## EVALUATION OF THE INTERMINISTERIAL CONSULTATION

Long-term renovation strategy for building stock

Method of conducting the consultation exercise	
Number of comments raised / of which critical	60/19
Number of comments evaluated	60
Number of comments accepted / of which critical	46/15
Number of comments partially accepted / of which critical	2/0
Number of comments not accepted / of which critical	12/4

Conciliation procedure (with whom, when, with what result) Number of comments resolved Number of comments unresolved

Summary of comments by entities

No	Entity	Comments raised by the deadline	Comments raised after the deadline	No comments	No response sent
1.	Association of Industrial Unions	4 (4r, 0c)	0 (0r, 0c)		
2.	Federation of Employers' Unions and Associations of the Slovak Republic	1 (0r, 1c)	0 (0r, 0c)		
3.	Buildings for the Future	4 (1r, 3c)	0 (0r, 0c)		

4.	Ministry of Finance of the Slovak Republic	11 (6r, 5c)	0 (0r, 0c)		
5.	Ministry of Economy of the Slovak Republic	10 (10r, 0c)	0 (0r, 0c)		
6.	Ministry of Culture of the Slovak Republic	6 (4r, 2c)	0 (0r, 0c)		
7.	Ministry of the Environment of the Slovak Republic	9 (2r, 7c)	0 (0r, 0c)		
8.	National Bank of Slovakia	4 (4r, 0c)	0 (0r, 0c)		
9.	National Union of Employers	4 (4r, 0c)	0 (0r, 0c)		
10.	Statistical Office of the Slovak Republic	1 (1r, 0c)	0 (0r, 0c)		
11.	Slovak Office of Standards, Metrology and Testing (Government Office of the Slovak Republic, Department of Legislation of Other Central Government Bodies)	1 (1r, 0c)	0 (0r, 0c)		
12.	Public	1 (0r, 1c)	0 (0r, 0c)		
13.	Association of Construction Entrepreneurs of Slovakia	4 (4r, 0c)	0 (0r, 0c)		
14.	Ministry of Defence of the Slovak Republic	0 (0r, 0c)	0 (0r, 0c)	Х	
15.	Ministry of Health of the Slovak Republic	0 (0r, 0c)	0 (0r, 0c)	Х	
16.	Ministry of Labour, Social Affairs and the Family of the Slovak Republic	0 (0r, 0c)	0 (0r, 0c)	Х	
17.	Nuclear Regulatory Authority of the Slovak Republic	0 (0r, 0c)	0 (0r, 0c)	Х	
18.	Geodesy, Cartography and Cadastre Authority of the Slovak Republic	0 (0r, 0c)	0 (0r, 0c)	Х	
19.	Ministry of Justice of the Slovak Republic – Legislation Section	0 (0r, 0c)	0 (0r, 0c)	Х	

20.	Antimonopoly Office of the Slovak Republic	$\overline{0}$ (0r, 0c)	0 (0r, 0c)	X	
21.	General Prosecutor's Office of the Slovak Republic	0 (0r, 0c)	0 (0r, 0c)	Х	
22.	Ministry of Agriculture and Rural Development of the Slovak Republic	0 (0r, 0c)	0 (0r, 0c)	Х	
23.	National Security Authority	0 (0r, 0c)	0 (0r, 0c)	Х	
24.	Ministry of Foreign and European Affairs of the Slovak Republic	0 (0r, 0c)	0 (0r, 0c)	Х	
25.	Ministry of Investments, Regional Development and Informatisation of the Slovak Republic	0 (0r, 0c)	0 (0r, 0c)	X	
26.	Ministry of Education, Science, Research and Sport of the Slovak Republic	0 (0r, 0c)	0 (0r, 0c)	Х	
27.	Ministry of Justice of the Slovak Republic	0 (0r, 0c)	0 (0r, 0c)		X
28.	Ministry of the Interior of the Slovak Republic	0 (0r, 0c)	0 (0r, 0c)		X
29.	Government Office of the Slovak Republic	0 (0r, 0c)	0 (0r, 0c)		X
30.	Industrial Property Office of the Slovak Republic	0 (0r, 0c)	0 (0r, 0c)		X
31.	Office for Public Procurement	0 (0r, 0c)	0 (0r, 0c)		X
32.	Slovak Office of Standards, Metrology and Testing	0 (0r, 0c)	0 (0r, 0c)		X
33.	Administration of State Material Reserves of the Slovak Republic	0 (0r, 0c)	0 (0r, 0c)		X
34.	Supreme Audit Office of the Slovak Republic	0 (0r, 0c)	0 (0r, 0c)		X
35.	Supreme Court of the Slovak Republic	0 (0r, 0c)	0 (0r, 0c)		X

36.	National Council of the Slovak Republic (Slovak Parliament)	0 (0r, 0c)	0 (0r, 0c)	Х
37.	Office of the Constitutional Court of the Slovak Republic	0 (0r, 0c)	0 (0r, 0c)	Х
38.	Department of Approximation of Law of the Government Legislation Section at the Government Office of the Slovak Republic	0 (0r, 0c)	0 (0r, 0c)	Х
39.	Slovak Agriculture and Food Chamber	0 (0r, 0c)	0 (0r, 0c)	Х
40.	Association of Towns and Communities of Slovakia	0 (0r, 0c)	0 (0r, 0c)	Х
41.	Plenipotentiary of the Government of the Slovak Republic for Roma communities	0 (0r, 0c)	0 (0r, 0c)	Х
42.	Confederation of Trade Unions of the Slovak Republic	0 (0r, 0c)	0 (0r, 0c)	Х
43.	Healthcare Surveillance Authority	0 (0r, 0c)	0 (0r, 0c)	Х
44.	Episcopal Conference of Slovakia	0 (0r, 0c)	0 (0r, 0c)	Х
45.	Ministry of Transport and Construction of the Slovak Republic	0 (0r, 0c)	0 (0r, 0c)	Х
	Total	60 (41r, 19c)	0 (0r, 0c)	

An evaluation of the substantive comments is provided in the tables below.

Legend:

 $\begin{array}{ll} R-regular & A-accepted \\ C-critical & N-not accepted \\ PA-partially accepted \end{array}$ 

Entity	Comment	Ty pe	Ev alu ati on	Follow-up
Associati on of Industri al Unions	In Chapter 4.4 'Incentives for the use of smart technologies and skills', we propose to include the following text before the last sentence in the seventh paragraph (on page 39): 'In view of the anticipated increased demand for skilled craftsmen in the context of the required increase in renovation rates under the European Green Deal, the European Social Fund ESF+ will support major re-training of craftsmen in the buildings sector within its focus on green professions and green economy; this will follow up on the projects financed within the Horizon 2020 programme.' Substantiation: Pilot projects of adult education in the new requirements resulting from Industry 4.0 have been implemented within the Horizon 2020 programme; this includes, e.g., requirements on nearly zero energy buildings. It is therefore necessary to capitalise on the knowledge and outputs of these pilot projects and training, and implement them at the national level.	R	А	The text was supplemented in accordance with the comment.
Associati on of Industri al Unions	In Chapter 6 'Obstacles and barriers', we propose to supplement the indents to include the following: '- inefficient awareness raising regarding support from providers; - unnecessary red tape for applicants at the application and approval stage; - unnecessarily	R	A	The text was supplemented in accordance with the comment.

