

Civil comment on the proposal of the Recovery and Resilience Plan of the Slovak Republic

The Plan of Renewal and Resilience of the Slovak Republic: The Slovak Republic came to the Interdepartmental [Comment Procedure: https://www.slov-lex.sk/legislativne-procesy/SK/LP/2021/112](https://www.slov-lex.sk/legislativne-procesy/SK/LP/2021/112)

Introduction

In the interdepartmental comment procedure, the Ministry of Finance of the Slovak Republic submitted draft LP/2021/112 Of the Slovak Republic's Recovery and Resilience Plan, according to which €6 billion is to be reinvested in reforms and investments aimed at restoring and increasing Slovakia's resilience by 2026.

Environmental NGOs have prepared a joint mass comment on a set of topics covered throughout the Recovery and Resilience Plan. Under the EU Recovery and Resilience Facility, a criterion has been set for drawing on 37% of the funding from the Recovery and Resilience Facility and a principle designed to ensure that measures are not environmentally harmful. Therefore, the so-called green economy, with an overlap of green themes to other areas, is also a fairly large part of the recovery plan.

In particular, in their observations, NGOs propose:

- adapt the criteria for adjusting the efficiency of greenhouse gas emission reductions where only cost/economic criteria should prevail;
- identify a number of risks of deterioration in the quality of environmental impact assessment and public involvement in projects;
- attach the partnership principle for a more transparent course and implementation settings;
- to eliminate inconsistencies between the objectives of national strategies and the approved European legislation;
- to include criteria for the sustainable use of renewable energy sources, including the exclusion of wood biomass from support for the modernisation of RES, to remove nonsensical administrative obstacles to the construction of new RES facilities;
- correct formulations that allow the use of technologies that are not in line with the objectives of achieving carbon neutrality;
- to improve the quality of mitigation measures in the framework of renovation of buildings, transport;
- use the guaranteed energy service model for the renovation of buildings in different components;
- improve adaptation measures to climate change;
- take into account the dimension of energy poverty (e.g. seniors);
- add a circular economy component;
- to incorporate the need for education on the climate crisis;
- add a component preparation conditions for capacity for decarbonisation of regions.

Organizations:

Katarína Nikodemová, Buildings for the Future,
 Dan Kollár, Cycling Coalition
 Simona Hlaváčová, Circular Hub platform,
 Ondrej Kozlovský, Extinction Rebellion Slovakia,
 Katarína Juríková, Greenpeace Slovakia
 Ľubica Šimkovicová, IEPD
 Ivana Maleš, INCIEN
 Oto Hudec, let's not waste time!
 Juraj Melichár, Friends of the Earth-CEPA
 Ján Karaba, SAPI
 Boglárka Kurka Ivanegová, SUSTO - Sustainability Tools
 Lilibana Rástocká, Slovak Climate Initiative
 Miroslava Plassmann, WWF Slovakia
 Lucia Szabová, Worried Mothers

Contact persons:

Juraj Melichár, Friends Zeme-CEPA, melichar@priateliazeme.sk, 0903 473 816
 Lilibana Rástocká, Slovak Climate Initiative, rastocka@klimatickainiciativa.sk, 0904 798 870
 Lucia Szabová, Worried Mothers, znepokojene@gmail.com, 0905 515 934

0/ General comments:

- **Note 0.1:**

We propose to complement key milestones in terms of climate protection, which are also determined by EU legislation or their setting for Slovakia. This systemic deficiency is that Slovakia does not have a model in place to achieve carbon neutrality by 2050, nor a clear trajectory towards the target of at least a 55% reduction in emissions compared to 1990 by 2030. In contrast, the model for the Integrated National Energy and Climate Plan of the Slovak Republic (hereinafter referred to as INEKP) envisaged a minimum increase in emissions to 40% by 2030. Data on renewables are also likely to be revised over the last ten years.

These shortcomings appear to be linked to the absence of some specific objectives and implementation procedures, such as not specifying how much the share of renewable energy sources will increase, nor the quantification of the benefits, or how they will contribute to meeting climate commitments as measures. This step is essential for the efficient use of funds from the Recovery and Resilience Fund.

This observation is of a fundamental nature.

- **Note 0.2**

To tackle energy poverty.

Recital:

The draft Recovery and Resilience Plan only vaguely states that the aspect of energy poverty is taken into account. Nowhere is there any rule that ensures that there is indeed a solution to this problem, no allocation of resources.

This comment is fundamental.

1/ Chapter 1: General objectives and coherence of the plan

- **Observation 1.1:**

On page 3, 7, we propose to change the text as follows:

We propose to adapt the term 'climate changes' to the correct name 'climate change'.

Justification:

According to the IPCC, a difference is currently made between the concepts of '*climate changes*' and '*climate change*.' While plural is mainly used for climate change of a natural nature, the concept of climate change means those related to anthropogenic/man-made growth of the greenhouse effect of the atmosphere since the beginning of the Industrial Revolution.

The comment is not of a fundamental nature.

- **Observation 1.2**

In several places in this chapter, there are references to 'growth' in connection with the green economy. An example is on page 4: "*The green economy will promote environmental sustainability, quality of life and contribute to the development of green innovation as one of the sources of economic growth.*"

Also on page 9, *chapter: Major challenges for smart, sustainable and inclusive growth*. We propose to reformulate these parts so that the green economy is not linked to the concept of economic growth.

Justification:

The European Environment Agency (EEA) considers economic growth to be a driver of the current climate and environmental crisis, as it is directly linked to an increase in production, consumption and use of resources and has a negative impact on the environment and human health. The EEA also seriously challenges the view that it is possible to achieve a long-term decoupling of economic growth from increasing pressure on the environment and calls for a rethink of the perception of progress or raising living standards through the growth category. According to the EEA, EU and Member State measures should promote not only technological change, but also societal changes and changes in all spheres of production and consumption. Since growth is conditional on cultural, political and institutional, it is essential that documents that aim at a truly sustainable and resilient future of Slovakia take into account all factors that may threaten it.¹

The comment is of a fundamental nature.

2/ Chapter 3: Additionality and implementation of the plan

¹ <https://www.eea.europa.eu/themes/sustainability-transitions/drivers-of-change/growth-without-economic-growth>

- **Note 2.1:**

On page 23, we propose to change the text as follows:

The Ministry of Finance of the Slovak Republic, as well as other reform implementers, will be involved in the implementation of the recovery plan in accordance with the Act on the Mechanism to Support renewal and resilience of various stakeholders, based on the principle of partnership. This mechanism - its form and timetable - will be developed in the coming months.

Justification:

In order to improve the quality of the implementation of investments and reforms, we propose to involve 'key partners' in the implementation of the recovery plan on the basis of a mechanism similar to that used under the ESI Funds management system. We propose to add the principle of partnership in setting up calls and monitoring of implementation to the Act on the Mechanism to Support Renewal and Resilience, which is currently in the interdepartmental comment procedure.

The comment is of a fundamental nature.

- **Observation 2.2:**

Any investments that are directed towards measures to mitigate climate change should be guided by the EU taxonomy.

