Energy

Assessment of Latvia's renewable energy supply-demand economic potential and policy recommendations,

VPP-EM-2018/AER-1-0001

GROUP MODELLING SESSIONS ON POLICY RECOMMENDATIONS

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CONTENT

INTRODUCTION

Several policymaking working groups were organised involving stakeholders to identify policy instruments that could increase the share of renewable energy sources (RES). Such discussions have a crucial role in improving the dynamic model, confirming its structure and behaviour, training the relevant decision-makers in the use of the model, receiving critical contributions to the simulation of policy instruments, and distributing results with different audiences.

In the current project implementation period, modelling workshops have been organised with several stakeholders - planning regions, municipalities, and the electricity supply operator. The municipality can bring together different stakeholders (businesses, citizens, non-governmental organisations, etc.) and seek compromises to address other issues. The municipality can act as a unifying party of independence by setting up working groups where mutual views and experiences are possible. Such interconnection is essential for implementing innovative energy supply solutions, such as integrating surplus heat from industrial plants into district heating.

Modelling workshops with a distribution operator are essential to refine the power transmission part of the system dynamics model and indicate the relevant constraints. This ensures that the system dynamics model more accurately reflects the actual situation in the energy sector.

The modelling workshops were organised to improve the integrated policy tools and present the results of the system dynamics model to various target groups.

1. IDENTIFICATION OF POLICY RECOMMENDATIONS IN MUNICIPALITIES

Achieving the country's renewable energy targets requires the implementation of policy instruments at the municipal level. Municipalities have a crucial role in implementing the main strategic directions set by the state, considering technological and socio-economic aspects. Local governments are making great efforts to develop and apply energy strategies and face economic and technological challenges in moving to RES systems.

Research [1], [2] points to the lack of public funding for local strategic energy planning as one of the main barriers to a successful transition to RES. Lack of funding is often an essential factor for less successful municipalities, as insufficient budgets mean not enough competent staff to develop strategic plans. In addition, due to a lack of funding, local authorities consume large amounts of funding for pilot projects. Still, there is a lack of a coordinated strategic vision for the further development of the sectors. Therefore, providing long-term funding to local authorities for strategic energy planning could ensure a more homogeneous level of quality in developing local strategic energy plans.

Another barrier identified for the transition to RES systems that has proven difficult to overcome in energy planning processes is local resistance to constructing larger power generation units, such as wind turbines, biogas plants, etc. The lack of action plans identified as additional barriers, the lack of interaction between local and national energy goals and policies, and changes in policy agendas that require short-term planning when long-term planning is desirable are additional barriers [3]. The transition to 100% renewable energy systems requires significant design, organisation, and technological execution, so no significant changes will ever occur without meaningful long-term strategies at the municipal level.

In the modelling workshops, a survey and discussions stimulated conclusions on various aspects of RES technology. The recommendations from three different modelling workshops are summarised below, but the answers obtained by regions are analysed in Chapter 1.1. and 1.2. As shown in Figure 1.1, solar technologies - solar panels (23.7%) and solar collectors (17.1%) are leaders as RES technologies that municipalities would like to support. However, municipalities also see support opportunities for other RES technologies.

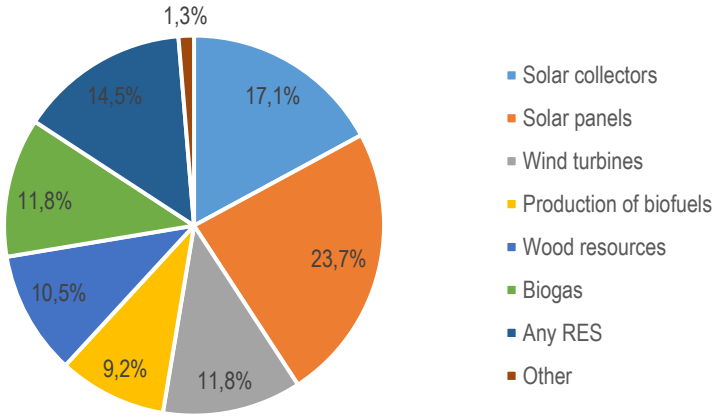

Figure 1.1. Respondents' responses on RES technology that should be supported

Figure 1.2 summarises the answers about the most appropriate type of support for introducing RES technologies. The most suitable of aid is co-financing to cover capital costs (21.4%), followed by assistance for the preparation of technical documentation for the project (21.4%) and then aid in the form of more accessible access to loans and loans with lower

repayment rates (17.9%) and facilitation of obtaining and approving permits for RES installation (17.95%).

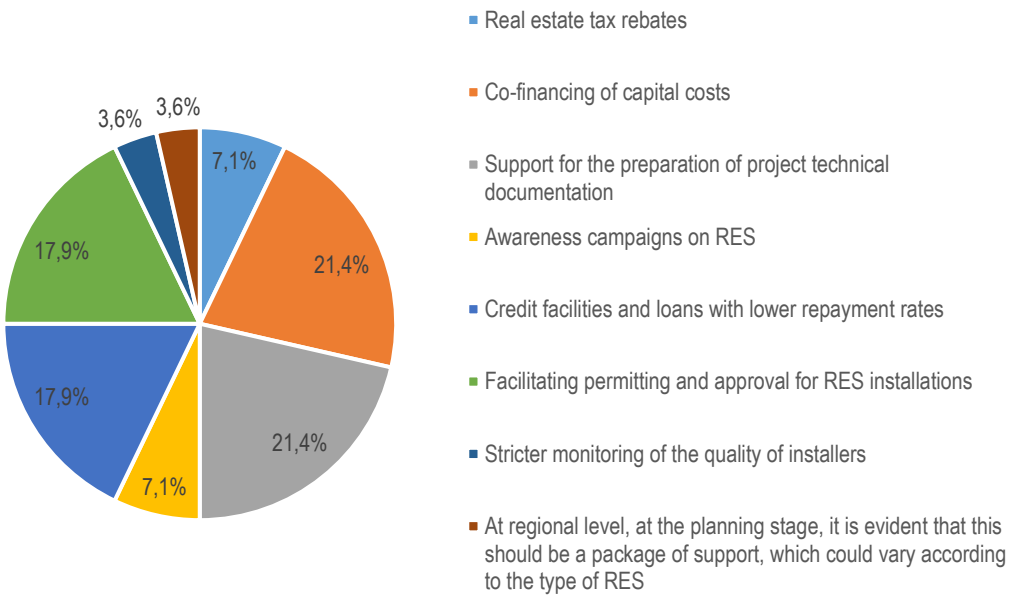

Figure 1.2. Respondents' answers on the most appropriate type of support for RES technologies

When co-financing RES technologies, the majority choose to support a 40-60% co-financing idea, and slightly fewer local government representatives support 20-40% co-financing. But the possibility of granting a tax rebate for real estate is the most extensive support for a tax rebate of 20-40% and slightly less for a tax rebate of more than 60% (see Figure 1.3).

