Finance for the energy transition – where’s it at?

Climate action in EU Cohesion Policy funding for Slovakia, 2014-2020
Slovakia has so far missed the opportunity to bind Cohesion spending with decarbonising its energy sector, which is marked by high dependence on imported fossil fuels and high carbon intensity. Any systemic change in the energy economy would require liberalisation and decentralisation which contrasts with the interests of the largely monopolistic ownership structure of Slovakia’s energy sector. The state administration also has a strong influence on other areas crucial for system change such as research and development, education, business support or regional development. In all of these sectors, barriers to liberalisation and decentralisation remain strong. That is why the Partnership Agreement – although formally acknowledging the low-carbon agenda as a priority – does not create any space for changing the way Slovakia produces, distributes and consumes energy. In all the Slovak strategies, the low-carbon economy is mentioned similarly to the use of the term ‘sustainable development’ in the past – the concept is described and its importance acknowledged, but when it is time to translate it into a spending strategy and setup of investment measures, it is obvious that it is either not understood or purposefully neglected. The Partnership Agreement covers climate action as a priority but fails to mainstream it into other priorities. Statements from the Partnership Agreement do not translate into concrete actions within Operational Programmes nor to the project selection criteria. Slovakia is again focusing on too many priorities, spreading the funds thin and leaving investment gaps large. Energy is a good example, where energy efficiency and renewables get EUR 1.35 billion while the calculated investment needs reach EUR 17.5 billion. The climate action within the Slovak Cohesion Policy setup follows the bottom line of energy and climate commitments which are not strong enough to push Slovakia up from the business as usual trajectory.
The energy sector of Slovakia has for decades been based on nuclear power - with 64.9% of all electricity produced - and fossil fuels – mostly gas and coal. Fossil fuels cover 71.7% of gross inland energy consumption and Slovakia is almost 90% dependent on their import. In the renewables sector, large hydro installations have the highest share and cover 14.8% of Slovakia’s electricity consumption. Biomass heat covers 93.8% of all RES heat consumed in Slovakia. The sustainability of utilising these sources is intensively questioned in Slovakia on the grounds of biodiversity, ecosystem stability and climate change adaptation abilities.

More than 30% of heat consumed goes through centralised district heating systems. Gas and solid fuels cover most of the production. Medium-sized heating plants (3–20 MW) account for a third of heat consumed. Increasing energy prices and decreasing energy consumption have, however, led to a decrease in connections to district heating systems, which has resulted in the government protecting the heat providers with a law discouraging consumers from disconnecting through strict conditions on emissions and performance efficiency of appliances they would wish to switch to.

Slovakia is the fourth most energy-intensive country in the EU with 0.337 toe per 1,000 EUR of GDP. The overall energy consumption of industry fell rapidly between 1990 and 1995, but then remained stable until 2013. In 2011, the Danish Energy Agency calculated a 70% energy efficiency potential in Slovak industry based on best practices in industrial sectors within the EU27.

Official estimations of energy savings potential in buildings reach up to 30-50% of current energy needs of the sector. More detailed assessments in some regions show potentials of more than 70%.

The law on energy efficiency No. 321/2014 sets a good framework as is required by the Energy Efficiency Directive and the Energy Performance of Buildings Directive, but the political will to invest is missing. Single family houses still get no support, although good examples on how to support energy savings exist in the Czech Republic where the state is investing EUR 1 billion within the New Green Savings initiative.
The climate performance of energy consumption has not changed at all with the greenhouse gas intensity of energy consumption reaching 96.9% of the reference year 2000 in 2013.147 This means that Slovakia consumes energy with the same climate impact as thirteen years ago. Slovakia would have to bring in strong policy and regulation to shift this trend. But the current Energy Policy and Energy Efficiency Action Plan show no signs of such ambition: The Energy Policy is heavily fixated on ‘energy security’, interpreted as an undisturbed energy supply based on nuclear energy and gas imports. Renewables are seen as complementary. Decentralised local energy production and consumption or energy self-sufficiency have no place in the picture.

Distribution network development is focused on high capacity interconnections, especially with Hungary. Smart grids are mentioned strictly descriptively in the energy policy with a vague task to develop them. No specific measures or plans are visible. Smart metering is set to meeting the minimum required by the Energy Efficiency Directive. The only place where consumer demand management is tackled is within awareness-raising projects implemented by the Slovak Innovation Energy Agency.