Justification:

It is important to focus on investments that help meet the objectives of the European Green Deal and which can be considered sustainable. In order not to create confusion about the nature of sustainability and activities that may be described as sustainable, an EU taxonomy has been created and we recommend that this classification tool also be taken into account when drawing up the Recovery and Resilience Plan.²³

Observation 2.3:

On page 1 of Chapter 3 - Additionality and implementation of the Plan, we propose to add the following text at the end of section 2.1:

In the preparation of the recovery and resilience plan, the National Energy and Climate Plan serves as an analytical basis as well as a reference framework for upcoming reforms and investments. Therefore, by 31 December 2021, the Ministry of Economy, in cooperation with other responsible authorities, will ensure that the Integrated National Energy and Climate Plan is updated to reflect the current objectives of the transition to a carbon-neutral society.

Recital:

The guidance to Member States on RFF on page 41 states that Member States should provide information in their Recovery and Resilience Plan on how they will ensure the consistency and complementarity of the plan with the INEKP and how the Recovery and Resilience Plan could accelerate specific investments or policies and measures set out in the INEKP.⁴⁵

² Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020 on the establishment of a framework to facilitate sustainable investment, and amending Regulation (EU)

³ /2088 (Text with EEA relevance)

⁴ https://ec.europa.eu/info/sites/info/files/document_travail_service_part1_v2_en.pdf

⁵ <https://www.economy.gov.sk/uploads/files/zsrwR58V.pdf>

Given that the Slovak INEKP is outdated and not in line with the current goals of the Slovak Republic in the area of achieving carbon neutrality, the basic prerequisite for the effectiveness of reforms and investments from the Recovery and Resilience Plan is the update of the INEKP. Therefore, we propose that the Ministry of Economy, in coordination with other responsible authorities, ensure that the plan is updated as a basic prerequisite for the successful implementation of individual measures of the Recovery and Resilience Plan, at the latest by the start of the implementation of the measures of the Plan.

3/ Component 1: Renewable energy sources and energy infrastructure

- **Observation 3.1:**

We are proposing reform 3. The reform of the regulatory framework for RES support shall be complemented by the text: '...including the definition of criteria for the sustainable use of renewable energy sources as a government strategy paper'

Recital:

The Strategy of environmental policy of the Slovak Republic until 2030 stipulates that by 2020 all types of renewable energy sources will have developed and adopted criteria for sustainable use. The Ministry of the Environment has partially implemented the Criteria for the Sustainable Use of Biomass for Operational Programmes.⁶⁷⁸ **The comment is of a fundamental nature.**

- **Observation 3.2:**

We propose to exclude wood biomass from support for investments in the modernisation of existing electricity sources from RES (repowering).

Justification:

In terms of impact on climate change, biomass is significantly worse (230 g CO₂eq/kWh) compared to solar (48 g CO₂eq/kWh), geothermal (38 g CO₂eq/kWh) or wind energy (12 g CO₂eq/kWh).⁹

Unlike other RES that are renewed on an ongoing basis, the guarantee of continuous and long-term stability of biomass energy acquisition in a particular region is not automatic. Only biomass should be considered as a renewable resource, the use of which does not jeopardise the regenerative potential and ecological stability of the site from which the provision of other important ecosystem services such as water retention, carbon storage, soil protection and biodiversity originates. The long-term growth of calamity logging in the forests of Slovakia together with the expansion of the market for solid biofuels reliably

⁶ https://www.minzp.sk/files/iep/03_vlastny_material_envirostrategia2030_def.pdf

⁷ <https://www.op-kzp.sk/obsah-aktuality/oznamenie-o-zverejneni-navrhu-kriterii-udrzatelneho-vyuzivani-a-biomass-in-regionoch-slovenska-pre-programs-sr-for-period-2014-2020-co-financed-z-esif-so-focus-on-wood-biomass/>

⁸

https://energoportal.org/images/dokumenty/po_rekonstrukcii/pozicny_dokument_biomasa_2016_final.pdf

⁹ Ipcc, 2014, p.1335. https://www.ipcc.ch/site/assets/uploads/2018/02/ipcc_wg3_ar5_annex-iii.pdf

signals future problems of stability of wood biomass production and non-production ecosystem services. ¹⁰**The comment is of a fundamental nature.**

- **Note 3.3:**

On pages 5 and 20, we propose to change the text as follows:

"Energy efficiency improvements will need to be approached whenever they are more environmentally **beneficial and** cost-effective than equivalent supply-side solutions", and "any energy supply-side solutions, including the construction of RES, will only be implemented when they are **more** environmentally beneficial and cost-effective than energy efficiency measures."

Justification:

The principle of energy efficiency first plays an irreplaceable role in the direction of carbon neutrality. We cannot just replace fossil fuels with renewable energy sources, because, with the current waste of energy, there simply will not be enough materials left to produce RES and greenhouse gas emissions that we can still emit to meet the goals of the Paris Agreement. ¹¹**The comment is of a fundamental nature.**

- **Observation 3.4:**

On page 7, we propose to change the text as follows:

Increasing electricity generation capacity from RES in line with the requirements of the Integrated National Energy and Climate Plan **and the related recommendations of the European Commission on this plan.**

Justification:

The recently published information of the SHMÚ on the recalculation of the share of RES over the last decade significantly underpins the authority of the projections of resce development in the approved INEKP. The European Commission recommends Slovakia to set a 24% share of RES by 2030 and the Slovak Association of PV and RES (SAPI) up to 25.6% share.¹²¹³¹⁴

The comment is of a fundamental nature.

- **Observation 3.5:**

On page 8, we propose to add " *municipalities, RES*(RES) energy generating communities under **Directive (EU) 2018/2001 and self-consumers " to the section**

¹⁰ <https://energoportal.org/390-ucelne-a-efektivne-vyuzivanie-biomasy>

¹¹ Dynamic Energy Return on Energy Investment (EROI) and material requirements in scenarios of global transition to renewable energies, Energy Strategy Reviews, <https://doi.org/10.1016/j.esr.2019.100399>

<https://www.sciencedirect.com/science/article/pii/S2211467X19300926>

¹² <https://euractiv.sk/section/energetika/interview/analyticka-shmu-cisla-o-consumption-biomass-noted-z-roky-nobody-to-interesting/>

¹³ <https://euractiv.sk/section/energetika/news/slovensko-sa-ocitlo-medzi-europskou-spickou-v-obnovitel-energy-very-sa-thym-let/>

¹⁴

https://ec.europa.eu/energy/sites/default/files/documents/staff_working_document_assessment_nec_p_slovakia_sk.pdf

Investments in the construction of new sources of electricity **from RES - Addressee as follows:**

Addressee:

• **Businesses, municipalities, RES Energy Communities (SOZ) under Directive (EU) 2018/2001, self-consumers Justification:**

European legislation, and partly the INEKP for 2021-2030, lists and increases support for municipalities, RES energy communities and self-consumption in the RES sector.¹⁵

The comment is of a fundamental nature.

- **Observation 3.6:**

On page 24, we propose to add the text as follows:

Investment vehicles should be allocated on the basis of the results of a technology-neutral auction, the main criterion being the cost of MWh of electricity **produced, taking into account environmental sustainability.**

Justification:

The principle of cost-effectiveness does not take into account the long-term carbon neutrality target by 2050 at the latest. Slovakia does not yet have a carbon neutrality model in its progress, so this has to be taken into account.