	lengthy public procurement; - lengthy construction proceedings also for building renovations.' Substantiation: The above obstacles are regularly encountered by construction companies and if they are not consistently removed (e.g.: by codifying new rational construction regulations and amending the Public Procurement Act), they will continue to seriously hinder not only the renovation of buildings, but the entire construction segment.			
Associat on of Industri al Unions	In Chapter 6 'Obstacles and barriers', we propose to supplement and modify the indent '- need for restructuring companies focusing on building renovation' to read as follows: '- the need to restructure companies and the need to re-train the staff of building renovation companies'. Substantiation: The actual restructuring of firms specifically focusing on renovation will take place in a market-based way, directly linked to the intensity of demand for construction works of this kind on the construction market. Re-training of employees will be one of the most effective tools to speed up the preparedness especially of small and medium-sized construction companies to carry out building renovation.	R	А	The text was supplemented and modified.
Associat on of Industri al Unions	In Chapter 6 'Obstacles and barriers', we propose to remove the following indent from the indents 'Barriers occurring in construction also apply to the renovation of buildings, such as': (on page 52): '- a lack of firms providing complete construction works aimed at major renovation or deep renovation,' Substantiation: The mentioned statement is materially incorrect, undocumented and misleading. The profile of our member companies shows that many of them are both	R	A	The indent was deleted.

	technically and professionally prepared to implement contracts of this kind in good quality should they appear on the market, and that the contracts will be well prepared by contractors and designers.			
Federati on of Employe rs' Unions and Associati ons of the Slovak Republic	1. We request that an alternative model be prepared for determining the emission reduction trajectory for the buildings sector, based on the assumption of full decarbonisation of gas supplied as energy for heat generation, and use of the carbon capture and storage (CCS) technology. Substantiation: Based on the assumptions made, the model chosen in the draft Long-term renovation strategy for building stock can be characterised as 'electricity-focused', i.e. concentrating on the electrification of energy consumption in the buildings sector. However, we know that decarbonisation of heat and cold production can be achieved in different ways. As part of the Clean energy for all Europeans package, the European Commission drew eight possible decarbonisation scenarios, depending on the ways in which decarbonisation is achieved. Alternative scenarios to electrification use hydrogen, decarbonised gases and the CCS technology to attain carbon neutrality. In view of the extensive and modern gas infrastructure in Slovakia, we believe that supplementing the scenario based on a combination of biomethane and hydrogen, and possibly the use of the CCS technology for emissions from the combustion of natural gas or the production of decarbonised gaseous fuels, would be more than justified. Moreover, recent studies – e.g. the DNV GL (Det Norske Veritas) study have determined that the option of maintaining gas infrastructure by integrating renewable and decarbonised gases (hydrogen, synmethane, biomethane) and/or CCS has the potential to	С	A	The contradiction was resolved at a meeting on 11 December 2020.

	save EUR 130 billion per year at the EU level, as compared to the			
	electrification scenario.			
Building s for the Future	Comment on Chapter 2.2, p. 17, and Chapter 2.4, p. 23: we recommend re-evaluating data on the expected share of renovated multi-apartment buildings and single-family houses, and align them with reality. Substantiation: The assertion that more than 64% of multi-apartment buildings have been renovated in Slovakia and that all multi-apartment buildings could be renovated in the country by 2030 is highly misleading and does not correspond to reality. It is based on the 2011 Census, which – as the authors themselves admit – does not specify the precise scope of the renovation. It is reported that deep renovation was carried out in no more than 55% of the cases. The same is true of the proportion of renovated single-family houses, where the strategy gives the figure of 48.97% of renovated single-	С	A	The text was modified.
	family houses in 2018. The actual number of fully renovated/restored houses is likely to be closer to one half of that. We recommend aligning the values with reality so as to avoid erroneous conclusions and determine the actual scope of the problem.			
Building s for the Future	Comment on Chapter 3: we request that the tables and related texts on pages 25 and 26 be revised so that not only CO2 emissions, but also CO2 equivalent (CO2eq) emissions are monitored, covering emissions of all greenhouse gases, and not just carbon dioxide. We also request that the data on CO2 be changed to CO2eq in the related legislative and non-legislative materials, in particular Annex 2 to Decree No 364/2012. Substantiation: 1. The European Union uses	R	Ν	The methodology of calculating CO2 emissions in the buildings sector was established for the present model on the basis of the applicable CO2 conversion factors in accordance with Annex 2 to Decree No 364/2012 for the individual energy carriers. Their calculation is based on CEN standards and overarching standards

CO2 equivalent (CO2eq) instead of insufficient monitoring of only	for the energy performance of buildings.
one of the number of greenhouse gases. The monitoring of CO2eq is	
incorporated in the current strategic papers of the European	
Commission, the European Investment Bank, the European Bank for	
Reconstruction and Development, the EU Taxonomy of sustainable	
investment and documents of the Intergovernmental Panel on Climate	
Change (IPCC). Such an irregularity would cause unnecessary	
technical problems and shortcomings in the calculation of impacts of	
activities in Slovakia. 2. The origin of the CO2 emission factor value	
for individual energy carriers is not directly explained in Decree	
No 364/2012 and the authors rather refer to standard STN EN 15 603,	
which has been repealed in the meantime and replaced by standard	
STN EN 15603/NA. The method of determining CO2 emissions is	
specified by Decree No 364/2012, in Section 2(8), as follows: Carbon	
dioxide emissions shall be determined based on the energy supplied	
along individual energy carriers using the conversion factors	
according to Annex 2. The amount of carbon dioxide emitted into the	
air shall be expressed in kg/m <sup>2</sup> of the total floor area of a building per	
year. 3. Greenhouse gases other than CO2 also have major impacts on	
climate change. According to the Intergovernmental Panel on Climate	
Change, for example, methane has a 34 times higher global warming	
potential than carbon dioxide over a 100-year period and 108 times	
higher potential over a 10-year period. Further, it would be desirable	
to increase the emission factors values for CO2eq in Decree	
No 364/2012 appropriately to also include emissions from all stages	
of the fuel cycle (from extraction to the thermal equipment). The	
equivalent values given in the document issued by the	
Intergovernmental Panel on Climate Change represent the statistical	

	average of the emission factor for a given fuel over its entire life cycle.			
Building s for the Future	We propose adding a new chapter after Chapter 5, where the new chapter would be titled 'Action plan of measures and investment mobilisation for 2021 to 2024' and read as follows: By 30 June 2021, the Ministry of Transport and Construction of the Slovak Republic shall prepare an action plan for 2021 to 2024, including a detailed plan with measures to be implemented between 2021 and 2024 with the aim to gradually implement the buildings renovation plan described in Chapter 3. The action plan should comprise a proposal for changes to the current public policies or a proposal for the introduction of new public policies that would be implemented by 2024 to ensure gradual implementation of the measurable progress indicators proposed in Chapter 3. The action plan should be based on the Long-term renovation strategy for building stock and should serve to identify steps to be taken in the short term to gradually meet the long-term objectives set by the long-term strategy itself. Substantiation: According to Act No 555/2005, the outcome of the strategy should be a long-term renovation plan for the building stock with a view to achieving a highly energy efficient and decarbonised building stock by 2050. According to Section 4c(2)(h), the strategy should contain specific efficient measures with measurable progress indicators for gradual implementation of the renovation strategy. In its Recommendation 2019/786 of 8 May 2019, the European Commission recommends to the Member States that, as the strategies are to set out a long-term vision to deliver on a 2050 decarbonisation	С	N	The comment was discussed and the Buildings for the Future initiative did not insist on it. The contradiction was resolved on 18 December 2020.