Top priority within the Energy Union debates in Slovakia is given to gas and oil distribution. During the visit of European Commission Vice-President, Mr Katainen, the Slovak prime minister announced a dedication to the Eaststring gas pipeline connecting CEE countries to the planned South Stream pipeline. Another project promoted by the Slovak government is to safeguard the existence of its key oil distribution infrastructure – the Družba oil pipeline operated by the recently re-nationalised company, Transpetrol, which is losing revenues. The respective Bratislava – Schwechat pipeline could salvage the situation by connecting Družba to the OMV refinery in Schwechat.

Nothing in current official documents on energy suggests that Slovakia is planning to abandon its energy-intensive development path. Policy is fixed on meeting the needs of large energy providers and consumers. During the 2030 targets debate, Slovakia has strictly insisted on non-binding targets, only allowing for emissions reductions where the country is exempt from reductions until 2021. Nuclear energy is considered key for achieving the 2050 objective.148

**EU FUNDS: A SECOND STATE BUDGET**

According to the 6th Cohesion report149, almost 90% of all public investments over the 2011–2013 period in Slovakia were mainly financed by European cohesion and structural funds, which was the highest share in the EU. This made the National Strategic Reference Framework 2007–2013, the basic strategic planning document for the spending of EU funds, the most important investment strategy of the country.

However, looking at the final setup of the Partnership Agreement and of the Operational Programmes, it is hard to identify any traces of energy transformation in its setting. The Cohesion Policy setup in Slovakia resembles only one thing: a second state budget.

The Partnership Agreement covers all sectors of public spending from healthcare, to business support, education, infrastructure, environment, research and development. This is all in order. It, however, does not set the spending in these sectors into a single, identifiable development path that would suggest any intention to transform the Slovak economy.

The results of ex-ante evaluation acknowledge this by stating that the ‘[PA] misses a better interconnection of [the] sustainable growth topic as a cross-cutting issue which does not relate solely to environmental protection but also to R&D, eco-innovation, transport, low-carbon economy, consumption and prevention aspect in the labour market [e.g. green jobs]. During implementation it will be important to stress the role of sustainable growth as a competitive advantage in the long run.’150

**EU FUNDS NOT SUPPORTING THE TRANSITION TO LOW-CARBON ECONOMY?**

In all Slovak strategies, the low-carbon economy is mentioned similarly to the use of the term ‘sustainable development’ in the past: The concept is described and its importance acknowledged, but when it is time to translate it into the spending strategy and set-up of investment measures, it is obvious that it is either not understood or purposefully neglected.

The 2014 National Reform Programme (NRP) dedicates a chapter to climate action. The NRP states that to achieve the 2030 targets Slovakia will not be able to stay on the business as usual trajectory and will have to ‘carry out significant emissions reductions in non-ETS sectors, including transport, buildings and agriculture’151. Slovakia was supposed to have elaborated a low-carbon development

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147 Source: Eurostat: http://ec.europa.eu/eurostat/web/energy/data/main-tables
150 Partnership Agreement, page 77.
strategy until 2030, in 2012, but the strategy is still not ready. One of the priorities within the low-carbon economy debate is to push for inclusion of nuclear energy as a low-carbon technology.

Although the NRP is mentioned as a base document for the elaboration of the Partnership Agreement, it is very general in setting the framework for Cohesion Policy spending, not connecting the problems identified in the analytical chapters to the investment opportunities in the Cohesion Policy.

The Partnership Agreement itself has similar features. It mentions all obligatory strategies and commitments, sets a bottom line strategy and lists activities to be financed with no prioritisation. There is, however, no reference to non-binding strategies such as the Low-Carbon Roadmap 2050 which could have provided a more robust direction for its investment strategy.

In its Sustainable Development chapter, the Partnership Agreement names several instruments and mechanisms through which it means to mainstream resource efficiency and climate performance into the implementation,153 for example green public procurement or the climate performance evaluation through CO2MPARE. Although green public procurement (GPP) is by law included in national procurement procedures, no clear methodology and capacity exists to effectively implement it in practice. Also, GPP does not make it beyond the Partnership Agreement. No OP mentions it as a principle which it means to follow.