The comment is of a fundamental nature.

- **Note 3.7:**

We propose to strengthen the financial allocation of the RES component and the energy infrastructure by a total of EUR 230 million, as follows: Investments in the construction of new electricity sources from RES by EUR 100 million, Investments in *the modernisation of existing RES* electricity sources by EUR 80 million, Investments in increasing the flexibility of electricity systems for increased RES integration by EUR 50 million.

Recital:

The currently proposed allocation covers only a minor part of the necessary costs for the proposed systemic reforms and investments. Most of all, this funding shortfall will be reflected in investments in the modernisation of existing RES electricity sources, where the specific investment costs for biogas stations are estimated at EUR 1,5-2 million/MW, which means that if investment support were allocated only to these types of installations, then the proposed allocation would be sufficient to modernise only one third of the total 122 MW facilities.

The comment is essential

- **Observation 3.8:**

For the RES component and energy infrastructure, we propose to add to the objectives of individual investment areas specific minimum values of the projected

¹⁵ <https://www.economy.gov.sk/energetika/navrh-integrovaneho-narodneho-energetickeho-a-klimatickeho-plan>

increase in the installed capacity of new sources of electricity from RES, as well as the installed power values for the modernisation of existing resus.

Recital:

Complementing the objectives under that proposal will strengthen the relevance of this component and a clear focus on the cost-effective results of the proposed investments. It also declares a greater link to the Power up reform plan and improves the applicability of the component in terms of EU control mechanisms.

- **Observation 3.9:**

On page 3, we propose that the text "*Administrative obstacles to the construction of new electricity generation facilities from RES*" should read as follows:

- The existing process of preparing investments in energy in Slovakia is administratively complicated, not transparent, inefficient and therefore disproportionately extends the duration of preparation and authorisation of projects of new SOURCES of RES.
- Pursuant to Article 16 of the Directive on the promotion of the use of energy from renewable sources, it is necessary to provide for the simplification and reduction of authorisation processes for new sources for electricity generation.
- Pursuant to Article 42 of the Internal Electricity Market Directive, it is necessary to establish transparent and efficient procedures for the non-discriminatory connection of new sources and energy storage facilities to the transmission or distribution system by the transmission system operator and distribution system operators.
- Local authorities should include provisions concerning the integration and use of RES in the spatial planning, construction and renewal of territorial infrastructure, industrial, commercial, residential zones as well as energy infrastructures in their territorial plans.

Recital:

This is to clarify the text in connection with the requirements of EU Directive 2018/2001 concerning authorisation processes for new RES equipment and to supplement the text under EU Directive 2019/944 concerning the process of connecting new energy storage sources and equipment.

- **Observation No 3.10:**

On page 5, we propose to add the text as follows:

In the 2nd and 3rd of July 20 Reform of the regulatory framework in the field of electricity

We ask to add a condition that the reform of the regulatory framework in the field of electricity at least respects the current level of public participation in decision-making and the level of environmental impact assessment (with the exception of the impact assessment on climate change, where it is necessary to supplement the adjustment in the EIA Act and then reflect this new regulation in this reform). In other words, that the provisions relating to participation and environmental impact assessment should not be weakened in the context of 'increase process efficiency'.

Recital:

It is clear that streamlining / digitization of the permitting process are in demand and in themselves a good approach, but they must not intervene or be prioritized over other values that are also protected by the Building of the Slovak Republic: protection of health, environment, access to information and environmental decision-making.

The comment is of a fundamental nature.

- **Note 3.11:**

On page 3, under Main Challenges and Objectives - Administrative obstacles to the construction of new electricity generation facilities from RES, second point:

We ask *for the word "shortening"* to be replaced by "streamlining" of the permitting process and to supplement the condition that the current level of public participation in decision-making and the level of environmental impact assessment are at least respected (with the exception of the assessment of the impacts on climate change, where it is necessary to supplement the modification in the EIA Act and then reflect this new regulation in the authorisation). In other words, that the provisions relating to participation and environmental impact assessment should not be weakened in the context of 'streamlining processes'.

Justification:

It is clear that support for the use of energy from renewable sources is necessary, only an appropriate form needs to be found. Streamlining the permitting process in itself is a good approach, but it must not intervene or be prioritized over other values that are also protected by the Building of the Slovak Republic: health protection, environment, access to information and environmental decision-making.

This comment is fundamental.

4/ Component 2: Renovation of buildings

- **Note 4.1:**

On page 4, we propose to edit the text as follows:

"- Direct consumption of solid fossil fuels, waste, ~~PLG~~ **LPG** and gas oil and diesel will be completed by 2030 at the latest and for fossil natural gas **by 2035**.

- The level of carbon emissions in gas will be reduced by 25 % by **2030** ~~2050~~."

Justification:

For LPG, it's probably just a typo. These provisions must be compared with the upcoming model of carbon neutrality within the framework of the updated Low Carbon Strategy of the Slovak Republic. Fossil fuel natural gas has comparable climate impacts to coal in accounting for methane leaks. According to the EBRD, greenhouse gas emissions from natural gas are around 625-925 gCO₂eq/kWh, depending on 2-5% of methane leaks at a 20-year global warming potential. By comparison, coal has emissions of 910 gCO₂eq/kWh. For climate protection reasons, the European Investment Bank ceases to finance projects with greenhouse gas emissions above 250 gCO₂eq/kWh after 2021. The Technical Report on the EU's Sustainable Investment Taxonomy of March 2020 even indicates a value of

100 gCO₂/kWh for gas and renewables, which will be reduced every 5 years towards carbon neutrality in 2050.¹⁶¹⁷¹⁸

- **Observation 4.2:**

On page 30, we propose to correct the text as follows: solar photovoltaic and photothermal systems.

Justification:

It's probably just a typo.

The comment is not of a fundamental nature.

- **Observation 4.3:**

On page 9, we propose to change the text as follows:

"More than 110,000 households are still heating with solid fuels that could be replaced by **low-emission measures**, ~~more effective boilers~~"

Justification : The assumption that people who burn solid fuels from waste to biomass will switch to more expensive fuel – natural gas is, in our view, wrong. Examples of good practice show that the principle of energy efficiency first is very important in tackling energy poverty, such as supporting the renovation of homes in the UK, France, etc.¹⁹²⁰

The comment is of a fundamental nature.

- **Observation 4.4:**

On page 29, we propose to change the text as follows:

Climate change mitigation	X	X
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"The investment will include, but is not limited to, the replacement of coal/oil-based heating systems and outdated gas boilers with ~~low-emission gas condensation~~ boilers, while replacing **boilers** will always be part of a comprehensive renovation of the house, including thermal insulation and window replacement."