 goal, Member States should go beyond a simple inventory of existing		
measures and provide a long-term view of the development of future		
policies and measures. The strategy states in several parts that		
achieving the thus-defined ambitious objectives will require increased	1	
efforts to intensify building stock renovation, both in terms of		
emphasising deep renovation and significantly increasing the		
renovation pace. According to the strategy, the proposed objectives		
can only be attained if the existing forms of support are		
complemented by new forms with sufficient funding and a focus on		
areas requiring increased efforts to improve energy performance. The		
strategy claims that the proposed objectives cannot be achieved		
without a strong and consistent political support, and without		
pursuing highly ambitious policies and measures to support building		
renovation in terms of volume, as well as substantial improvements in	n	
energy performance. The strategy also states that the set binding		
targets require investment going far beyond the current levels of		
funding. Although the strategy itself notes that a fundamental change	,	
the introduction of highly ambitious policies and a significant		
increase in resources are required to meet the objectives, Chapters 4		
and 5 do not include any relevant proposal for modification of the		
current public policies or for new policies. These chapters mostly		
summarise the existing public policies, which however – as the		
strategy itself admits – are not sufficient for attaining the proposed		
objectives. We are aware that a debate is still underway regarding the		
proposed allocation within the new 2021–2027 ESIF programming		
period and the Recovery and Resilience Facility, which offer a key		
opportunity to increase the necessary investments, and it is thus not		
 possible to describe precisely the proposals for support measures and		

	their allocations that will be financed from these resources. It can be assumed that this problem will be resolved during the period of preparation of the action plan, ending on 30 June 2020. We are also aware of the risk associated with a long-term proposal for implementing the measures. For this reason, we propose to draw up an action plan for 2021 to 2024 that will focus on the short to medium terms, to ensure that the objectives of the long-term strategy are achieved. However, in addition to a proposal for new fiscal support instruments, it will be necessary to also introduce or modify legislative and regulatory public policies, and extend information and communication tools. The proposed action plan should also reflect the proposal for measures planned by the European Commission for 2020 to 2024 period under the 'renovation wave' strategy. Such a process and hierarchy, where an action plan is drawn up based on a strategic paper, are by no means exceptional in Slovakia or abroad. The Action plan to address the consequences of drought and water shortage ('WATER IS THE VALUE') prepared by the Ministry of			
	the Environment of the Slovak Republic can serve as an example.			
Building s for the Future	We request that the issue of indoor climate conditions be added and incorporated into the whole paper in terms of recast Directive 2010/31/EU on the energy performance of buildings and Commission Recommendation 2019/786. Substantiation: The whole paper suffers from a lack of incorporation of indoor climate conditions into policies and proposed measures. The strategy refers to an improvement of indoor climate conditions as a positive side effect of renovations. However, if we look into the recast Directive 2010/31/EU on the	С	А	The comment was discussed and, after mutual explanations were provided, the contradiction was resolved on 18 December 2020.

	energy performance of buildings and Commission Recommendation			
	2019/786, both these documents conceive renovation not only as an			
	instrument to achieve energy savings, but also as a means to improve			
	indoor climate conditions of buildings and the comfort and health of			
	their users. The Commission Recommendation directly states that a			
	long-term renovation strategy for building stock should address the			
	issue of indoor environment quality (climate conditions).			
	Requirements on the quality of the indoor environment are missing in			
	the support instruments. It should also be stated therein that the			
	competent authorities preparing the given support instrument should			
	apply a holistic approach to the issue and set the parameters of			
	support also with regard to the quality of the indoor environment.			
	Measures to support the renovation of buildings should therefore also			
	include, along with requirements for energy savings, requirements on			
	the quality of the indoor environment (climate conditions), which			
	would help maximise the utilisation of the renovation potential and			
	thus improve the quality of life of the building's users. A general			
	statement that a good quality of the indoor environment is required by			
	the legislation cannot be considered sufficient, as the same is true of			
	the energy performance of buildings. Renovations are a unique			
	opportunity to improve the quality of people's lives and should this			
	aspect be neglected, we will be faced with the issue of increasing the			
	indoor environment quality again in a few years, but this time at a			
	greater cost. This has already been the case with the support for			
	thermal insulation and subsequent sharp deterioration in indoor air			
	quality.			
Ministry		R	A	The text was modified.
1		1		

of Finance of the Slovak Republic	On individual parts: In the title of Chapter 4 'Measures to fulfil the renovation plan', I request that the words 'of buildings' be added after the word 'renovation'. Substantiation: It has to be made clear that this plan aims at the renovation of buildings, so that the title of the chapter does not imply that the chapter might be devoted to a recovery plan – the Recovery and Resilience Facility as the central recovery tool of the NextGenerationEU programme.			
Ministry of Finance of the Slovak Republic	On individual parts: In Chapter 4.3 'Policies and activities targeting public buildings', I request that the following sentence be added to the third paragraph, after the second sentence ending with the words 'mobilisation of private capital': 'Energy services allow private finance to be mobilised not only during investment, but especially during subsequent purchase of receivables, which may increase the renovation pace (maximum leverage, minimum market distortion). In a European context, the use of guaranteed energy services can be seen as a fundamental reform in the way the renovation of public buildings is financed.'. Substantiation: It will be essential to mobilise private capital if the objective of creating a highly energy efficient and decarbonised building stock by 2050 is to be achieved. Guaranteed energy services, energy services, supported energy services, etc. are the most efficient ways to mobilise private capital.	R	A	The text was supplemented.
Ministry	On individual parts: In Chapter 4.2 (Daliay and activities torgeting			
Finance	public buildings', I request that the following sentence be added in	С	Α	The text was supplemented.
of the	the fourth paragraph, after the last sentence: 'The use of financial			
Slovak	instruments or a combination of grant funding with repayable funding			

Republic	will be crucial in order to avoid the lock-in effect and to carry out deep renovation of buildings using guaranteed energy services.'. Substantiation: In view of the generally long return periods in building renovation projects, it will be necessary to find a financial mechanism for deep renovations that will shorten the return period. One of the most efficient options is to combine grant funding with repayable funding.			
Ministry of Finance of the Slovak Republic	On individual parts: In Chapter 5.1.2. 'Renovation of non-residential buildings', I request that the following sentence be added in the second paragraph, after the sixth sentence ending with the words 'guaranteed energy services': 'A combination of grant funding with repayable assistance in a single financial operation is possible under the proposed new CPR regulation, which will make it possible to substantially simplify the whole process of utilising financial instruments to support guaranteed energy services11'. At the same time, footnote 11 has to be added as follows: '11CPR Regulation (Proposal for a Common Provisions Regulation for 2021 to 2027), governing the implementation of the ESIF. This specifically refers to Article 52 (point 5)'. Substantiation: In view of the generally long return periods in building renovation projects, it will be necessary to find a financial mechanism for deep renovations that will shorten the return period. One of the most efficient options is to combine grant funding with repayable funding.	R	A	The text was supplemented in accordance with the comment.
Ministry		Ъ		The draft resolution will be modified in
of	On the proposed Government resolution – the draft resolution has to	K	A	accordance with the Guidelines for the
Finance	be prepared in line with the Guidelines for the preparation and			preparation and presentation of materials for

of the Slovak Republic	presentation of materials for the meetings of the Slovak Government.			the meetings of the Slovak Government. It will not impose tasks on other Government members.
Ministry of Finance of the Slovak Republic	On the material itself – in general: The methodology of input data for determining the cost-effectiveness of construction and renovation of buildings in terms of their energy performance (TSÚS, TSÚS, n.o., May 2015, ISBN 978-80-971912-0-7) was adopted in 2015. Before it is adopted for the next period, I recommend reviewing the prices set in 2015 in view of the actual acquisition prices.	R	А	
Ministry of Finance of the Slovak Republic	On the material itself – in general: I recommend supplementing the statistics on the number of applications for a financial contribution to the renovation of buildings with information on how many projects have been granted a financial contribution, on what basis the applicants were selected, and what the plan is for the future selection of candidates.	R	PA	The required level of detail is not relevant to the nature of the material.
Ministry of Finance of the Slovak Republic	On the material itself – in general: In the document, in Chapter 6 'Obstacles and barriers', it is stated that 'The public procurement process for building renovation continues to be affected by insufficient professional and technical competence in setting the individual conditions, requirements and criteria, as well as the application of a cost-effective approach, taking into account the best price/quality/cost ratio over the lifetime of a building, resulting in procurement at the lowest price.'. I request that measures be taken to	С	A	The comment was discussed and, after mutual explanations were provided, the Ministry of Finance of the Slovak Republic did not insist on the comment. The contradiction was resolved on 11 December 2020.