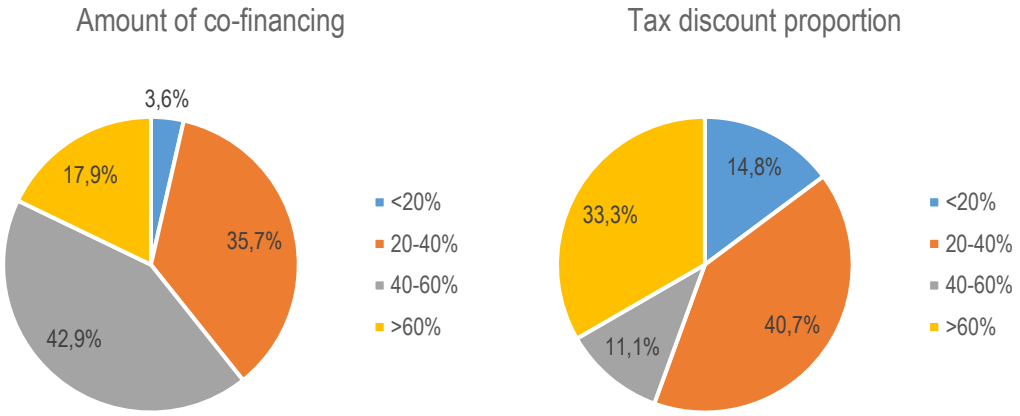

Figure 1.3. Respondents' answers on the amount of co-financing for RES technologies and the amount of real estate tax rebate

The obtained answers from the local government representatives will be used to create policy development scenarios in the system dynamics model.

1.1. Modelling workshop for Latgale municipalities

On March 12, an online workshop, "100% Renewable Energy Municipalities in Latgale," took place. The workshop also included a survey of participants on RES, their potential, the

obstacles to using RES, and answers received from representatives of Rezekne, Kraslava, Riebini, Balvi, Preili and Daugavpils municipalities.

The introductory part of the workshop was devoted to the discussion on the role of local governments in raising RES, emphasising the importance of long-term planning documents. To facilitate the discussion, participants were invited to give their views on whether municipalities should define specific targets for the share of RES. 85% of the representatives believe that increasing the percentage of RES in the municipality should be a strategic goal, and significant attention is paid to it. Only 15% of local governments have already defined increasing the share of RES as one of the goals (see Figure 1.4).

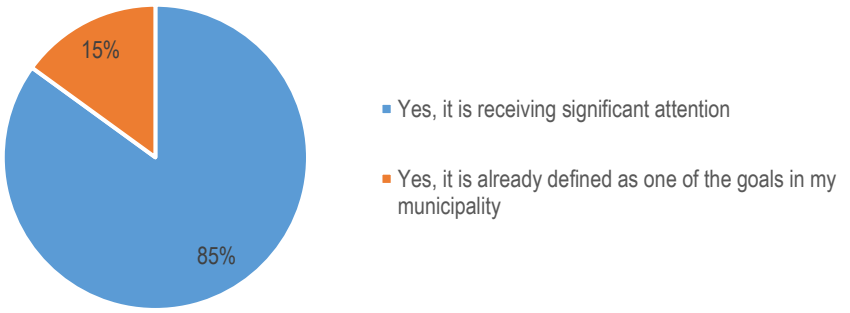

Figure 1.4. Respondents' answers about increasing the share of RES should be a strategic goal in local governments

Representatives of local governments mentioned that the most challenging way to increase the share of RES is in the household sector because the response, interest and understanding of the population are low, there are problems in attracting funding, and there is no confidence that the idea will be implemented. A significant obstacle in apartment buildings is that all residents agree on both increasing the energy efficiency of the building and introducing RES. In turn, energy efficiency measures are being taken in apartment buildings owned by municipalities. The district heating and electricity sectors were mentioned as even more complicated for the transition to RES. There will be a lack of knowledge about the introduction and efficient use of RES technologies and a reluctance to change the energy resource if the existing system works satisfactorily. It is considered that the introduction of RES technologies should be subsidised as they are high cost, and the installation of these technologies is believed to have a high payback period.

Representatives of local governments were asked about various RES technologies and their potential. One of the most critical issues is the awareness of municipal representatives. As shown in Figure 1.5, half of the surveyed local government representatives are moderately knowledgeable about solar technology, 12.5% do not feel particularly informed, and 37.5% are well informed about the possibilities of using solar technology.

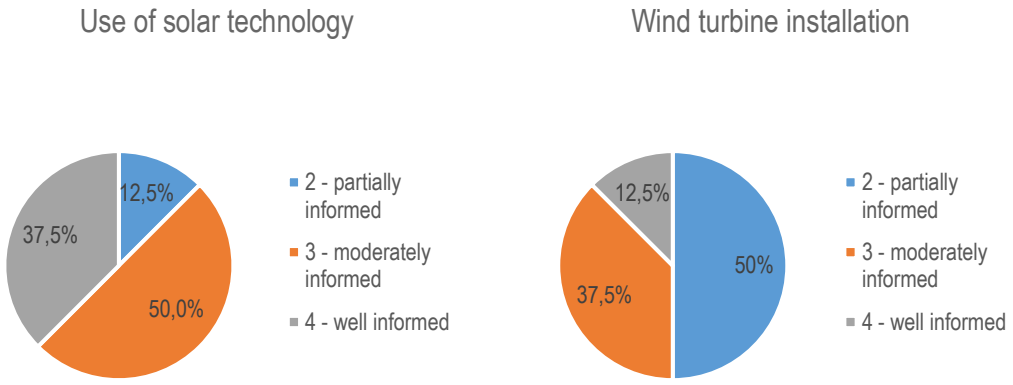

Figure 1.5. Respondent's awareness of the use of solar technology and installation of wind turbines in Latgale municipalities

Awareness about the installation aspects of wind turbines was also clarified (Figure 1.5), and according to the answers obtained, it can be concluded that the representatives of local governments are less informed about the possibility of installing and using wind turbines or are less interested in wind turbines. Half of the respondents said that they had relatively little knowledge about installing wind turbines. In contrast, 37.5% said they were moderately knowledgeable, and 12.5% were well informed about wind turbine installation.