Justification:

The impact of support of EUR 50 million also on fossil gas boilers must be assessed in the light of climate change mitigating. The component also mentions solar systems. There are also other RES measures in the field of heating. Natural gas has comparable climate impacts to coal in accounting for methane leaks. According to the EBRD, greenhouse gas emissions from natural gas are around 625-925 gCO₂eq/kWh, depending on 2-5% of methane leaks at a 20-year global warming potential. By comparison, coal has emissions of 910 gCO₂eq/kWh. For climate protection reasons, the European Investment Bank ceases to finance projects with greenhouse gas emissions above 250 gCO₂eq/kWh after 2021. The

¹⁶ <https://www.ebrd.com/power-and-energy/ebrd-energy-sector-strategy.pdf>

¹⁷ <https://www.eib.org/en/publications/eib-energy-lending-policy>

¹⁸ https://ec.europa.eu/info/business-economy-euro/banking-and-finance/sustainable-finance/eu-taxonomy-sustain-activities_en

¹⁹ <http://vykurovanie.enviroportal.sk/kotol.aspx>

²⁰ <http://www.prog.sav.sk/index.php/energy-poverty-in-slovakia-2020-od-analysis-to-resistance-pre-faithful-non-policy>

Technical Report on the EU's Sustainable Investment Taxonomy of March 2020 even indicates a value of 100 gCO₂/kWh for gas and renewables, which will be reduced every 5 years towards carbon neutrality in 2050.²¹²²²³

- **Observation 4.5:**

We propose in the section "Investments - Restoration of public historic and listed buildings" in the section "Objectives" the following point:

"In the design and implementation of building and technical measures aimed at increasing the energy performance of the building, the aim is to emphasize the preservation of the original architecture in terms of preserving historical and monumental value." **The comment is not fundamental.**

- **Observation 4.6:**

We propose to add the following point to the section "Investments - Restoration of public historic and listed buildings" in the section "Implementation":

"In order to implement measures related to the improvement of energy efficiency, the guaranteed energy service model within the meaning of Act No. 321/2014 Z.z. on Energy Efficiency will be used."

Recital:

Due to the requirement for an average minimum amount of primary energy savings (30 %) we propose to allow administrators and owners of historical and listed buildings to use the guaranteed energy service model. In view of the potential for reducing primary energy in historic and listed buildings, measures on the part of the energy source, management and regulation of heat consumption can be considered primarily, but not on the part of the thermal envelope of the building, which supports precisely the use of the guaranteed energy service model, as these are investments with a short return time.

The comment is ordinary.

- **Note 4.7:**

We propose to add the following point to the section "Improving the energy performance of single-family houses" in the section "Implementation":

The programme includes the following measures: thermal insulation of perimeter walls, roof, ceiling and floors, replacement of windows and doors, replacement of energy source, water retention measures, composting equipment, solar thermal and photovoltaic systems, heat pumps, controlled ventilation and heat recovery system from waste air or water (recuperation). Each of the measures has its own technical specification, its own aid intensity and the maximum amount of subsidy. This will include a contribution to the expert energy assessment and project documentation.

²¹ <https://www.ebrd.com/power-and-energy/ebrd-energy-sector-strategy.pdf>

²² <https://www.eib.org/en/publications/eib-energy-lending-policy>

²³ https://ec.europa.eu/info/business-economy-euro/banking-and-finance/sustainable-finance/eu-taxonomy-sustain-activities_en

Recital:

We propose to define more precisely the supported measures and to complement measures that increase energy performance or adaptation measures but are not included in the description. The Programme should also include a contribution to expert judgement and project documentation.

The comment is fundamental.

5/ Component 3: Sustainable transport

- **Observation 5.1:**

We ask that the prioritisation of reconstruction sections in the actual implementation of the component takes more account of environmental criteria and climate **benefits as well** as the potential load factor of the tracks after reconstruction and not only the current load factor.

Justification : Rail transport is an environmentally friendly form of transport and the development of its infrastructure and the increase in its capacity have the potential to contribute to a significant reduction in transport emissions. The current workload also reflects the long-standing underinvested in rail transport. Therefore, the evaluation of priorities based on the benefit-cost assessment (BCR), where the current line load may carry a great deal of weight, as shown by the currently presented priorities of the Ministry of Transport for Railways, is not sufficient. Upgrading, accelerating, electrification of lines can lead to their higher load factor, in addition, the benefit will not only be the load factor of the lines, but also the reduction of emissions (not only due to the change in traction but also the transfer of passengers to the railways), which ultimately brings wider benefits to society as a whole. All these environmental aspects should be assessed by the BCR. Not only purely economic aspects and not only aspects from the point of view of the current track load factor.²⁴

The comment is of a fundamental nature.

- **Observation 5.2:**

On page 38, we propose to add the text as follows:

In Investment 1: Removing narrow sections in low-carbon infrastructure. Part 2 of the checklist — compliance with the 'do not significantly harm' principle

We ask to add that the climate risk assessment will be carried out according to standard criteria and standard environmental impact assessment procedures in accordance with the legislation in force, which will be complemented by separate provisions governing impact assessments of proposed activities and strategy papers on climate change.

Justification:

Given that an amendment to the Law on Environmental Impact Assessment is planned - the impact on the climate should be considered obligatory in this proceeding.

The comment is of a fundamental nature.

²⁴ <https://www.mindop.sk/priority/zeleznice>

- **Note 5.3:**

In the reform section, we ask to supplement the collection of data on daily population mobility and their application in the planned development of a methodology for project selection. At the same time, we are asking for the education of representatives of public administration and self-government in the field of cycling to be included in the reform measures. In the investment part, we ask to apply the established methodology and define the area addressed for urban cycle paths in and downstream cycle paths in nearby suburban areas.

Recital:

Data on daily population mobility using current technologies (e.g. from mobile phones) are an essential basis for developing methodology and then prioritising the construction of missing sections of cycle paths with high traffic potential. Education of representatives of public administration and self-government is essential for effective implementation of investment activities, sufficient quality of resulting solutions and avoiding the risk of low project preparedness of municipalities. The use of the proposed methodology and a clear definition of the areas addressed will ensure investment where cycling infrastructure is most efficient, in particular in relation to reducing the share of individual car transport in terms of reducing the negative environmental impacts of transport.

The comment is of a fundamental nature.

6/ Component 4: Decarbonisation of industry

- **Note 6.1:**

On page 7, we propose to add the text as follows:

The objectives of Reform 2: *Cost-effective* reduction of greenhouse gas emissions in industry say that there is a need to "reduce the use of fossil fuels in industry, on condition that it is technically and economically efficient." In addition to technical and economic efficiency, we propose to add environmental and social impacts **to the text.**

Justification:

Environmental and social requirements, not just their cost-effectiveness, which is in many cases misjudged, need to be clearly articulated in decarbonisation measures and the evaluation of individual projects. Decarbonising industry and ending the use of fossil fuels is our social responsibility, which we cannot approach only through economic and technical efficiency.

- **Note 6.2:**

On page 8, in the implementation section, we propose to add the text as follows:

"The support scheme will not support measures that would extend the life of fossil fuels beyond their economic sustainability or lead to an increase in energy **intensity**, have negative impacts on biodiversity or are not in line **with the forthcoming carbon neutrality model**".

Recital:

The decarbonisation of industry must clearly monitor and meet the objectives of achieving carbon neutrality by 2050 at the latest. In order to achieve this objective, we need the implementation of the 'Cost-effective reduction of greenhouse gas emissions in industry' reform to follow the objectives of a low-carbon strategy, complemented by a carbon neutrality model.