	eliminate this shortcoming.			
Ministry of Finance of the Slovak Republic	On the material itself – in general: I request measures to increase the utilisation of EU funds as compared to previous years. Substantiation: The document states that these funds were utilised in the past to a minimum extent because of the poor quality of projects.	С	A	The comment was discussed and, after mutual explanations were provided, the Ministry of Finance of the Slovak Republic did not insist on the comment. The contradiction was resolved on 11 December 2020.
Ministry of Finance of the Slovak Republic	On the material itself – in general: I request that measures be adopted in the area of public non-residential buildings to ensure the collection and availability of data on these buildings, and that a strategy be developed for the future use of these buildings. Substantiation: The material points out that no relevant statistics are available for non- residential buildings. It is based on data from 1994 to 2003, which were also used in the preparation of the strategy in 2014. There is a high potential for energy savings and more efficient use of these buildings, but calculations may be distorted due to obsolete data.	С	A	The comment was discussed and, after mutual explanations were provided, the contradiction was resolved on 11 December 2020.
Ministry of Finance of the Slovak Republic	On the material itself – in general: I request that the document and proposed measures also include a methodology of investment prioritisation, an investment plan for public non-residential buildings, and defined rules for the use of financial resources for investing in public non-residential buildings. Alternatively, I request that these tasks be imposed by a resolution. Substantiation: The duty to prepare a methodology for investment prioritisation and an investment plan is already imposed by a valid resolution. It would be impractical to	С	A	The comment was discussed and, after mutual explanations were provided, the contradiction was resolved on 11 December 2020.

	prepare two documents concerning the same subject only a few months apart.			
Ministry of Econom y of the Slovak Republic	On the clause of selected impacts: We recommended to indicate the deadline for the interministerial consultation in the relevant line. The deadlines for the commencement and completion of the public consultation are conditional on the pending interministerial consultation; the public consultation process did not take place because the impacts were not specified.	R	А	The comment was incorporated.
Ministry of Econom y of the Slovak Republic	On the clause of selected impacts: it is stated in point 10 that the material 'has an indirect positive impact of reducing greenhouse gas emissions. The assumption of a reduction in CO2 emissions in the buildings sector is based on a decrease in the total energy consumption in the buildings sector, and targeted building renovation programmes aimed at deep renovation of buildings.' It suggests that indirect impacts can also include a positive impact consisting in reduced costs of heating and cooling of buildings.	R	Α	The text was modified in accordance with the comment.
Ministry of Econom y of the Slovak Republic	On the explanatory memorandum: We propose to rephrase the text of the impact description: 'The proposed strategy does not have a negative impact on the public administration budget. The strategy has potential positive impacts on business and the environment, has no impact on marriage, parenthood and family, social impacts, informatisation of society, and public administration services for citizens. A specific evaluation is provided in the clause of selected	R	Α	The text was supplemented and modified.

	impacts.' so that it corresponds to the Clause of selected impacts, point 9, where no impacts are indicated. We recommend indicating the potential indirect positive impact on the environment consisting in reduced greenhouse gas emissions and the indirect positive impact on business, in terms of setting a framework of public priorities for the energy efficiency of buildings and adopting a long-term vision for the state, as an incentive for better planning of investments and further steps by private businesses in the energy and construction sectors, in Part 10 of the Clause – Notes.			
Ministry of Econom y of the Slovak Republic	On the material itself: We consider the current categorisation of 'energy forms' in Tables 19 and 20 insufficient with regard to the possibility of identifying the real likely contribution of each primary energy source to the development of CO2 and PM2.5 emissions. We consider it desirable that the tables and charts showing the forecasts of energy consumption and CO2 emissions until 2050 also include the names of specific fuels (primary energy sources), including the estimated CO2 and PM2.5 emissions that will be released into the air by their combustion. In order to reflect the actual trends in emissions as much as possible, it is essential that the calculation of the estimated quantities of these emissions be based on emission factors respecting the basic principles of stoichiometric fuel combustion. For the sake of simplification, it would also be acceptable to use the emission factor values developed and published by the Intergovernmental Panel on Climate Change (IPCC), which respect these principles and which simultaneously largely differ from the emission factor values, e.g. for solid biofuels, listed in Tables 17 and 18 of the material. In view of	R	Ν	The methodology for calculating CO2 emissions in the buildings sector was established for the present model on the basis of the applicable CO2 conversion factors in accordance with Annex 2 to Decree No 364/2012 for the individual energy carriers. Their calculation is based on CEN standards and overarching standards for the energy performance of buildings. The values of the emission factors indicated on the Ministry of the Environment's website are updated once a year, which would not make it possible to ensure proper comparability of the data within the model. The requirement to supplement the forecasted trends in PM2.5 goes beyond the requirements of the Energy Performance of Buildings Directive, which imposes

	the fact that in terms of the impact on human health, as well as the attainment of the country's binding targets towards the European Commission, the impact of PM2.5 emissions is much more significant than that of CO2 emissions, we propose to add a forecast of the development in PM2.5 to the material. To this end, we recommend using the average emission factor values taken from the Final Report of Národná energetická spoločnosť, a.s. (The National Energy Company) titled 'Preparation of proposed emission factors for combustion plants for the Ministry of the Environment of the Slovak			obligations only with regard to greenhouse gas emission reduction targets. On the other hand, the EPBD lays down no binding targets in this area. The underlying data necessary for determining the PM2.5 forecast are not available in the required breakdown into residential and non- residential buildings.
	Environment of the Slovak Republic. Substantiation: In addition to natural gas, coal and heating oil, the development of CO2 emissions is also highly affected by biomass and lumpwood. Both can be found, in different proportions, in the categories of 'heat supplied', 'renewable resources' and 'electricity'. The ratio at which these primary energy sources are present in these categories cannot be identified in the material, which makes it impossible to quantify their impact on CO2 and PM2.5 emissions until 2050.			
Ministry of Econom y of the Slovak Republic	On the material itself: The Integrated National Energy and Climate Plan (NECP), as required by Regulation (EU) 2018/1999 of the European Parliament and of the Council on the Governance of the Energy Union and Climate Action contains chapters that should be covered by the Long-term renovation strategy for building stock in terms of information. This is true of Chapter 2.2, paragraph (i)(3) and (4) (page 57 of the NECP), Chapter 2.2, paragraph (ii) (page 57 of the NECP), and Chapter 3.2, paragraph (ii) (page 131 of the NECP). In	R	N	The model developed by BPIE (Buildings Performance Institute Europe) attached to the European Commission was prepared on the basis of data provided by Eurostat and the Slovak Hydrometeorological Institute (these also served as a basis used by the Ministry of the Environment) in accordance with the key indicators presented in the NUS SR and INEKP and other macroeconomic

	formal terms, the proposed material 'Long-term renovation strategy			inputs, energy prices and their prediction,
	for building stock' contains the required information, specifically the			the rate of return, and a number of other
	indicative milestones in Chapter 3.2 of the proposal, measurable			variables. It is a comprehensive model. The
	progress indicators in Chapter 3.3 of the proposal, and an estimate of			required structure of the material is in line
	savings in Chapter 3.3 of the proposal. However, the above evidence			with the requirement expressed in the
	is limited to a statement that the estimate of energy savings as well as			Energy Performance of Buildings Directive
	the investment need for achieving these savings was calculated using			and the contents of the material conform to
	a calculation model prepared in co-operation with BPIE. It is not			the requirements of Regulation (EU)
	stated how this model was aligned with the model used in the creation			2018/1999 of the European Parliament and
	of the NECP (drawn up by the Slovak Ministry of the Environment			of the Council on the Governance of the
	and the World Bank). It can be stated in general that the existing			Energy Union and Climate Action.
	situation is described in high detail, but the planned activities and			
	future costs are very concise. It would be suitable to modify the			
	structure of the proposal so as to reflect the relevant chapters of the			
	Integrated National Energy and Climate Plan for 2021–2030 (NECP)			
	in Chapters 2.2 (paragraph (i)(3) and (4)) and 3.2 (paragraph ii). Their			
	structure is determined by Regulation (EU) 2018/1999 of the			
	European Parliament and of the Council on the Governance of the			
	Energy Union and Climate Action.			
Ministry	On the material itself: On page 36, we propose to add the following			
10	text after the sentence 'Energy poverty indicators have been			
Econom	developed at the European level to assess and monitor energy	R	Α	The text was supplemented.
y of the	poverty': 'Various specific instruments, measures and policies of the			
Slovak	Member States that could serve as an inspiration for Slovakia are also			
Republic	available in the framework of the European Commission's initiative			
	"Energy Poverty Observatory" (EPOV), along with various energy			