As can be seen in Figure 1.6, 37.5% of local government representatives expressed average knowledge about the possibilities of biogas production and use, but 62.5% are relatively unaware of biogas.

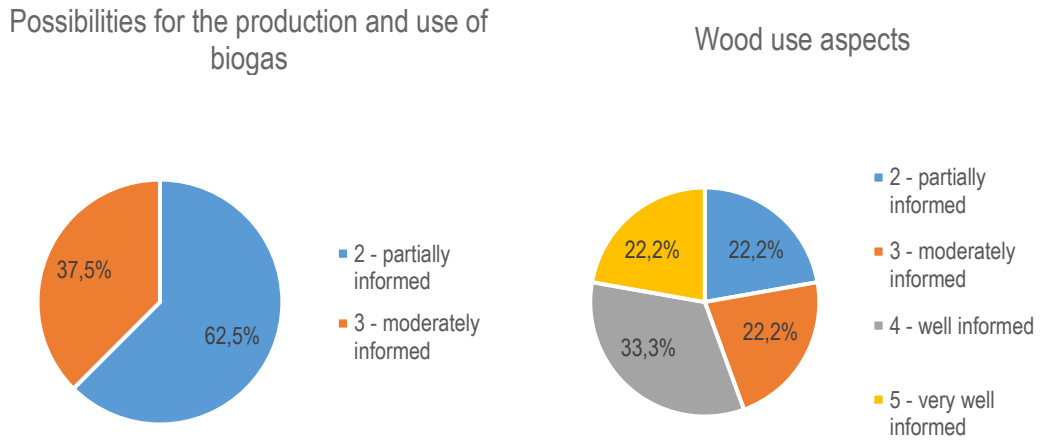

Figure 1.6. Awareness of respondents about biogas production and wood use in Latgale municipalities

The awareness of wood use aspects of municipalities is similar to that of other RES technologies. As shown in Figure 1.6, 22.2% are knowledgeable and informed about wood, but 22.2% are also medium - and less knowledgeable, but a more significant proportion (33.3%) is well informed about wood use aspects.

The majority (62.5%) of the municipalities' representatives moderate electric transport and its use. In contrast, the other representatives responded equally that they were not informed or

partly informed and well informed about the aspects of the use of electric transport, as shown in Figure 1.7.

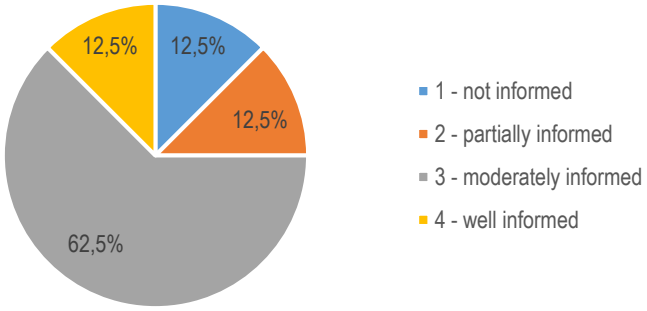

Figure 1.7. Respondent's awareness of the possibilities of using electric transport in Latgale municipalities

When asked about RES technologies, which should provide more support in their municipalities according to Figure 1.8, municipalities would need more support for solar energy technologies or solar collectors (21.1%) and solar panels (21.1%), as well as biogas (15.8%) and support for the use of wood resources (15.8%). 10.5% would like to support biofuel production, while 5.3% would like more support for wind turbines. 10.5% believe that support is needed for any RES technology.

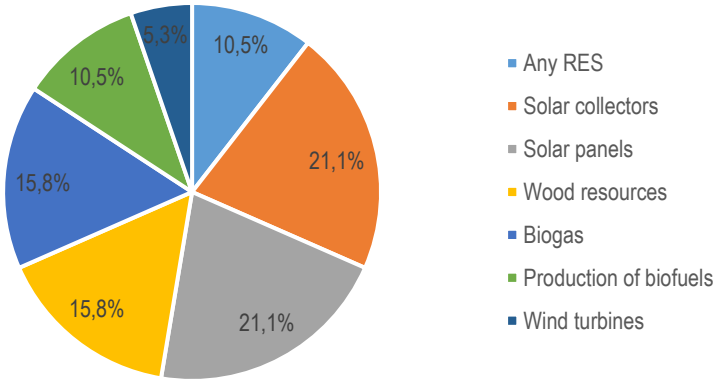

Figure 1.8. Respondents' responses on RES technology that should be supported

The participants raised the issue of using and comparing solar electricity and thermal energy. Both solar technologies have potential. Solar collectors are used to prepare hot water but must evaluate the authorities to use solar collectors to operate effectively. Each RES technology must find the right place to apply it so that the use of the resource and the technology do not pay off. It is recommended that both solar technologies be covered at the municipal level. Still, electricity and heat bills should be assessed; consumption should be evaluated (during which period it is higher and lower) and then analysed which solar technologies should be better installed. Heating producers have shown an interest in solar thermal energy. Companies active in setting up solar technologies are also developing.

As shown in Figure 1.9, mainly (18.8%) support for deploying the most appropriate RES technologies is considered co-financing for capital costs, facilitated lending opportunities and loans with lower repayment rates and support for the preparation of the project's technical

documentation. 12.5% of respondents consider informative campaigns on the use of RES, facilitated authorisation and harmonisation for the installation of RES and stricter monitoring for the quality of installation installers, while only 6.3% consider tax breaks for real estate as a good aid instrument.

