedstocks and fuels, the contribution of which towards the target referred to in Article 1(5)(1) of the Law on Energy from Renewable Sources shall be considered to be twice their energy content: <...>
- 12.18. non-biological liquid and gaseous transport fuels produced from renewable sources;
- 12.19. carbon capture and utilisation for transport purposes, if the energy source is renewable in accordance with Article 2(2) of the Law on Energy from Renewable Sources; <...>.

Achievement and progress in Lithuania of the national targets are provided in Chapters 1 and 11.

16. Additional information

16.1. Information on the compliance of biofuels and bioliquids with sustainability criteria (the fifth paragraph of Article 18(3) of Directive 2009/28/EC)

According to the data of the Lithuanian Ministry of Agriculture, all biofuel production undertakings operating in Lithuania are members of the German self-certification scheme ISCC recognised by the European Commission. A self-certification scheme is a control system establishing the compliance of biofuels with sustainability criteria. Undertakings importing or producing biofuels must prove that their biofuels are produced in a sustainable manner. They can do so by contacting the organisation administrating the certification scheme and request the performance of required audits with a view to proving the compliance of biofuels with the sustainability criteria.

According to the data provided by Lithuania's biofuel producers, about 97% of the produced biofuels comply with the sustainability criteria. The sustainability of the remaining 3% cannot be verified, as they are produced from raw materials coming from third countries.

16.2. Implementation of the Aarhus Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (Articles 6 and 7 of the Aarhus Convention)

Articles 6 and 7 of the Aarhus Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters ('the Aarhus Convention') regulate public involvement in making decisions on specific activities and drawing up plans, programmes and policies in the field of the environment.

Lithuania ratified the Aarhus Convention in 2001, its GMO amendment in 2007 and the Protocol in 2009.

Lithuania spares no effort to enable the public to be involved in environmental policy making.

The Lithuanian Government set up a working group composed of representatives from various institutions, non-governmental and research organisations. Its work resulted in the Action Plan for implementing the decisions of the third meeting of the Parties to the Aarhus Convention concerning Lithuania⁸³.

In an effort to ensure the highest possible level of awareness raising in respect of the Convention and the rights protected thereby, both legal and practical information work

⁸³The Action Plan for implementing the decisions of the third meeting of the Parties to the Aarhus Convention concerning Lithuania, as approved by Resolution No <u>979</u> of the Republic of Lithuania of 26 August 2009 approving the Action Plan for implementing the decisions of the third meeting of the Parties to the Aarhus Convention concerning Lithuania

(publications, brief information on the environment, etc.) has been underway since the signature thereof.

More information on the Aarhus Convention and its practical implementation is given on the website of the Ministry of the Environment of the Republic of Lithuania. The current version of the 2014-2016 Report on Aarhus Convention implementation in Lithuania is also posted there ⁸⁴.

Institutionally, the implementation of the Aarhus Convention in Lithuania is ensured by: (a) the Ministry of the Environment of the Republic of Lithuania and other ministries of the Republic of Lithuania insofar as the regulated relations are related to the environment (policymaking, drafting of legislation); (b) institutions in the field of the environment that most frequently deal with the application of Aarhus Convention implementing provisions: the Environmental Protection Agency, the Environmental Protection Department under the Ministry of the Environment, services, inspectorates (the Lithuanian Geological Survey under the Ministry of the Environment, the Lithuanian Hydrometeorological Service under the Ministry of the Environment, the State Service for Protected Areas under the Ministry of the Environment, the State Territorial Planning and Construction Inspectorate under the Ministry of the Environment, etc.); (c) institutions active in the fields concerned: municipal institutions, the Cultural Heritage Department under the Ministry of Culture, the Fire and Rescue Department under the Ministry of the Interior, the National Public Health Centre under the Ministry of Health, the Radiation Protection Centre, the Health Training and Disease Prevention Centre, etc.); (d) the Commission on Administrative Disputes resolving disputes and national courts.

Public authorities are responsible, within their remit, for the proper implementation and application in practice of the provisions of the Aarhus Convention.

In the light of the fact that the Aarhus Convention is a legal act of horizontal application covering a major share of State-regulated areas, the provisions of the Convention are implemented by the provisions of general and sectoral statutory and subordinate legislation (there is no one legal act for the implementation of the provisions of the Aarhus Convention). Specificities of legal regulation according to the Convention's pillars:

Pillar I: Access to environmental information by the public (Articles 4 and 5);

Main legislation: (a) the Procedure for public access to environmental information in the Republic of Lithuania⁸⁵; (b) the Law of the Republic of Lithuania on the Right to Obtain Information from State and Municipal Institutions and Agencies⁸⁶; (c) the Rules on examining individuals' requests and applications and providing services to them at public administration entities⁸⁷.