The need for exclusion from support for measures aimed at research, development or commercial deployment of carbon capture and storage/use technologies (CCS/CCUs) whose use to the extent necessary has not yet been confirmed and their potential to achieve a significant reduction in CO₂ emissions by 2050 is currently limited. The potential use of CCS technology also does not meet the 'do no significant harm' criterion, as CO₂ has to be transported and permanently stored, which requires the financing and construction of transport infrastructure for CO₂ (similar to today's oil and gas pipelines) and the selection of suitable sites for the repository, while it is very difficult to guarantee safe, permanent and verifiable storage of CO₂. CO₂ leakage depending on volume and concentration can also contaminate groundwater and surface water, soil and harm human health. CO₂ capture goes directly against efforts to reduce the energy intensity of the industry, as it requires energy to compress, transport and inject CO₂ into the ground. From an environmental point of view, the high demands of these technologies on water resources are also a problem.

- **Note 6.3:**

When assessing the DNSH principle for 'Reform 2: Cost-effective reduction of greenhouse gas emissions in industry', the impact on biodiversity states: 'The reform will contribute to the protection of *ecosystems through the reduction of air pollution*'.

We call for the assessment of the DNSH principle for this reform to take into account its possible impact on the protection and restoration of biodiversity.

Justification:

The reform of 'Cost-effective reduction of greenhouse gas emissions in industry' can have a significant impact on the protection and restoration of biodiversity, depending on the projects that will benefit from the reform. For example, potential support for carbon capture and storage/use technologies (CCS/CCU) would have a significant impact on energy intensity and the protection of biodiversity and water resources. Without the reform clearly identifying which projects can qualify for support, it is essential that DNSH is subject to the whole process of implementing the **reform** "Cost-effective reduction of greenhouse gas emissions in industry".

The comment is of a fundamental nature.

- **Observation 6.4:**

Reform - amendment of the Act on Integrated Pollution Prevention and Control (IPPC) - timetable: We propose to take into account the currently ongoing revision of the Industrial Emission Directive 2010/75/EU within the timetable for adopting the amendment to the Act, to be adopted in Q4 2021 and to harmonise both processes.

Recital:

In view of the parallel regulation of the European Directive, which is transposed into national legislation in the IPPC Act, it is appropriate that there should be no adjustment which, when published, will no longer be outdated due to the new directive.

The comment is not of a fundamental nature.

- **Observation 6.5:**

On page 8, we propose to add the text as follows:

"Defining how to support the decarbonization of industry on the basis of the Slovak model for **carbon neutrality**, the principle of value for money, **the best available** technologies and up-to-date knowledge from the sector."

Justification:

The principle of value for money may not take into account the long-term goal of carbon neutrality by 2050 at the latest. Slovakia does not yet have a carbon neutrality model in place, so it is appropriate that it be developed as soon as possible and at the same time that environmental criteria are taken into account until it is developed.

The comment is of a fundamental nature.

- **Observation 6.6:**

On page 11, in the section Implementation, we propose to add the text "Support will be implemented within the scope of the Ministry of Environment of the Slovak Republic in cooperation with the main materially affected sections, composed of experts from the environment of integrated *pollution permitting and control*, *project managers*, experts directly from the environmental industry and employees of material sections of the Ministry of Environment of the Slovak Republic. " on other relevant actors, in particular experts from civil society and municipalities, so that synergies in the implementation of support are balanced.

Recital:

Given the seriousness of industrial decarbonisation in terms of both economic (long-term sustainable economy) and climate (emission share), broad cooperation and synergies are key to ensuring the protection of various aspects of the public interest.

This observation is of a fundamental nature.

- **Observation 6.7:**

We propose to reformulate the first paragraph of the decarbonisation of industry component - a target where the reference to the national INECP targets and the reference to the European 2030 targets are not in line.

Recital:

The targets set out in the INECP are different from the European emission reduction targets. In this wording, paragraph does not make sense.

- **Observation 6.8:**

On page 9, under Objectives, we ask to supplement the text as follows:

In Reform 3: Amendment to the Act on Integrated Pollution Prevention and Control (IPPC), we ask to supplement the Objective that the planned amendment to the Act on Integrated Pollution Prevention and Control should respect or increase the current level of public participation in decision-making and the level of environmental impact assessment (except for the assessment of impacts on climate change, where it is necessary to supplement the modification in the *Eltúto Act*, then reflect the new regulation also for integrated In other words, that the provisions relating to participation and environmental impact assessment should not be weakened in the context of 'streamlining processes'.

Justification:

Integrated authorisation concerns large installations, with potentially significant environmental impacts, including climate change. However, streamlining the authorisation processes must not come at the expense of the public concerned's participation and control of these processes. The disproportionate burden on the competent authorities or the clarification and simplification of conditions for the business environment must not be prioritized over other values, which are also protected by the Building of the Slovak Republic: protection of health, environment, access to information and decision-making on the environment.

The comment is of a fundamental nature.

7/ Component 5: Adaptation to climate change

- **Note 7.1:**

We recommend that the Adaptation to Climate Change component should namely list the means envisaged for settling land with non-state owners. It should be noted that in addition to the purchase, the realisation of land adjustments may also be envisaged. This is not clear from the text of the component today, and rather it seems that the purchase of land is envisaged exclusively. A suitable addition may also be that the State finances the digitization of the land adjustment process so that they go faster and the configuration of critical parts takes place as soon as possible.

Recital:

By 2020, complex land adaptations in Slovakia were carried out in only 12% of the territory, while more than 3,000 cadastres still need to make land adjustments. It may therefore be the case that, when the land is purchased, the land in register E will be purchased, to which there will be no access and thus the State will not be able to simply provide the planned management on them. Therefore, the possibility of land adjustments should be made possible in the settlement of land and the State would decide, depending on the specific territory, whether buy-outs or land adjustments are more appropriate in order to achieve a higher proportion of the representation of state land in protected areas. However, in territories where the State has high representations of land ownership (fragmented into many parcels), the correct choice of land conversion perimeter may contribute to a significant increase in the share of state land in protected areas at a lower cost than if land had to be purchased in those areas. In territories with a low share of state ownership, of course, land purchase is the only realistic alternative.

This comment is of a fundamental nature

- **Observation 7.2:**

We call for the financial budget for the Adaptation to Climate Change component to be doubled from the proposed 2.5% of the total budget of the Recovery and Resilience Plan to at least 5%.

Justification:

The regulation for the Recovery and Resilience Plan provided for 37% of the expenditure to be earmarked for climate support - including biodiversity, which is represented in this component under the Plan. The budget of the whole component - EUR 150 million - represents just under 2.5% of the entire budget of the Recovery and Resilience Plan and just under 7% of the Green Economy, which we consider insufficient and worrying. The Green Economy should represent a quality mix of reforms and measures targeting climate

change, biodiversity restoration and energy production and use. With the proposed budget, biodiversity protection cannot be considered to be an adequately represented element throughout the Recovery and Resilience Plan, nor as an evenly represented element within the Green Economy area.

This comment is fundamental.

8/ Component 6: Inclusive education

- **Note 8.1:**

In the section "Investments – expansion of kindergarten capacities" in the paragraph implementation add the following paragraph:

The renovation of existing public buildings will support measures to improve the energy efficiency of buildings, adaptation measures and measures to ensure the quality of the indoor environment in the building.