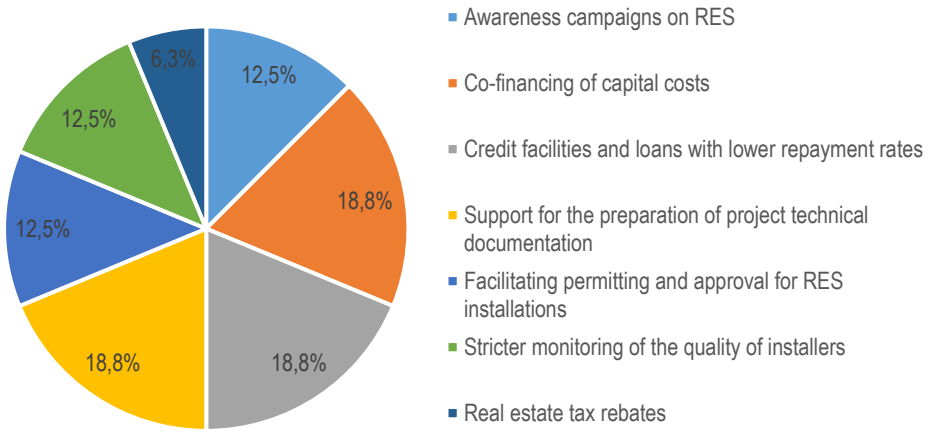

Figure 1.9. Respondents' answers on the most appropriate type of support for RES technologies

If it were planned to co-finance RES technologies (Figure 1.10), half of the respondents would co-finance 20-40%, but a minor part would support co-financing in 40-60% and more than 60% of the total costs of RES.

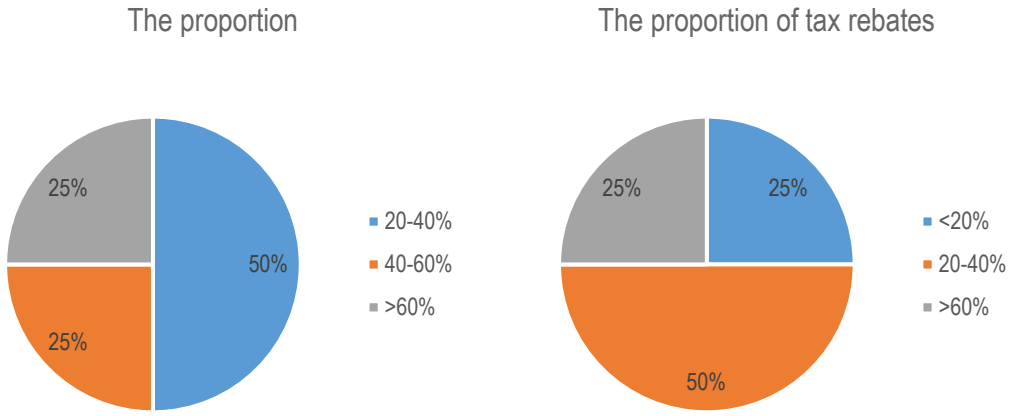

Figure 1.10. Respondents' answers on the amount of co-financing for RES technologies and the amount of real estate tax rebate

In Figure 1.10, there are answers to the question of a real estate tax rebate, if any, and 50% of respondents would be granted a 20-40% tax allowance, 25% would grant a tax rebate of up to 20%, and the other 25% would give more than a 60% tax allowance.

The discussion also raised the view that before one of the support mechanisms for the use of RES is put in place, it is necessary to assess the potential for the benefit of RES because it is considered that the installation and maintenance of RES technologies are costly. Therefore, the use of RES is not justified.

The views of municipal representatives on the nuisance factors for the use of RES in the transport sector were clarified (see Figure 1.11). 57.7% indicated that the disruptive factor was

high costs and lack of funding, while 19.2% stated lack of knowledge and stereotypes as a disruptive factor.

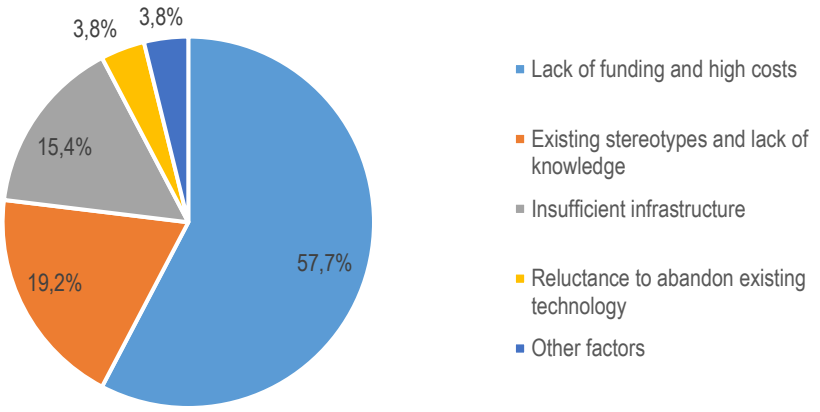

Figure 1.11. Respondents' responses to obstacles to the use of RES in the transport sector

As shown in Figure 1.12, half of 52.4% of the representatives believe that the construction of wind farms in the Latgale region should be left to entrepreneurs, but 42.9% believe that support for wind farms is necessary because they have promising opportunities in Latgale. Only 4.8% believes that wind energy has no future in Latgale.

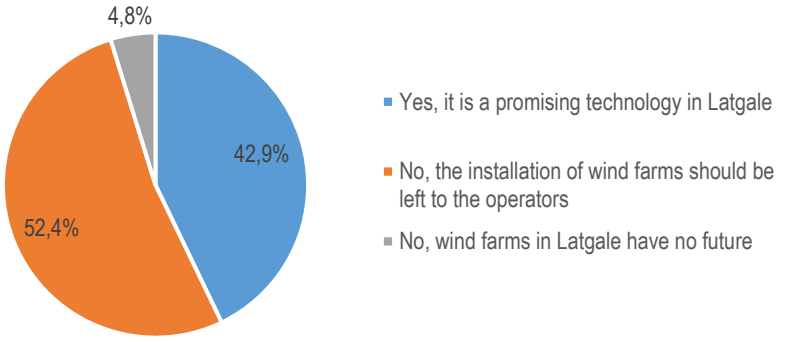

Figure 1.12. Respondents' answers about the support of local governments in the construction of wind farms

When asked if solar technology needs support, 64.3% said that financial support was needed, 32.1% thought support was required for installation and permitting, and 3.6% thought solar technology was also competitive (see Figure 1.13).