	poverty indicators' and to improve the quantification of the number of households and analyse its potential causes.			
Ministry of Econom y of the Slovak Republic	On the material itself: We propose to omit the text in parentheses on page 35 '(due to a low income also affected by a low degree of education)' Substantiation: It has to be borne in mind that in Slovak circumstances, the share of energy costs in the disposable household budget is higher than in most EU countries in each income category, and this is true not only of the lowest income groups of the population, which could be characterised by a low degree of education attained.	R	Α	The text was omitted and the new text added.
Ministry of Econom y of the Slovak Republic	On the material itself: Modify Table 19 to also indicate the quantity of heat supplied from RES. Substantiation: It can be expected that the quantity of renewable energy used for heating will increase by 2.9 TWh by 2030, as compared to 2020. This figure is presented in the National Energy and Climate Plan in Table 15, which indicates an increased use of RES in heating and cooling in 2030 as compared to 2020. A new line should be added for 2030 that indicates the ambition to use RES in heat supplies.	R	Ν	Data on the quantity of heat supplied using RES are not available in detail for residential and non-residential buildings. The CO2 emission conversion factors for the heat supplied from RES to buildings are also unknown. Slovakia has set binding targets for RES at the national level, but not for buildings. The model for setting indicative milestones for 2030, 2040 and 2050 foresees an increase in the use of RES in buildings by 10% every 5 years. The forecast set out in the strategy is in line with the requirements set by the Energy Performance of Buildings Act for major renovation of buildings, which should advance in the coming years to the level of constructing nearly zero energy

					buildings, insofar as this is economically, functionally and technically feasible.
F	Ministry of Econom y of the Slovak Republic	On the material itself: The first sentence on page 3 states: 'The European Commission ("Commission") presented a clear vision of achieving climate neutrality by 2050 in the form of the "Clean energy for all Europeans" initiative in November 2016.' This sentence is not entirely correct. 'Clean energy for all Europeans' is a package of measures to maintain the European Union's competitiveness at a time when the transition to clean energy is changing global energy markets. In the above package, the EU committed to cut CO2 emissions by at least 40% by 2030, while modernising EU's economy and ensuring jobs and growth for all European citizens. On 11 December 2019, the European Green Deal. The Green Deal should serve as a new EU growth strategy that aims to transform the Union into a climate neutral, fair and prosperous society with a modern, resource-efficient and competitive economy.	R	A	The text was modified.
N 1 : F	Ainistry of Econom y of the Slovak Republic	On the material itself: The text on page 29 states that the model for determining the trajectory is based, among other things, on the assumption that 'direct consumption of solid fossil fuels, waste, LPG and gas oil and diesel will be phased out by 2030'. According to the Integrated National Energy and Climate Plan, support will be provided within the heating sector to effective district heating systems with heat supplies originating from RES, waste heat from industrial processes with cost-efficient utilisation of RES, especially locally	R	Ν	In the direct consumption of solid fossil fuels, waste, LPG and gas oil and diesel, the model currently assumes the value of 0.5%. The forecasted decrease in the consumption of energy from waste in the buildings sector is close to zero in view of the current share of consumption of energy from waste in the total energy consumption for this sector.

	available biomass/biomethane and waste, including support for multi- fuel systems. Therefore, with regard to the energy recovery of municipal waste within circular economy, we do not anticipate that energy consumption from waste would drop to zero from 2030 onwards.			
Ministry of Culture of the Slovak Republic	On the proposed Government resolution We would like to point out that the draft Government resolution is incomplete and needs to be modified. Substantiation: Legislative and technical comment.	R	A	The draft resolution will be modified in accordance with the Guidelines for the preparation and presentation of materials for meetings of the Slovak Government.
Ministry of Culture of the Slovak Republic	On the material itself Re: Chapter 2 – State of renovation of the stock of residential and non-residential buildings, paragraph 2.4 – State of renovation of the stock of residential and non-residential buildings, page 25, first paragraph under the table, the text from the fourth sentence including 'The proposed text' implies that although a specific approach is required with regard to objects of heritage protection, they can and, based on the context of the strategy, must be thermally insulated. If this is not possible externally due to heritage protection, such buildings should be insulated internally. We cannot agree with this view. Measures aimed at improving the energy performance of buildings can only be effective if the solution is comprehensive, including not only thermal insulation of the vertical building envelope, but also replacement of windows and doors. However, energy performance measures would not be effective in buildings of historical value if doors and windows had to be	С	A	The text was supplemented in accordance with the comment.

maintained. This is precisely why heritage buildings were excluded from the Energy Performance of Buildings Act. In order to make the strategy realistic and feasible also in relation to buildings that are subject to historical or heritage protection, we propose to modify the text after the following sentence: 'Many of the public sector buildings are historic buildings or subject to monument care or otherwise important in terms of architecture.' as follows: 'These buildings require a special approach, while respecting their heritage protection values (their values in terms of architecture, technology, fine arts or craft). Value may be attached not only to facades of these buildings, but also to their windows, doors and other parts. When decisions are made with respect to buildings that constitute national cultural heritage or are situated in heritage protection areas, the conditions of structural interventions are subject to decision of the competent regional heritage authority (note: reference to Act No 49/2002 on heritage protection, as amended). Such buildings are often in a poor structural and technical condition and require an array of structural interventions (such as dehumidification, repairs of roof coverings and gutter systems), which, if performed in a professional and sensitive manner, can significantly improve their user-friendliness and reduce operational costs. In terms of cost planning, it is necessary to be aware of the increased financial burden, as part of the costs has to be invested in subsequent long-term and systematic maintenance. It is necessary to rely on international experience and know-how and use any available training opportunities to improve the structural and technical condition and comprehensive energy balance of historic buildings.'.

Ministry of Culture of the Slovak Republic	On the material itself Re: Chapter 4 – Measures to fulfil the renovation plan, paragraph 4.6 – Summary of policies and measures aimed at improving the energy performance of buildings, Table 24 – Planned forms of support for improving energy performance in the buildings sector, page 46 – 'Renovation of historic public buildings and public buildings subject to heritage protection' If the submitting party leaves historic public buildings and public buildings subject to heritage protection in the strategy in spite of our opinion that their inclusion in the strategy is not in conformity with the Energy Performance of Buildings Act, we agree with the proposed text, but note that it will be necessary to precisely define the terms 'structural and technical condition' and 'reduction of operating costs'. We are of the opinion that these terms better correspond to the Energy Efficiency Act, from which heritage buildings were not exempted. In terms of protecting heritage buildings, the solution to the problem of infrastructure innovation (e.g. modernisation of the technical equipment: heating, wiring, gas distribution network, sanitation) is acceptable.	R	PA	
Ministry of Culture of the Slovak Republic	On the material itself On Chapter 5 – Mobilising investments in the renovation of the public and private building stock, paragraph 5.3, page 52, the last paragraph 'Strategy' estimates the investment demands of the renovation of historic and heritage protection public buildings at EUR 120 million. We note that renovation of heritage buildings is costly and the estimated sum inadequate.	R	A	The text was modified.