Recital:

Within the framework of the component and the investment in question, we propose to add a paragraph defining what measures can be financed as part of the renovation of a given existing building. In addition to energy efficiency improvement measures, renewal should also consist of adaptation measures (i.e. vegetation roofs, shielding technology, etc.) as well as

measures to ensure the quality of the indoor environment in the interior (i.e. measures to ensure a sufficient supply of fresh air, a high-quality supply of daylight and artificial lighting, thermal and acoustic well-being).

Several measurements show poor quality of the indoor environment (KVP) in Slovak schools. The internal environment in schools is an important factor, given that children are a particularly sensitive population. Analyses carried out in Slovak schools confirm that KVP has an impact on children's health as well as on their growth, learning performance and attendance. Higher air quality in the classroom can improve student performance by up to 15 percent. In areas without forced ventilation and adequate heating, or with insufficient thermal protection, there is a problem with low temperature in winter. This is especially true if the occupancy of the space is low. Conversely, if the occupancy of the space is high, CO₂ levels increase rapidly and air quality deteriorates. Users are then forced to open windows. However, opening windows does not automatically guarantee an increase in air quality. The temperature of the space may subsequently decrease, which reduces thermal well-being and local discomfort may also arise due to drafts. The measurement showed that in a critical week the CO₂ concentration in the library space climbed up to 4000 ppm. In general, the concentration should not exceed 1000-1500 ppm. At concentrations above this level, there is a feeling of drowsiness and fatigue, a decrease in concentration on activities, and a headache occurs. A value of 5000 ppm determines the limit at which long-term stay in space is not recommended.

However, in experience, we can say that these are typical problems for spaces where many people gather, such as classes, libraries, etc. Problems with air quality mainly concern well-insulated buildings without forced ventilation. This occurs, for example, after the renovation of a building in which the thermal properties of the building envelope have improved and forced ventilation has not been installed. At the same time, improving the thermal insulation properties of the envelope increases the airtightness of the building, which requires paying more attention to ensuring air exchange.

The comment is fundamental.

9/ Component 7: Education for the 21st century

- **Note 9.1:**

In the chapter "Investments – completion of school infrastructure" in the section "Implementation", we propose to add the following paragraphs:

For investments related to increasing the energy efficiency of buildings, the guaranteed energy service model within the meaning of Act No. 321/2014 Z.z. on Energy Efficiency can be used.

The renovation of existing buildings will support measures to improve the energy efficiency of buildings, adaptation measures and measures to ensure the quality of the indoor environment in the building.

Justification:

Within the framework of the component and the investment in question, we propose to add a paragraph defining what measures can be financed as part of the renovation of a given existing building. In addition to energy efficiency improvement measures, renewal should also consist of adaptation measures (i.e. vegetation roofs, shielding technology, etc.) as well as

measures to ensure the quality of the indoor environment in the interior (i.e. measures to ensure a sufficient supply of fresh air, a high-quality supply of daylight and artificial lighting, thermal and acoustic well-being).

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However, in experience, we can say that these are typical problems for spaces where many people gather, such as classes, libraries, etc. Problems with air quality mainly concern well-insulated buildings without forced ventilation. This occurs, for example, after the renovation of a building in which the thermal properties of the building envelope have improved and forced ventilation has not been installed. At the same time, improving the thermal insulation properties of the envelope increases the airtightness of the building, which requires paying more attention to ensuring air exchange.

- **Note 9.2:**

In the component "Education for the 21st century" in the section "Investments – completion of school infrastructure" in the paragraph "Implementation", we propose to add the following paragraphs:

For investments related to increasing the energy efficiency of buildings, the guaranteed energy service model within the meaning of Act No. 321/2014 On Energy Efficiency will be used.

The renovation of existing buildings will support measures to improve the energy efficiency of buildings, adaptation measures and measures to ensure the quality of the indoor environment in the building.

Recital:

According to the design of the component, investments are considered to be 100 % climate, i.e. in the case of renovation of a school building, the minimum average primary energy saving of 30

%. For this reason, we propose (as in the Inclusive Education component, for example) to enable beneficiaries to benefit from the guaranteed energy service model.

Within the framework of the component and the investment in question, we propose to add a paragraph defining what measures can be financed as part of the renovation of a given existing building. In addition to energy efficiency improvement measures, renewal should also consist of adaptation measures (i.e. vegetation roofs, shielding technology, etc.) as well as

measures to ensure the quality of the indoor environment in the interior (i.e. measures to ensure a sufficient supply of fresh air, a high-quality supply of daylight and artificial lighting, thermal and acoustic well-being).

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The comment is fundamental.

- **Observation 9.3:**

In order to significantly strengthen the influence of this component on the green transition and to fulfill the principle of "do no significant harm", we ask:

- ensure the development of knowledge and skills to promote sustainable development, in line with the Enviro strategy 2030.
- that education reform focuses on the balanced development of skills and competences and that this is reflected across the Education component for the 21st century. This includes the proposal that the curriculum reform should take into account the OECD Learning Compass 2030 education framework and the skills for promoting sustainable development defined by UNESCO.
- among the objectives of the component to explicitly complement the increase in climate literacy, skills for promoting sustainable development, as well as global competences.
- Jobs will not only change in the future as a result of digitalisation. As a result of the transition to a low-carbon and circular economy, the structure of the economy will change, which should be reflected in the text, highlighting the skills mismatch.

Recital:

The fundamental flaw of the Education component for the 21st century is the insufficiently reflected climate crisis and, overall, the need to increase environmental and climate literacy. The main challenges of education for the 21st century highlight that Slovak pupils lag behind in reading, science, financial literacy as well as in global competences. However, the proposed reforms focus disproportionately on the development of digital skills and lack a comprehensive view, evaluation and reflecting real needs. The component ignores the fact that it is not only technical solutions that are enough for the successful implementation of the current Recovery and Resilience Plan, as well as for achieving carbon neutrality by 2050 and sustainable development. Slovakia needs educated, skilled and competent people who are able to enforce the green transition in practice.

This comment is fundamental.

- **Observation 9.4:**

We propose to add climate change to the main challenges to which the education system should respond.

Recital:

One of the most serious challenges of our time, climate change, is not even mentioned in the chapter. Reform of the objectives, content and forms of education must also include the development of climate literacy, as well as the skills and attitudes needed to successfully live in a low-carbon society.

This comment is essential

- **Observation 9.5:**

We ask to take into account key aspects of the 'green transition' reform, in particular:

- Updating education objectives, content and methods at every level to lead to a comprehensive understanding of climate change as well as other megatrends.
- Development of support tools, including financial mechanisms, to make environmental and climate education a firm part of the work of educators.

- Strengthening the preparation of future educators, as well as further continuous education, so that they are able to effectively teach environmental and climate education.

Recital:

The so-called 'green transistor' is narrowed to building digital infrastructure and increasing the energy efficiency of school buildings.

This observation is essential

- **Observation 9.6:**

We ask the component to be thoroughly supported by high-level evidence and recommendations.