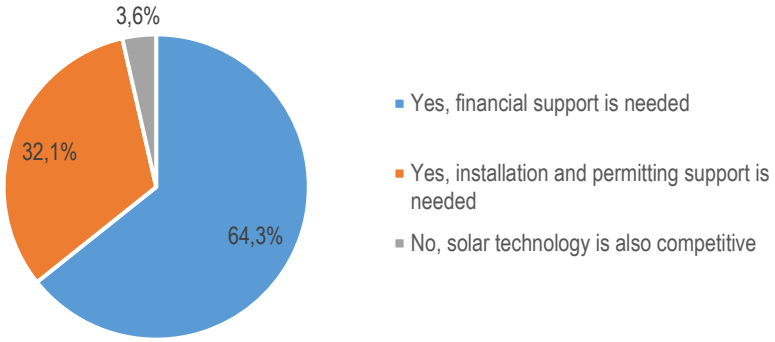

Figure 1.13. Respondents' responses to the need for solar technology support

Representatives of the Latgale region believe that the most suitable support for solar technologies should be provided as co-financing for capital costs (71.4%)help for the preparation of project technical documentation (17.9%). As shown in Figure 1.14, the other proposed support mechanisms have received less support.

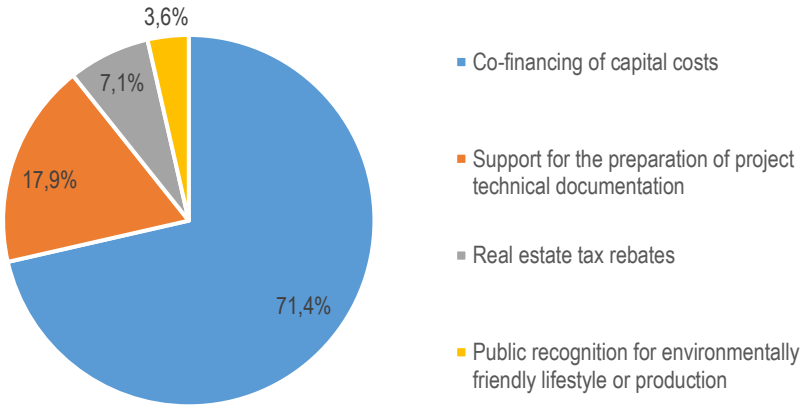

Figure 1.14. Respondents' answers on the most appropriate type of support for solar technologies

There was also a discussion on electric transport during the workshop on how quickly its acquisition would be paid off. It was clarified that the time of the electric car to repay depends on the price of electricity, as the price at public charging points is EUR 0,20/kW, while at private charging points (place of residence), this price would be even 3-4 times lower so that the purchase of electric vehicles would also pay off more quickly. In calculating the costs of public charging sites for electricity, the electric car will pay off in 7 years compared to a vehicle that uses fossil fuel. An essential factor is that the electric vehicle has additional support mechanisms, such as no operating tax and registration fees, and it is possible to use accessible parking lots. In the future, subsidies for the purchase of electric cars are expected to be available. Still, there is a pressing question of whether, without support, the price of electric vehicles is competitive.

The most significant potential for RES in transport is electromobility (57.1%) and then biomethane (14.3%). Figure 1.15 shows the potential for modern biofuels to be seen in 9.5% of municipalities. 9.5% believe all RES technologies in transport have potential, but so many believe that no one has the potential for RES technology.

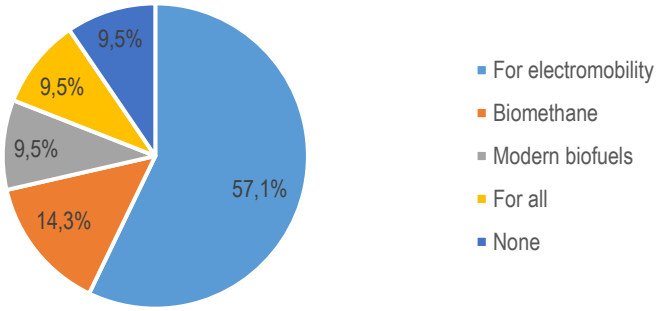

Figure 1.15. Answers by respondents on the potential of RES in the transport sector

In the discussion on what needs to be done or changed to have wind parks installed in Latgale, it was clarified that local government spatial planning is required to mark which areas would allow the deployment of wind turbines. This would be the first step towards entrepreneurs willing to invest in RES technologies. It is also essential to reduce stereotypes about the impact of wind parks on human health and discuss economic benefits for citizens.

The discussions revealed that municipalities are thinking about insulating buildings, the heating sector, electricity transport and green technologies and improving efficiency in new development programmes. The choice of RES technologies also enhances the economic situation in regions, such as building a chip shell, ensuring that someone will also need to prepare the chips and create new jobs. At the end of the discussion, the municipalities committed themselves to renewing their development plans and proposing new ideas during the workshop.

1.2. Modelling workshop for Zemgale municipalities

On April 21, a workshop, “100% Renewable Energy Municipalities in Zemgale”, was organised in cooperation with the Zemgale Planning Region and the Zemgale Region Energy Agency. The webinar workshop was attended by representatives from Jekabpils, Bauska and Jelgava, companies wishing to implement RES technologies, the heat supply sector representatives, and the Zemgale Regional Energy Agency participated in the discussion and answered questions from the organisers.

During the workshop, a discussion about RES projects implemented in the Zemgale region, how successful they are, and the obstacles that do not promote the implementation of RES projects. Representatives of the area expressed a desire for co-operation with neighbouring municipalities and possible co-operation in larger-scale projects. Participants acknowledged that much is determined by the funding available to develop all ideas. Another aspect to consider is that tenders for funding programmes choose the limits within which RES ideas and projects can be implemented.

The company Ltd “LAFLORA” shared its experience in the workshop about the administrative process for the coordination of the wind farm and the **problems that have arisen due to the territorial plan of the municipality**. Creating a new detailed plan means that the project development process is delayed, and more time and money is spent than planned. Development, infrastructure, the attraction of production and investment are essential for the company. In advance, it needs to know what can be developed and improved and what will not be possible to implement based on regulatory enactments and development plans. **Public engagement** and cooperation with businesses, municipalities and public authorities remain **essential**. If the municipality is interested, it also helps companies to realise their ideas, which

are included in urban and municipal development plans. But it is necessary to **arrange the regulatory enactments at the national level**, which tends to be contradictory and not conducive to development. **Many bureaucratic barriers** take a lot of time and often lose why a particular project was launched. This hampers the growth of companies and innovative technologies. This aspect can lead to an unpalatable view of the country when participating in international projects, and the intention cannot be implemented due to national bureaucracy.