Ministry of Culture of the Slovak Republic	On the material itself, Chapter 2 We recommend modifying the incorrect numbering of individual paragraphs in this chapter. Substantiation: Incorrect numbering.	R	A	The text was modified in accordance with the comment.
Ministry of Culture of the Slovak Republic	On the material in general According to the explanatory memorandum, the Ministry of Transport and Construction of the Slovak Republic presents the material 'Long-term renovation strategy for building stock' (the 'Strategy') on the basis of Section 4c of Act No 555/2005 on energy performance and amending and supplementing certain laws, as amended ('the Energy Performance Act'). Please note that under Section 2(2)(a) of the Energy Performance Act, the procedures and measures under Section 2(1) of the Energy Performance Act (one of the procedures and measures under Section 2(1)(e) of the Energy Performance Act is the preparation of a long-term renovation strategy for the building stock!) do not apply to buildings and monuments protected on the grounds of their architectural or historical value or as part of the distinctive environment, where compliance with the requirement for the energy performance of buildings to Section 2(4) of the Energy Performance Act, these buildings include especially buildings declared as objects of national cultural heritage, buildings in a heritage area or heritage zone as part of the historical settlement, and buildings put into use before 1 January 1947. N.B.: The presented material is based not only	C	A	The contradiction was resolved, after mutual explanations were provided, on 11 December 2020.

	on the Energy Performance Act, but also on Act No 321/2014 on energy efficiency and amending and supplementing certain laws, as amended. However, the latter Act does not address energy performance in relation to cultural monuments and real estate in historical sites. On the basis of the above, the inclusion of buildings subject to heritage protection in the strategy is at variance with the Energy Performance Act.			
Ministry of the Environ ment of the Slovak Republic	On the proposed Government resolution: The draft resolution of the Government of the Slovak Republic is unreviewable; it does not indicate what tasks would be imposed on which members of the Government if it were adopted; we request that it be drawn up in accordance with the Guidelines for the preparation and presentation of materials for meetings of the Slovak Government and that it then be presented to us again for comments.	С	A	The draft resolution will be modified in accordance with the Guidelines for the preparation and presentation of materials for the meetings of the Slovak Government. It will not impose tasks on other Government members.
Ministry of the Environ ment of the Slovak Republic	On the material itself, page 43, Table 23: Improvement of the energy performance of multi-apartment buildings, regarding Support for equipment using renewable energy sources in a multi-apartment building, activity – biomass boiler (80 €/kW, max. 7 kW/apartment), the Ministry of the Environment of the Slovak Republic fundamentally opposes the support for biomass boilers in multi- apartment buildings because of the resulting odour and emissions of pollutants into the air. The most suitable form of supplying heat and hot water in terms of air protection is a district heating system; we therefore believe that this measure is counterproductive. Where a multi-apartment building cannot be connected to a district heating	C	A	This is an existing measure, available online at https://zelenadomacnostiam.sk/sk/domacnos ti/podporovane-zariadenia/kotly-na- biomasu/ After mutual explanations were provided, the contradiction was resolved on 16 December 2020.

	system, we request that it be stated and highlighted that the biomass boiler has to be procured and then operated together with an electrostatic filter for fine dust particles.			
Ministry of the Environ ment of the Slovak Republic	On the material itself: - in general, pages 45–47, 49, 52; the Ministry of the Environment of the Slovak Republic requests that specific instruments be omitted from the planned forms of support for the improvement of energy performance in the buildings sector with regard to the Recovery and Resilience Facility as the central recovery tool of the NextGenerationEU programme as well as European structural and investment funds for 2021 to 2027. Substantiation: these strategic measures and policy documents will be approved separately as a whole by the Slovak Government within the framework of the National Reform Programme of the Slovak Republic, including the Recovery Plan and the Partnership Agreement of the Slovak Republic for 2021 to 2027, by April 2021. Approval of partial documents and intentions of each reform measure within the two instruments would be unsystematic and premature.	С	Ν	The strategy must set out mechanisms to support the mobilisation of investment in building renovation so as to achieve the objectives of the renovation strategy. The required structure of the material is in line with the requirement expressed in the Energy Performance of Buildings Directive. The current term 'planned forms' will be modified to 'proposed forms'. The Ministry of Transport and Construction of the Slovak Republic lists these measures, which should be financed from the forthcoming financial instruments, the Recovery and Resilience Facility and the ESIF, but respects that they will be specifically approved by the Government. The contradiction was not resolved.
Ministry of the Environ ment of the Slovak	On the material itself: - in general: We request the publication of the calculation methodology (e.g. the technical reports on the project) based on which the outputs from the project between the Ministry of Transport and Construction of the Slovak Republic and the Buildings Performance Institute Europe (BPIE) are declared.	R	A	

Republic				
Ministry of the Environ ment of the Slovak Republic	On the material itself: - in general: When preparing future strategies and other strategic and legislative documents, including updates of this strategy, we strongly suggest that emissions be monitored not only for CO2, but also for the CO2 equivalent, covering emissions of all greenhouse gases, not just carbon dioxide.	С	А	The Ministry of Transport and Construction of the Slovak Republic agrees that other greenhouse gas emissions will also be taken into account in the preparation of future strategies and other policy and legislative documents.
Ministry of the Environ ment of the Slovak Republic	On the material itself: - in general: The Ministry of the Environment of the Slovak Republic requests that the document and proposed measures include a binding methodology for investment prioritisation and an investment plan for public non-residential buildings as well as private buildings. It has to define detailed rules for the use of financial resources for investing in public non-residential buildings and private buildings. We also consider it necessary to further specify information on the measures that will be adopted in the framework of the investments with a view to adapting to climate change, as well as promoting green infrastructure and preserving biodiversity; these measures must be compulsory and cannot be conditional on their economic return. We request a statement that preference will be given to those solutions that will include adaptation water containment measures to combat climate change, and measures to promote the preservation of biodiversity and eliminate adverse impacts on protected species. Renovation of mainly non-residential buildings should also include efficient forms of indoor cooling, which will	С	N	A similar comment was also raised by the Ministry of Finance of the Slovak Republic; in that case, the contradiction was resolved based on a conciliation procedure. On the basis of approved Government Resolution No 649/2020, the task has already been imposed, and the tasks related to the preparation of the methodology and the prioritisation of investment plans have a deadline for implementation in 2021. The contradiction was not resolved.

	require more energy than heating in the future.		
Ministry of the Environ ment of the Slovak Republic	On the material itself: Chapter 3. A roadmap with measurable progress indicators. In order to reflect the actual trends in emissions as much as possible, it is essential that the calculation of the estimated quantities of these emissions be based on emission factors respecting the basic principles of stoichiometric fuel combustion. We recommend using emission factor values that are listed on the Ministry of the Environment' website and are updated on an annual basis: https://www.minzp.sk/klima/obchodovanie-emisnymi- kvotami/stacionarne-prevadzky/, and specify them as national emission factors in Tables 17 and 18 of the material (page 26). As we consider CO2 emissions from biomass neutral in terms of climate change and since emissions of PM2.5 have a much greater impact than CO2 emissions in terms of human health and also the attainment by Slovakia of the binding targets set by the European Commission, we propose that the forecasted trends in PM2.5 be also included in the material. Substantiation: In addition to natural gas, coal and heating oil, the development of emissions is also highly affected by biomass and lumpwood. Both can be found, in different proportions, in the categories of 'heat supplied', 'renewable resources' and 'electricity'. The ratio at which these primary energy sources are present in these categories cannot be identified in the material, which makes it impossible to quantify their impact on CO2 and PM2.5 emissions until 2050.	C A	The methodology of calculating CO2 emissions in the buildings sector was established for the present model on the basis of the applicable CO2 conversion factors in accordance with Annex 2 to Decree No 364/2012 for the individual energy carriers. Their calculation is based on CEN standards and overarching standards for the energy performance of buildings. The values of the emission factors indicated on the Ministry of the Environment's website are updated once a year, which would not make it possible to ensure proper comparability of the data within the model. The Ministry of Transport and Construction of the Slovak Republic is open to a discussion on a potential future change in the CO2 emission conversion factors in the buildings sector. The requirement to supplement the forecasted trends in PM2.5 goes beyond the requirements of the Energy Performance of Buildings Directive, which imposes obligations only with regard to greenhouse gas emission reduction targets. On the other hand, the Directive lays down no binding targets in this area. The