Recital:

The overly narrowly worded starting points for this chapter are also reflected in the list of literature used, with references not addressing the themes of the proposed reforms - curriculum and textbook reform and teacher education and development. The material to be determined by the ambitious Recovery and Resilience Plan must be thoroughly supported by high-level evidence and recommendations. These include, for example:

- [Oecd. \(2020\). What Students Learn Matters: Towards a 21st Century Curriculum](#),
• International Bureau of Education:
- [Ibe. 2017. Reconceptualizing and Repositioning Curriculum in the 21st Century: A Global Paradigm Shift](#)
 - 1 [Ibe. 2019. Future Competences and the Future of Curriculum: A Global Reference for Curricula Transformation](#)
- The starting sources shall also include:
 - 1 Envirostratégia 2030

○ Proposal for priorities for the implementation of the 2030 Agenda (adopted by Government Resolution 273/2018)

This comment is fundamental.

10/ Component 11: Modern and affordable healthcare

- **Observation 10.1:**

In the section "Investments 2 and 4" in the paragraph "Implementation", we propose to add the following paragraphs:

For investments related to increasing the energy efficiency of buildings, the guaranteed energy service model within the meaning of Act No. 321/2014 Z.z. on Energy Efficiency can be used.

The renovation of existing buildings will support measures to improve the energy efficiency of buildings, adaptation measures and measures to ensure the quality of the indoor environment in the building.

Recital:

Due to the requirement to reduce primary energy, we propose (as in, for example, **inclusive education component to enable beneficiaries to benefit from the guaranteed** energy service).

Within the framework of the component and the investment in question, we propose to add a paragraph defining what measures can be financed as part of the renovation of a given existing building. In addition to energy efficiency improvement measures, renewal should also consist of adaptation measures (i.e. vegetation roofs, shielding technology, etc.) as well as

measures to ensure the quality of the indoor environment in the interior (i.e. measures to ensure a sufficient supply of fresh air, a high-quality supply of daylight and artificial lighting, thermal and acoustic well-being).

11/ Component 13: Long-term social health care

- **Note 11.1:**

Due to the requirement to reduce primary energy, we propose (as in, for example, energy service. Within the framework of the component and the investment in question, we propose to add a paragraph defining what measures can be financed as part of the renovation of a given existing building. In addition to energy efficiency improvement measures, the recovery should also consist of

adaptation measures (i.e. vegetation roofs, shielding equipment, etc.) as well as measures to ensure the quality of indoor environments in the interior (i.e. measures to ensure a sufficient supply of fresh air, high-quality supply of daylight and artificial lighting, thermal and acoustic well-being). The comment is fundamental.

12/ Component 14: Business environment

In the part of the investments related to the renovation of buildings in the paragraphs "Implementation", we propose to add the following paragraphs:

For investments related to increasing the energy efficiency of buildings, the guaranteed energy service model within the meaning of Act No. 321/2014 On Energy Efficiency will be used.

The renovation of existing buildings will support measures to improve the energy efficiency of buildings, adaptation measures and measures to ensure the quality of the indoor environment in the building.

Recital:

inclusive education component to enable beneficiaries to benefit from the guaranteed

- **Note 12.1:**

On page 6, section "Introducing the "1in-2out" rule"

"New rules will be introduced to ensure an efficient process of reducing ("1in-2out" rule, application of protection against unjustified goldplating)."

We propose to add an overarching rule to ensure that these rules are implemented only on condition that they do not cause a reduction in standards for the protection of the environment, climate and health of the population.

Recital:

Both the '1in-2out' rule and 'unjustified goldplating' are framed by purely economic interests 'burden reduction' and 'increasing competitiveness', without taking into account the impact on other protected interests.

13/ Component 15: Justice reform

- **Note 13.1:**

In the "Investments – Investments in buildings and reorganisation of courts" in the paragraph "Implementation", we propose to add a third point to measures to ensure the quality of the indoor environment in the building.

Recital:

Within the framework of the component and the investment in question, we propose to add a paragraph defining what measures can be financed as part of the renovation of a given existing building. In addition to energy efficiency improvement measures, renewal should also consist of adaptation measures (i.e. vegetation roofs, shielding technology, etc.) as well as

measures to ensure the quality of the indoor environment in the interior (i.e. measures to ensure a sufficient supply of fresh air, a high-quality supply of daylight and artificial lighting, thermal and acoustic well-being).

The comment is fundamental.

14/ Component 17: Digital Slovakia

- **Note 14.1:**

On page 39, we propose to exclude the following chapter:

Chapter 3.2.1.3 Digital skills of seniors and SeniorPad

Justification:

The translator envisages improving seniors' access to electronic services by purchasing 280,000 tablets. We recommend that the funds allocated to this call be deleted altogether because, according to the chapter on page 5, the sub-heading "Better services for citizens and entrepreneurs" writes "better services to the state ... including the mobile version of the display". It is not so clear why it would be necessary to improve seniors' access to electronic services through another device that the senior already mostly owns and, if so, is much more practical for transmission. We recommend that the promoter focus more on the energy poverty of the senior and, if so, let the volunteers check how seniors could contribute to saving money on energy and how to less damage the air by improper combustion.

The comment is of a fundamental nature.

- **Observation No 14.3:**

On page 47.48, 50, we propose to exclude the following chapter

Making services and confirmations available and provided in the European Blockchain Infrastructure (EBSI)

Justification : The translator envisages a link to a structure that does not yet exist in Slovakia, and it is also unclear whether blockchain technology will be used for this solution. We recommend considering this investment.

The comment is classic in nature.

- **Observation No 14.4:**

On page 53, we propose to exclude the following chapter:

Chapter 3.2.2.3 Fast grants – Hackathony

Justification: The translator foresees innovations that will arise from hackatons. However, the promoter did not elaborate on his proposal on how to deal with the need to have correct, machine-processable data without errors, preferably as open data, which is currently significantly absent. We recommend moving the funds to support institutes such as the IEA, which could use the funds to expand capacities, education. At the same time, the institute can organize such hackatons at significantly lower costs. An example is the hackaton of the Czech National Audit Office <https://www.hackujstat.cz/>.

The comment is of a fundamental nature.

- **Observation No 14.5:**

On page 53, we propose adding the following chapter:

Chapter 3.2.1.1 Better services for citizens and entrepreneurs

The objectives "*Objectives*" section says "*Deploying Government to address 16 complex life situations for EU citizens and entrepreneurs*"

We ask to add what 16 complex life situations are involved. We anticipate that these situations will include services for improving the environment and ownership relationships, which are linked to the construction of mitigation and adaptation solutions.

Justification:

The submitter does not specify the essential services in the text.

The comment is of a fundamental nature.

15/ We propose adding a new component: Preparing the conditions for capacity generation for decarbonisation of regions

We propose to add a new component Preparation of conditions for capacity generation for decarbonisation of regions

Component description

The component includes the preparation of an appropriate environment for the creation of new capacities for the planning and coordination of sustainable energy at the level of strategic and planning regions/territories

24 urban development - the so-called Regional Sustainable Energy Centres (RCUE). RCUE are subject to a special measure within the framework of the INEKP until 2030, which foresees their financing from the ESI Funds and the Sr.