During the discussion, the company's representatives also noted that the **National Energy and Climate Plan 2030 is too short** of pursuing various ideas and projects since it can only catch up on funding at this time. It is intolerable to think in the long term to develop and realise ideas.

In the workshop, participants shared views on the use of hydrogen. Hydrogen production is divided into different categories, depending on the type and resources of its extraction, and should focus more on "green" hydrogen produced from the RES. Hydrogen technologies are currently developing at a global level, and there are also good examples in Europe where hydrogen is used in road transport. In Zemgale, several municipalities are investigating **the possibility of using hydrogen.**

The new amendments to the Energy Law, where energy communities will be permitted and regulated, give great hope to regional representatives. If it is implemented, as stipulated by the law, all permits for the installation of the RES can be obtained by the same authority, then solar and wind technologies would be used much more than before. The interest in solar and wind technologies is an extensive and **relieved bureaucratic process** that would encourage their installation. It would be essential to reduce the existing bureaucracy because the ideas were delivered more quickly.

The representatives expressed the need to **think more about the household and transport sector**. Any support instrument to develop the use of RES technologies is valuable. These sectors lack awareness of different technologies and lack support, and the financial aspect impacts the increase in the share of RES. There was a view that it was difficult to raise the share of RES in all sectors. Still, the public is not directly involved in the energy sector, **does not understand the benefits**, and does not support the idea and realisation itself. In particular, an example of biogas and wind turbines was mentioned. There was also a view that it saw the potential for solar and wind energy to raise the share of RES in municipalities.

The survey identified the knowledge of the various RES technologies of the workshop participants and the opportunities and barriers to the deployment of RES technologies. The majority (44.4%) of representatives are well informed about solar technologies, while 33.3% are medium known. 22.2% of representatives are very well informed about the use of solar panels and solar collectors (see Figure 1.16).

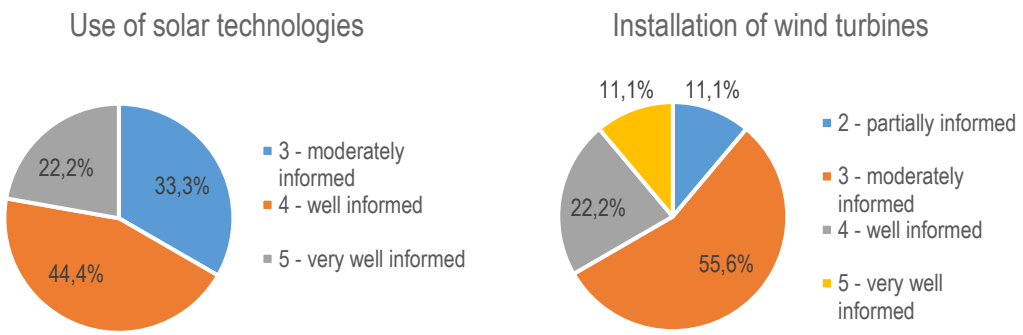

Figure 1.16. Respondent's awareness of the use of solar technology and installation of wind turbines in Zemgale municipalities

As shown in Figure 1.16, a more significant proportion (55.6%) of the representatives are moderate in wind turbine installation aspects; 11.1% are partly informed but well informed are 22.2%. 11.1% of the representatives are considered to be very well informed about wind turbines.

More than a half (55.6%) of the workshop participants are, on average aware of the production of biogas and its potential, while 33.3% are well known, and 11.1% are very knowledgeable about RES biogas and its monitoring capabilities (see Figure 1.17).

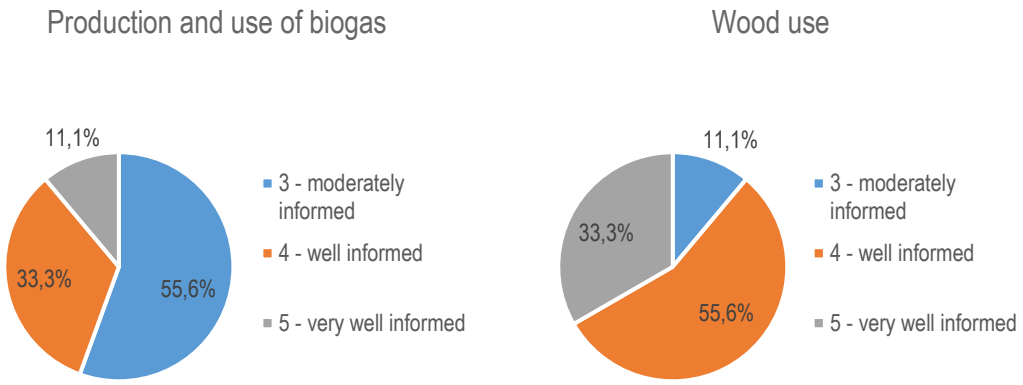

Figure 1.17. Awareness of respondents about biogas production and wood use in Zemgale municipalities

In Figure 1.17, it can be concluded that the representatives of Zemgale are aware of wood use, as 55.6% are well-informed and 33.3% are very well informed.

Representatives are well informed about the possibility of electric transport, as 66.7% are knowledgeable, and 22.2% are very well informed about an electric vehicle, see Figure 1.18.

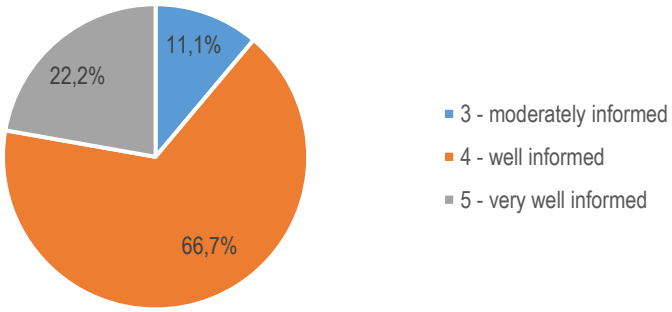

Figure 1.18. Respondent's awareness of the possibilities of using electric transport in Zemgale municipalities

When asked about which RES and technologies should provide the most support in the municipality, as shown in Figure 1.19, the most extensive support from the municipality is needed for any RES technology (23.1%). But if you analyse specific RES technologies, 19.2% believe that help is required for solar panels, 15.4% believe that support is needed for wind turbines and biogas, followed by support for solar collectors (11.5%).