				underlying data necessary for determining the PM2.5 forecast are not available in the required breakdown into residential and non- residential buildings. After mutual explanations were provided, the contradiction was resolved on 16 December 2020.
Ministry of the Environ ment of the Slovak Republic	On the material itself: Tables 19 and 20, page 28 Modify Table 19 to also indicate the quantity of heat supplied from RES. Substantiation: It can be expected that the quantity of renewable energy used for heating will increase by 2.9 TWh by 2030, as compared to 2020. This figure is presented in the National Energy and Climate Plan, in Table 15 'Estimates of the total expected contribution of individual technologies from renewable sources in Slovakia in the heating and cooling sector', which shows an increase in the use of RES in heating and cooling in 2030 as compared to 2020. A new line should be added for 2030 that indicates the ambition to use RES in heat supplies. Substantiation: We consider the current categorisation of 'energy forms' in Tables 19 and 20 insufficient with regard to the possibility of identifying the real likely contribution of each primary energy source to the development of CO2 and PM2.5 emissions. We consider it desirable that the tables and charts showing the forecasts of energy consumption and CO2 emissions until 2050 also include the names of specific fuels (primary energy sources), including the estimated CO2 and PM2.5 emissions that will be released into the air by their combustion.	С	A	Table 20 'Buildings sector – estimated CO2 emissions (Mt CO2)': the indicative milestones are based on the underlying data from Tables 17 and 18, broken down into residential and non-residential buildings. Data on the quantity of heat supplied using RES are not available in detail for residential and non-residential buildings. The emission conversion factors for the heat supplied from RES to buildings are also unknown. Slovakia has set binding targets for RES at the national level, but not for buildings. The model for setting indicative milestones for 2030, 2040 and 2050 foresees an increase in the use of RES in buildings by 10% every 5 years. The forecast set out in the strategy is in line with the requirements set by the Energy Performance of Buildings, which should advance in the coming years to the level of

				constructing nearly zero energy buildings, insofar as this is economically, functionally and technically feasible. After mutual explanations were provided, the contradiction was resolved on 16 December 2020.
Ministry of the Environ ment of the Slovak Republic	On the material itself: in Part 1.3, page 20, the paragraph 'To improve thermal performance of roofs on the existing buildings (single-family houses, multi-apartment buildings and non-residential buildings), additional thermal insulation can be performed in flat roofs", we suggest also including a synthetic EPDM rubber film as a means of waterproofing flat roofs, along with plasticised PVC; this film is currently commonly used for flat and slightly pitched roofs, and is also ideal for green extensive roofs. Substantiation: This film is currently commonly used for flat and slightly pitched roofs, and is also ideal for green extensive roofs.	R	А	The text was supplemented in accordance with the comment.
National Bank of Slovakia	1. In Figure 1 – Numbers of apartments in multi-apartment buildings, and Figure 2 – Numbers of apartments in single-family houses, the material presents statistical data for different time periods. We propose to align the data at an average of one year so that the observations in the charts are mutually comparable.	R	N	The data in the figures present the intensity of construction in relation to the applicable requirements for building structures in the given period. Presentation on an annual basis is not meaningful in this case.
National Bank of	2. It is proposed to substantiate under Table 9 why the latest available	R	A	The data in Table 9 are derived from the TSÚS database of buildings for the period of the scientific and technological services,

Slovakia	data are 17 years old.			which ended in 2004.
National Bank of Slovakia	3. In Part 3.2, the setting of indicative milestones for 2030, 2040 and 2050, and their contribution to the Union's targets, we propose to also include data for 2010 and for the last available year in the charts 'Energy consumption – the buildings sector' and 'CO2 emissions – the buildings sector'.	R	Ν	The relevant charts in Part 3.2 for the buildings sector serve to present future indicative milestones for the years 2030, 2040 and 2050. The determination of the trajectory and the definition of the baseline of energy consumption and related CO2 emissions are sufficiently described in the text of the chapter.
National Bank of Slovakia	4. The material aims to contribute to the achievement of the national CO2 reduction target. We propose to quantify the impacts on public finances and the business environment in the given clause in order to ensure deep renovation of buildings.	R	N	The renovation strategy does not alter the initial impacts of the strategy papers adopted and has no budgetary impact in view of the nature of the material.
National Union of Employe rs	3. Regular comment on Chapter 6, page 52 In Chapter 6. 'Obstacles and barriers' – supplement and modify the indent '- need for restructuring companies focusing on building renovation' to read as follows: '- the need to restructure companies and the need to re-train the staff of building renovation companies'. Substantiation: The actual restructuring of firms specifically focusing on renovation will take place in a market-based way, directly linked to the intensity of demand for construction works of this kind on the construction market. Re-training of employees will be one of the most effective tools to speed up the preparedness especially of small and medium-	R	A	The text was modified in accordance with the comment.

	sized construction companies to carry out building renovation.			
National Union of Employe rs	1. Regular comment on Chapter 4.4, page 39In Chapter 4.4 'Incentives for the use of smart technologies and skills' – include the following text before the last sentence in the seventh paragraph (on page 39): 'In view of the anticipated increased demand for skilled craftsmen in the context of the required increase in renovation rates under the European Green Deal, the European Social Fund ESF+ will 'support major re-training of craftsmen in the buildings sector within its focus on green professions and green economy; this will follow up on the projects financed within the Horizon 2020 programme.' Substantiation: Pilot projects of adult education in the new requirements resulting from Industry 4.0 have been implemented within the Horizon 2020 programme; this includes, e.g., requirements on nearly zero energy buildings. It is therefore necessary to capitalise on the knowledge and outputs of these pilot projects and training, and implement them at the national level.	R	A	The text was modified in accordance with the comment.
National Union of Employe rs	2. Regular comment on Chapter 6, page 52 In Chapter 6. 'Obstacles and barriers', we propose to remove the following indent from the indents 'Barriers occurring in construction also apply to renovation of buildings, such as': (on page 52): '- a lack of firms providing complete construction works aimed at major renovation or deep renovation,' Substantiation: The mentioned statement is materially incorrect, undocumented and misleading. The profile of our member companies shows that many of them are both technically and professionally prepared to implement contracts of this kind in good	R	А	The text was omitted in accordance with the comment.

	quality should they appear on the market, and that the contracts will be well prepared by contractors and designers.			
National Union of Employe rs	4. Critical comment on Chapter 6, page 52 In Chapter 6. 'Obstacles and barriers' – supplement the indents to include the following: '- inefficient awareness raising regarding support from providers; - unnecessary red tape for applicants at the application and approval stage; - unnecessarily lengthy public procurement; - lengthy construction proceedings also for building renovations.' Substantiation: The above obstacles are regularly encountered by construction companies and if they are not consistently removed (e.g.: by codifying new rational construction regulations and amending the Public Procurement Act), they will continue to seriously hinder not only the renovation of buildings, but the entire construction segment.	R	A	The text was modified in accordance with the comment.
Statistica l Office of the Slovak Republic	In the material itself and its tables, we propose correcting incorrect data. The number of comments from the Statistical Office of the Slovak Republic containing correct data, their character, location in tables, etc. is such that it exceeds the scope of the slov-lex portal. According to Article 10(4) of the Guidelines for the preparation and presentation of materials for the meetings of the Slovak Government (approved by Resolution of the Slovak Government No 512 of 13 June 2001), the Statistical Office of the Slovak Republic will present these comments in printed form.	R	A	
Slovak Office of	We would like to point out to the submitting party that if measures	R	A	Acknowledged.