It is therefore about preparing an important structural reform (but not implementing it), in particular:

- Preparation of the organisational and administrative model for the future RCUE and ensuring consensus on the model among key regional development actors (in particular municipalities).
- Development of standardised methodologies for regional energy planning in Slovakia.
- Preparation of professional capacities for RCUE and preparation of the continuing vocational training system of RCUE personnel.
- Preparation of a single model of regional energy information system (REIS) for RCUE.

Timeframe and milestones: 2021-2023

Milestone 1: Finished organizational and administrative model RCUE, Q4 2021

Milestone 2: Memorandum of regional development actors (in particular municipalities) on support for the proposed RCUE model, Q2 2022

Milestone 3: Ready-made package of standardised methodologies for regional energy planning,
Q4 2023

Milestone 4: Final design of RCUE personnel training system, Q4 2023

Milestone 5: Finished sample REIS, Q4 2023

Estimated cost: EUR 3 million

Addressee: Ministry of Economy of the Slovak Republic/Slovak Innovation and Energy Agency

Recital

Preparing an appropriate environment for the emergence of new capacities for the planning and coordination of sustainable energy at CFP/DMR level (RCUE) is the preparation of an important structural reform (but not its implementation). Successfully managing this reform is a fundamental

²⁴Zamkovský, J.: Capacities for energy planning in the regions and implementation of regional energy policy. Friends of the Earth-CEPA, 2021.

(http://energoportal.org/images/dokumenty/Vystupy_EVS/EVS_navrh-opatreni_04_RCUE.pdf)

the fulfilment of the Slovak Republic's international commitment to achieve carbon neutrality by 2050. Without carbon-neutral regions, Slovakia will not achieve carbon neutrality. Nor can regions, without adequate expertise, develop into carbon neutrality.

At present, there are no similar capacities at regional level and no further basic conditions are created for the coordinated progress of the regions towards consistent decarbonisation. Energy (of wider importance) at regional level is natural and its development has long been directed primarily by accessibility to subsidy programmes, namely systems of individual and mutually purposefully and time-free individual projects.

The implementation of the reform (establishment and operation of the RCUE) is subsequently planned to be financed by the ESI Funds in the current programming period 2021-2027. Experience to date in implementing reforms has repeatedly confirmed that their success depends on well-prepared administrative, personnel and other conditions.

The preparation of this reform will ensure that new expertise is created in the regions capable of ensuring not only their gradual decarbonisation and increasing their energy self-sufficiency by reducing energy needs and consumption and the efficient use of renewable energy sources (and thus systematically reducing CO₂ emissions), but also the economic stability of the regions and their resilience to increasing external instability.

Since support for the creation of a new infrastructure for planning and coordination of sustainable energy at the level of CFP/ÚMR is already envisaged in the draft Partnership Agreement and also in the preparation of op Slovakia, this component will significantly positively affect the efficient and efficient use of public funds in the Slovak Republic in the near future. In addition, new capacities

(RCUE) will bring significant permanent economic benefits to municipalities in framework of the CFP/IMR.

The component is in line with the Low Carbon Strategy for the Development of the Slovak Republic until 2030 with a view to 2050, the Integrated National Energy and Climate Plan for 2030, as well as the European Union's climate and energy efficiency targets. Strengthening regional capacities with a view to the effective transposition of EU policies 'top-down' is also one of the priorities repeatedly highlighted by EC and EU representatives.

Green component dimension

The component will create the appropriate conditions for the emergence of new planning and coordination infrastructure in regions (RCUE network) that will direct their development towards decarbonisation, reducing greenhouse gas emissions, increasing energy efficiency in all sectors (in particular buildings, public lighting, regional transport, industry and agriculture) and the sustainable use of renewable energy sources. This will make a significant contribution to achieving the EU's 2030 climate target, climate neutrality by 2050 and the National Energy and Climate Plan.

²⁵Tinker, P.: Analysis of the potential for cost and energy savings through KEC and RCUE. Ministry of Economy of the Slovak Republic, February 2021.

Digital dimension of the component

The component will create the preconditions for the efficient use of IoT technologies in regional energy planning, the application of smart solutions to measure and monitor the energy intensity of individual sectors at regional level, the management of their energy consumption and the assessment of the fulfilment of emission and energy targets in the regions.

Do no significant harm

The implementation of the component will make a significant contribution to climate stabilisation, the definition and application of environmental sustainability criteria for the energy use of local renewables, as well as to the reduction of air pollution.

16/ We propose adding a new component: Circular economy and green public procurement

- **Note 16.1:**

We propose to add the 'circular economy' component to the recovery plan, as it is one of the important pillars of the European Green Deal, it is important and neglected within our national economy (the already outdated narrative and philosophy of 'waste management' persists) and therefore requires reform action.

The renovation plan does not have a comprehensive section on this subject, with the exception of non-conceptual and mostly insufficient measures for some reforms (e.g. when renovating buildings, but when it is not clear how it will be loaded with sorted construction waste - material flows of sorted waste are not closed). Slovakia has systemic shortcomings in this area, which also has great economic and social potential. There is a need to set up a system that supports the circular economy and sets the rules for green public procurement in a fair, clear and comprehensible way. The Institute of Green Public Procurement should be compulsory for all ministries of the Slovak Republic. Without the application of green public procurement rules, a transistor to a greener economy makes no great sense.

The circular economy is a system of connected vessels - it works on green energy, it needs new designs, innovations, technologies, new types of products and services. Services linked to the creation of new and valuable jobs. CE requires extensive and functional electronization of the state administration. It is necessary to look at the overall position, which must lie in the waste hierarchy and be built on waste prevention in the first place, then reuse and recycling. Effective implementation of the principles of the circular economy can also mean a significant saving of financial resources for municipalities or the state itself. It should be stressed that the State should lead by example – to buy goods and services that are as environmentally friendly as possible and so - with its own demand to support the emergence of new markets and new opportunities for the realisation of its citizens.

Efficiently set up circular economy system:

- Works on renewable energy sources
- It therefore actively promotes innovation, research and new design, new types of services and technologies
- It addresses the issue of the content of critical materials necessary for the technologies of the future and their profit from landfills or mining waste.
- It has clearly laid down green public procurement rules for all ministries and municipalities
- It supports the creation and expansion of the market for new materials, services and recyclates, not only packaging, but also includes furniture or construction waste, but also building materials (e.g. glass window filling containing recycled)²⁵
- It has clearly defined rules for the content of recyclates in products
- It actively supports a circular type of services such as repair, lending or sharing. Support is also possible through tax breaks for providers of these services or customers themselves. Sweden, for example, favours the purchaser.^{26,27}

²⁵ <https://ec.europa.eu/jrc/en/publication/recovery-critical-and-other-raw-materials-mining-waste-and-landfills>

²⁶ <https://repair.eu/news/right-to-repair-is-blossoming-all-over-europe/>

²⁷ <https://www.theguardian.com/world/2016/sep/19/waste-not-want-not-sweden-tax-breaks-repairs>

- It has a clear, functional and "user friendly" portal Waste Management Information System (ISOH)
- Promotes the use of best available techniques (BAT) - even for non-recyclable waste, BAT prefers landfilling or energy recovery
- Returns nutrients derived from bio-recylisions back to soil through an effective agricultural policy
- Extends producer responsibility to textile waste
- It has set milestones (2025-35%) to achieve a strategic 70% of green public procurement by 2030.