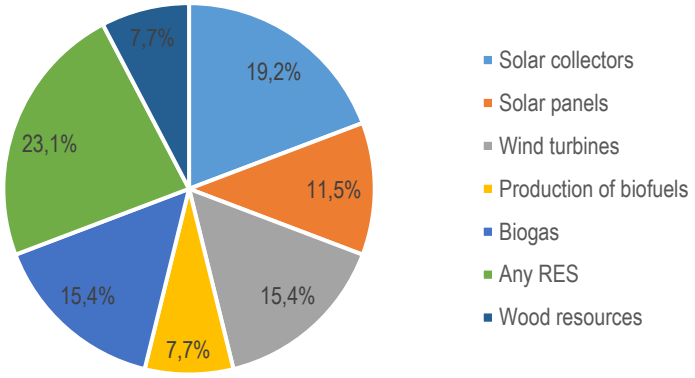

Figure 1.19. Respondents' responses on RES technology that should be supported

One of the most suitable types of support for implementing RES technologies was co-financing for capital costs (21.4%) and support for the preparation of project technical documentation (21.4%). As shown in Figure 1.20, support for easier obtaining and approval of permits for the installation of RES was expressed by 17.9% of the representatives. The need to get more accessible credit facilities and loans with lower repayment rates was mentioned. Tax rebates for real estate and information campaigns on the use of RES received slightly less support. Participants also said that this should be complex support at the planning stage at the regional level, which could vary depending on the type of RES and requires more robust monitoring of the quality of equipment installers.

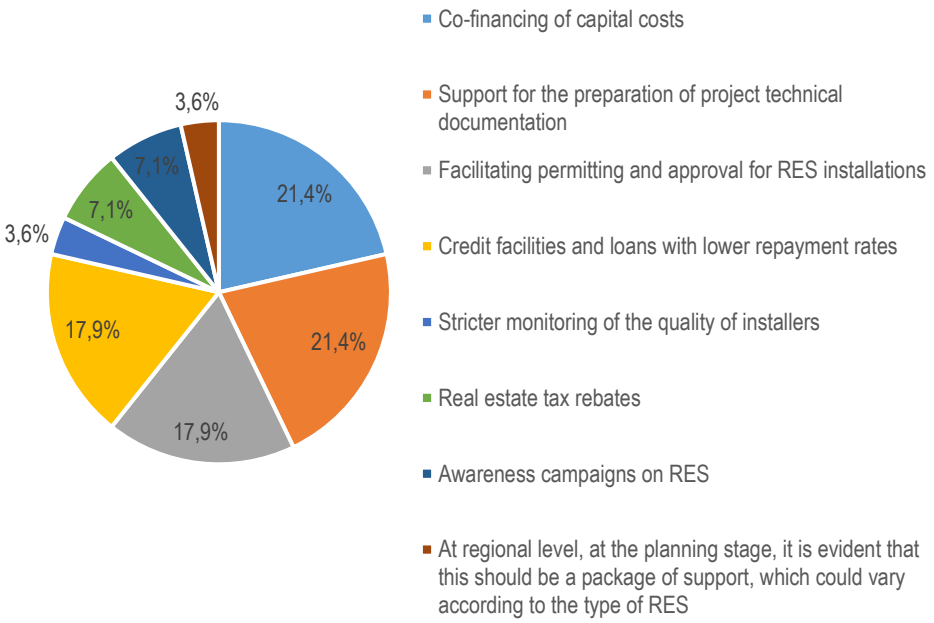

Figure 1.20. Respondents' answers on the most appropriate type of support for RES technologies

Regarding the co-financing rate for RES technologies, if granted, 55.6% think that co-financing should be 40-60%, 22.2% believe that co-financing should be 20-40% and 22.2% grant co-financing of more than 60% (see Figure 1.21).

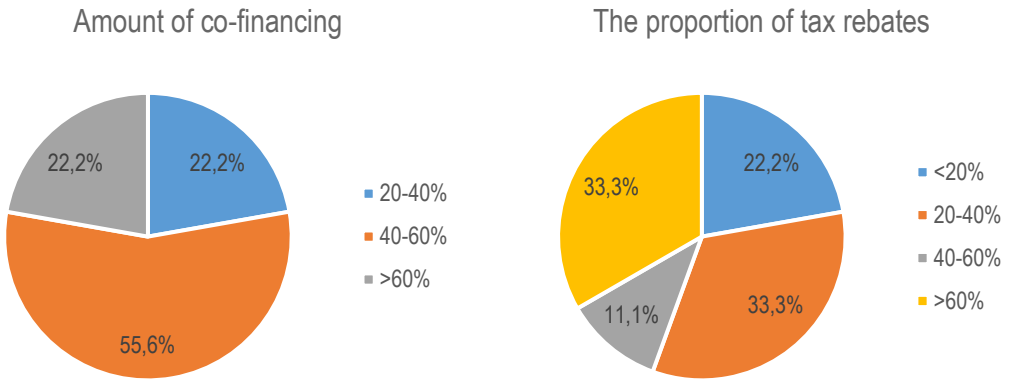

Figure 1.21. Respondents' answers on the amount of co-financing for RES technologies and the amount of real estate tax rebate

Figure 1.21 shows that 33.3% of participants think that the real estate tax rebate should be 20-40%, 33.3% believe that the refund should be more than 60%, but 22.2% believe that the refund should be up to 20% and 11.1% would grant a 40-60% discount on real estate tax if one of the RES technologies were installed in it.

2. IDENTIFYING POLICY RECOMMENDATIONS FOR INFRASTRUCTURE DEVELOPMENT

From March 2021 to June 2021, three thematic meetings were organised with representatives of JSC "Sadales tīkli" to jointly clarify the sub-model for the grid infrastructure of the system dynamics model.

The first thematic meeting took place on the 22nd of March, during which the representatives of the RTU presented the structure of the system dynamics model. During the meeting, the differences between the models of local RES systems and the modelling of the national energy sector were clarified. The main discussions were devoted to input data that can be obtained from information gathered by JSC "Sadales tīkli":

- Consumption data to determine average load/consumption profiles in different sectors, kW per hour;
- Regional distribution of electricity produced in microgeneration, MWh per year;
- Own consumption of microgeneration equipment, MWh per year;
- Network capacity for electricity transmission between regions;
- Expected constraints on network balancing.