Standar	described in the Long-term renovation strategy for building stock are			
ds,	comprised in future legislative proposals, the references to Slovak			
Metrolog	technical standards in these legislative proposals will have to be set			
y and	out in such a way as to maintain voluntary compliance with the			
Testing	technical standards, so that the use of a technical standard is not the			
	only possible solution, and thus to avoid the binding nature of such			
	technical standards. Substantiation: To ensure compliance with			
	Regulation (EU) No 1025/2012 of the European Parliament and of			
	the Council of 25 October 2012 on European standardisation, which			
	defines a 'standard' as a technical specification, adopted by a			
	recognised standardisation body, with which compliance is not			
	compulsory. The solution contained in a technical standard should			
	only be one of possible options of achieving compliance with a legal			
	regulation, not the only one. Technical standards are considered to be			
	the minimum recommended technical solution and compliance with			
	them ensures that the user meets the requirements resulting from			
	them. According to Section 3(10) of Act No 60/2018 on technical			
	standardisation, compliance with a Slovak technical standard or			
	technical standardisation information is voluntary.			
				The methodology of calculating CO2
	We request that Tables 17, 18, 19 and 20 and the related text on pages			emissions in the buildings sector was
	25 to 28 be revised so that not only CO2 emissions, but also CO2			established for the given model based on
Dublia	equivalent (hereinafter CO2eq) emissions are monitored, including	C	N	applicable CO2 emission conversion factors
1 ubit	emissions of all greenhouse gases, and not just carbon dioxide. We	C	1	in accordance with Annex 2 to Decree
	also request that the data on CO2 be changed to CO2eq in the related			No 364/2012 for each energy carrier. Their
	legislative and non-legislative materials, in particular Annex 2 to			calculation is based on CEN standards and
	Decree No 364/2012. Substantiation: * The European Union uses			overarching standards for the energy

CO2 equivalent (CO2eq) instead of insufficient monitoring of only one of the number of greenhouse gases. The monitoring of CO2eq is incorporated in the current strategic papers of the European Commission, the European Investment Bank[1], the European Bank for Reconstruction and Development[2], the EU Taxonomy of sustainable investment[3], and documents of the Intergovernmental Panel on Climate Change (IPCC). Such an irregularity would cause unnecessary technical problems and shortcomings in the calculation of impacts of activities in Slovakia. \* The origin of the CO2 emission factor value for each energy carrier is not directly explained in Decree No 364/2012 and the authors refer to standard STN EN 15 603, which has been repealed in the meantime and replaced by standard STN EN 15603/NA. \* The method for determining CO2 emissions is set by Decree No 364/2012, in its Section 2(8), as follows:[4] Emissions of carbon dioxide shall be determined from the energy supplied along the individual energy carriers using the conversion factors according to Annex 2. The amount of carbon dioxide emitted into the air shall be expressed in  $kg/m^2$  of the total floor area of a building per year. \* Greenhouse gases other than CO2 also have major impacts on climate change. According to the Intergovernmental Panel on Climate Change, for example, methane has a 34 times higher global warming potential than carbon dioxide over a 100-year period and 108 times higher potential over a 10-year period. \* Further, it would be desirable to increase the emission factors values for CO2 in Decree No 364/2012 appropriately to also include emissions from all stages of the fuel cycle (from extraction to the thermal equipment). Equivalent values from the documents of the Intergovernmental Panel on Climate Change [5] are a statistical

performance of buildings, taking into account the energy mix used in Slovakia. The values of CO2 emission factors presented on the Ministry of the Environment's website are updated on an annual basis; this would not make it possible to ensure proper comparability of data within the model. The Energy Performance of Buildings Directive sets out obligations to meet greenhouse gas emission reductions, but does not set any binding targets in this area. Indicative milestones for the buildings sector were set on the basis of Commission Recommendation (EU) 2019/786 on building renovation, which defines the framework of possible milestones.

	average of the emission factor for the selected fuel over its entire life			
	cycle, and can serve as a standard together with the data of the			
	European Bank for Reconstruction and Development[6]. The			
	comment is critical [1]			
	https://www.eib.org/attachments/strategies/eib_project_carbon_footpr			
	int_methodologies_en.pdf [2] Energy Transitions Commission,			
	Copenhagen Economics analysis based on Farquharson et al (2016);			
	Lazarus et al (2015), summarised on page 42 online:			
	https://www.ebrd.com/power-and-energy/ebrd-energy-sector-			
	strategy.pdf [3] https://ec.europa.eu/info/business-economy-			
	euro/banking-and-finance/sustainable-finance/eu-taxonomy-			
	sustainable-activities_en [4] Decree No 364/2012, implementing Act			
	No 555/2005 on the energy performance of buildings. Ministry of			
	Transport, Construction and Regional Development of the Slovak			
	Republic of 12 November 2012. Also available at: https://www.slov-			
	lex.sk/pravne-predpisy/SK/ZZ/2012/364/20200310 [5] IPCC: Annex			
	III: Technology-specific cost and performance parameters. In:			
	Climate Change 2014: Mitigation of Climate Change, page 1335.			
	[online]. [retrieved on 28 June 2020]. Available online: [6] Energy			
	Transitions Commission, Copenhagen Economics analysis based on			
	Farquharson et al (2016); Lazarus et al (2015), summarised on page			
	42 online: https://www.ebrd.com/power-and-energy/ebrd-energy-			
	sector-strategy.pdf			
A				
Associati	We are not a lar Charatan ( 201 starlar and the mission?) are and the			The text was modified in accordance with
on or	we request : In Chapter 6 Obstacles and barriers – supplement the	R	A	the comment.
Constru	indents to include the following: - inefficient awareness raising			
ction	regarding support from providers; - unnecessary red tape for			

Entrepre neurs of Slovakia	applicants at the application and approval stage; - unnecessarily lengthy public procurement; - lengthy construction proceedings also for building renovations.' Substantiation: The above obstacles are regularly encountered by construction companies and if they are not consistently removed (e.g.: by codifying new rational construction regulations and amending the Public Procurement Act), they will continue to seriously hinder not only the renovation of buildings, but the entire construction segment.			
Associati on of Constru ction Entrepre neurs of Slovakia	We request: In Chapter 4.4 'Incentives for the use of smart technologies and skills' – include the following text before the last sentence in the seventh paragraph (on page 39): 'In view of the anticipated increased demand for skilled craftsmen in the context of the required increase in renovation rates under the European Green Deal, the European Social Fund ESF+ will support major re-training of craftsmen in the buildings sector within its focus on green professions and green economy; this will follow up on the projects financed within the Horizon 2020 programme.' Substantiation: Pilot projects of adult education in the new requirements resulting from Industry 4.0 have been implemented within the Horizon 2020 programme; this includes, e.g., requirements on nearly zero energy buildings. It is therefore necessary to capitalise on the knowledge and outputs of these pilot projects and training, and implement them at the national level.	R	A	The text was modified in accordance with the comment.
Associati on of Constru	We request: In Chapter 6 'Obstacles and barriers' – supplement and modify the indent '- need for restructuring companies focusing on	R	A	The text was modified in accordance with the comment.

ction	building renovation' to read as follows: '- the need to restructure			
Entrepre	companies and the need to re-train the staff of building renovation			
neurs of	companies'. Substantiation: The actual restructuring of firms			
Slovakia	specifically focusing on renovation will take place in a market-based way, directly linked to the intensity of demand for construction works of this kind on the construction market. Re-training of employees will be one of the most effective tools to speed up the preparedness especially of small and medium-sized construction companies to carry out building renovation.			
Associati on of Constru ction Entrepre neurs of Slovakia	We request: In Chapter 6 'Obstacles and barriers', we propose to remove the following indent from the indents 'Barriers occurring in construction also apply to renovation of buildings, such as': (on page 52): '- a lack of firms providing complete construction works aimed at major renovation or deep renovation,' Substantiation: The mentioned statement is materially incorrect, undocumented and misleading. The profile of our member companies shows that many of them are both technically and professionally prepared to implement contracts of this kind in good quality should they appear on the market, and that the contracts will be well prepared by contractors and designers.	R	A	The text was omitted in accordance with the comment.