Article 5 (*Collection and dissemination of environmental information*) of the Convention is implemented by general and sectoral legislation.

Pillar II: Public participation in environmental decision-making (Articles 6 and 8):

Article 6 (*Public participation in decisions on specific activities*) of the Convention is implemented by the Law on Environmental Protection⁸⁸ and special legal acts such as: (a) the Law of the Republic of Lithuania on the Environmental Impact Assessment of the Proposed

⁸⁴http://am.lrv.lt/uploads/am/documents/files/Implementation_report_LT_2017_lithuanian.pdf

⁸⁵Procedure for public access to environmental information in the Republic of Lithuania, as approved by Resolution No <u>1175</u> of the Government of the Republic of Lithuania of 22 October 1999 approving the Procedure for public access to environmental information in the Republic of Lithuania

⁸⁶Law No VIII-1524 of the Republic of Lithuania on the Right to Obtain Information from State and Municipal Institutions and Agencies

⁸⁷Rules on examining individuals' requests and applications and providing services to them at public administration entities, as approved by Resolution No <u>875</u> of the Government of the Republic of Lithuania of 22 August 2007 approving the Rules on examining individuals' requests and applications and providing services to them at public administration entities

⁸⁸Law No <u>I-2223</u> of the Republic of Lithuania on Environmental Protection

Economic Activity⁸⁹; (b) the Procedure governing the process of public information and participation in the environmental impact assessment of the proposed economic activity⁹⁰.

Article 7 (*Public participation concerning plans, programmes and policies relating to the environment*) of the Convention; the main legal acts: (a) the Procedure for the strategic environmental impact assessment of plans and programmes ⁹¹; (b) the Procedure for public participation in the strategic environmental impact assessment procedures for plans and programmes and the provision of information to assessment entities, EU Member States and other foreign States ⁹²; (c) the Regulations governing public information, consultation and participation in spatial planning decision-making ⁹³, and also legal acts providing for public involvement in policy-making (public involvement in various working groups at local and central level, etc.).

Article 8 (*Public participation during the preparation of executive regulations and/or generally applicable legally binding normative instruments*) of the Convention is implemented by legal acts ensuring the right of the public to participate in the legislative process, the main legal act is the Law of the Republic of Lithuania on the Legislative Framework⁹⁴.

Pillar III: Public access to justice in environmental matters; the grounds for public access to justice are provided for in generally applicable (e.g. the Law on the Right to Obtain Information from State and Municipal Institutions and Agencies;) and special legal acts. The procedural aspects of the implementation of the right are governed by general legislation on administrative, civil and criminal procedures. Disputes relating to the environment are resolved under the general procedure (there are no special regulation or institutions resolving only environmental disputes).

⁸⁹Law No <u>I-1495</u> of the Republic of Lithuania on the Environmental Impact Assessment of the Proposed Economic Activity

⁹⁰The Procedure governing the process of public information and participation in the environmental impact assessment of the proposed economic activity, as approved by Order No D1-370 of the Minister for the Environment of the Republic of Lithuania of 15 July 2005 approving the Procedure governing the process of public information and participation in the environmental impact assessment of the proposed economic activity ⁹¹The Procedure for the strategic environmental impact assessment of plans and programmes, as approved by Resolution No 967 of the Government of the Republic of Lithuania of 18 August 2014 approving the Procedure for the strategic environmental impact assessment of plans and programmes

⁹²The Procedure for public participation in the strategic environmental impact assessment procedures for plans and programmes and the provision of information to assessment entities, EU Member States and other foreign States, as approved by Order No D1-455 of the Minister for the Environment of the Republic of Lithuania of 27 August 2004 approving the Procedure for public participation in the strategic environmental impact assessment procedures for plans and programmes and the provision of information to assessment entities, EU Member States and other foreign States

⁹³The Regulations governing public information, consultation and participation in spatial planning decision-making, as approved by Resolution No <u>1079</u> of the Government of the Republic of Lithuania of 18 August 1996 approving the Regulations governing public information, consultation and participation in spatial planning decision-making

⁹⁴Law No XI-2220 of the Republic of Lithuania on Legislative Framework