Discussions also focused on policy instruments for the development of microgeneration:

- Increasing fossil taxes;
- Co-financing of capital costs;
- Co-financing of installation and connection costs;
- Net settlement system for legal entities;
- Full (not partial) MPC discount in the net settlement system;
- Possibility to use the produced volume in another object/sell to a neighbour.

The second thematic meeting was held on the 22nd of April, dedicated to modelling distribution networks. It was discussed how the system dynamics model currently considers network capacities and calculates transmission costs for electricity. The technical details of the distribution network substations and transformers and the transmission regions were clarified to define how the increase in microgeneration loads could limit the transmission capacity between the planning regions of Latvia.

The third thematic meeting was organised on the 7th of June, where JSC "Sadales tīkli" presented the developed future forecasts for the development of microgeneration to agree on the main assumptions that are also taken into account in the system dynamics model. JSC "Sadales tīkli" performs modelling of development scenarios to assess the compliance of distribution networks with a more significant increase in RES technologies.

Electricity generation facilities, such as hydropower and wind microgeneration turbines, which are not expected to increase widely, were discussed. Such assumptions are also made in the system dynamics model. They are substantiated by the trends observed for the connections of microgeneration and electricity equipment followed by JSC "Sadales tīkls".

Representatives of JSC "Sadales tīkls" forecast different development scenarios for solar microgeneration equipment, including a virtual net system for legal entities and support for energy communities. Development scenarios are modelled based on existing connection trends.

The development trends for wind power plants, connected to the "High Voltage Networks" in electricity transmission, were also discussed. The main task of modelling is to find a balance between wind and solar electricity use, which is consistent with the first results of the system dynamics model.

REFERENCES

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[2] L. Allman, P. Fleming, and A. Wallace, “The progress of English and Welsh local authorities in addressing climate change,” *Local Environ.*, vol. 9, no. 3, pp. 271–283, Jun. 2004, DOI: 10.1080/1354983042000219379.

[3] L. Krog and K. Sperling, “A comprehensive framework for strategic energy planning based on Danish and international insights,” *Energy Strategy. Rev.*, vol. 24, pp. 83–93, 2019, DOI: https://doi.org/10.1016/j.esr.2019.02.005.

ANNEX 1

Participants of the webinar practical seminar-workshop “Municipality of 100% renewable energy resources in Latgale”, March 12, 2021

Started	Ended
12/03/2021 10:00	12/03/2021 13:00

No.	Name, Surname	Workplace/organisation represented
1	Aleksandrs Gavrilovs	JSC "Sadales tīkls"
2	Andris Rukmans	Kraslava municipality council
3	Anrijs Tukulis	JSC Latvenergo
4	Antra Kalnbaļķīte	RTU IESE
5	Antra Radziņa	RTU IESE
6	Armands Grāvelsiņš	RTU IESE
7	Beate Zlaugotne	RTU IESE
8	Boriss Varlamovs	Latgale Business Centre
9	Dagnija Blumberga	IESE
10	Daina Bārdule	Urban Development Board
11	Edgars Vīgants	LAHC
12	Edmunds Teirumnieks	Rezekne Academy of Technology
13	Eduards Medvedevs	Rezekne municipality council
14	Ērika Teirumnieka	Rezekne Academy of Technology
15	Gunta Ahromkina	Kraslava municipality council
16	Helēna Trošimova	Daugavpils city council
17	Ieva Pakere	RTU IESE
18	Ilona Šauša	Latvian Permaculture Society
19	Ilona Igovena	n/a
20	Imelda Vutnāne-Kojāne	Preili municipality council
21	Inese Jakovele	Riebiņi municipality council
22	Inga Zapāne	Rezekne municipality council
23	Inga Ancāne	Daugavpils city council
24	Ingrīda Bernāne	Latgale planning region
25	Inta Rimšāne	Rezekne municipality council
26	Ivars Liepiņš	Komforts group
27	Iveta Malina	n/a
28	Jānis Ancāns	Daugavpils city council
29	Juris Želvis	n/a
30	Kristaps Kaugurs	Riga Energy Agency
31	Kristīne Smagare	n/a

No.	Name, Surname	Workplace/organisation represented
32	Leonīds Jākobsons	Association of Building Material Producers
33	Maruta Plivda	Preili municipality council
34	Māra Reča	REA
35	Nika Kotoviča	REA
36	Peteris Lusis	n/a
37	Romāns Petrovs	Aglona municipality council
38	Sņežana Afanasjeva	Daugavpils City Municipality Institution "Public Utilities Board"
39	Vita Rūtiņa	Daugavpils municipality council
40	Vladimirs Kirsanovs	RTU IESE
41	Zanda Jansone	Ltd LBRA
42	Zanda Lisovska	Ilukste municipality council

ANNEX 2

Participants of the webinar in the practical seminar-workshop "Municipality of 100% renewable energy resources in Zemgale", April 21, 2021

Started	Ended
21/04/2021 10:00	21/04/2021 13:00

No.	Name, Surname	Workplace/organisation represented
1	Aleksandrs Karpenko	Ltd "Jēkabpils Siltums"
2	Anda Jēkabsone	Ltd Ekodoma
3	Antra Kalnbaļķīte	RTU IESE
4	Antra Radziņa	RTU IESE
5	Armands Grāvelsiņš	RTU IESE
6	Beate Zlaugotne	RTU IESE
7	Dagnija Blumberga	RTU IESE
8	Edvīns Drigins	Kurzeme planning region
9	Elvija Namsone	Dobele municipality council
10	Gints Birzietis	LLU
11	Gints Burks	Ltd "Jelgavas autobusu parks"
12	Gunda Cērmūkša	Jēkabpils municipality council
13	Ieva Pakere	RTU IESE
14	Inga Kreicmane	ZREA
15	Jekaterina Lola	Stopini municipality council's agency Saimnieks
16	Kaspars Beķeris	Fortum Latvia
17	Līva Stašule	n/a
18	Raitis Madžulis	Zemgale Regional Energy Agency
19	Raitis Ignatjevs	Bauska municipality council
20	Reinis Kaļķis	Ltd EMBŪTES SENLEJA
21	Sabīna Alta	Ltd Laflora
22	Sandra Gogule	Jēkabpils city municipality
23	Signe Mārtiņkrista	ZREA
24	Solvita Lūriņa	Jelgava city municipality
25	Uldis Riekstiņš	Skrīveri municipality council
26	Uldis Ameriks	Ltd Laflora
27	Vladimirs Kirsanovs	RTU IESE