No climate mainstreaming performance evaluation is planned so far in the evaluation plan of the Partnership Agreement. So it is hard to find any trace of substance...
behind the stated EUR 2.36 billion assigned to climate action.\(^{154}\)

**THE ROLE OF INNOVATION, RESEARCH AND DEVELOPMENT: STUCK IN THE PAST**

Investments under the Partnership Agreement in research and development are based on the current Strategy for Intelligent Specialisation which sets priorities according to the existing dominant industry sectors: automotive, electronics and steel processing.\(^{155}\) In addition, the PA sets efficient use of resources, eco-innovation and emissions reduction as ‘key societal priorities’ and adds sustainable energy, environmental infrastructure and agriculture to the list, creating a basic hook for green innovation.\(^{156}\) This is roughly translated into the list of supported measures, where eco-innovation, resource efficiency and environmentally-oriented activities are mentioned.\(^{157}\)

Potential is there. Slovakia allocates EUR 150 million to energy efficiency and environmentally-friendly technologies in SMEs. For some reason, however, all allocations originally planned for low-carbon business support (almost EUR 75 million) were shifted elsewhere in the final programme versions. This may show a lack of confidence in the low-carbon economy concept.

Overall SME development support amounts to EUR 143 billion\(^{158}\) which is a bit over 10% of the overall allocation. As SMEs are usually drivers of economic change, the focused support for SME development in low-carbon and ‘green’ sectors of the economy could have made a difference. Most of the allocated funding is, however, general SME support without being connected to the energy or resource efficiency mainstream and the only allocations for low-carbon technologies and processes in SMEs were deleted. This change diminishes the horizontal integration of low-carbon technologies and shows that Slovakia does not want to prioritise them.

No thematic orientation is visible in the OP on Research and Innovation (OPRI) either. The OP dedicates a meagre EUR 8.3 billion to low-carbon processes and innovation and climate resilience. The rest is unspecified R&D support and the OP gives no preference to ‘green innovation’ in its evaluation framework. The only hook remains the general setup of the Partnership Agreement. Whether this is enough will be visible when the first calls are launched and more precise rules will be set.

**ENERGY FOR THE LOW-CARBON ECONOMY: UNDERFUNDED AND MISGUIDED**

Energy savings, energy efficiency and renewables utilisation receive EUR 1.35 billion (9.8% of the overall EU support within the Investment for Growth and Jobs objective) including controversial energy efficiency measures in large enterprises and cogeneration in fossil-fuelled installations. Energy efficiency processes in industry generate additional income through energy consumption saved per unit of production. This way, the companies gain public support for economically feasible modernisation of their operation. In cogeneration the OPQE will support highly efficient gas installations which can improve energy efficiency and decrease air pollution but will not have a sufficiently positive climate impact and will not decrease import dependency, so should not be considered under the climate action element of the programme.

In 2012, CEE Bankwatch Network published officially estimated investment needs connected to achieving the EU 2020 targets in energy and covering the refurbishment needs of Slovak residential building stock, totalling EUR 17.5 billion.\(^{159}\) The huge investment gap again shows that not everything can be funded properly when too many priorities are supported.

**SMALL RES FOR HOUSEHOLDS AND MUNICIPALITIES A SMALL STEP FORWARD**

Renewable energy gets a thin EUR 169 million, with EUR 65.7 million supporting micro PV installations in households and to some degree on public buildings. The rest is made up of EUR 55.2 million for biomass installations up to 20 MW and around EUR 47 million for other RES mostly going to thermal heatpumps in households.

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154 See page 18 on ‘Climate mainstreaming’


156 Partnership Agreement, page 12.

157 Partnership Agreement, page 80.

158 Calculated as the sum of relevant categories of interventions extracted from final OP versions.

This support is very welcome as it stimulates households to plan more complex energy refurbishment projects and start thinking about their own energy production capacities. The allocations, however, are rather meagre. Households (both in single family houses as well as apartment houses) will get around EUR 112 million for RES installations through financial instruments. Energy efficiency in the housing sector is limited to apartment blocks, leaving out half of Slovak households living in single family houses, even though only about 15% of these are to some extent renovated. The Integrated Regional OP dedicates EUR 111.3 million to energy efficiency in the housing sector which will be distributed through financial instruments within the Slovak Investment Holding. When we compare it to the EUR 1 billion allocated for the New Green Savings Scheme in the Czech Republic, the enthusiasm rather seeps away. This, however, goes beyond Cohesion Policy and would require a look at how the Emissions Trading System and investing of its revenues are working in Slovakia.

Financial instruments are currently under preparation with the purpose to support small scale renewables on buildings Slovakia. The Slovak Innovation and Energy Agency is starting its first EU-funded support for individual households (single family houses). So far, it is hard to predict the impact of this support as this kind of support has not been tried before.

**FEEDING THE OLD HEATING SECTOR**

Existing heat producers have tapped into EU funds quite effectively. They claim support from two measures within the ‘Quality of Environment’ Operational Programme. One is biomass support and the other is cogeneration and district heating systems.

The positive contribution of biomass support is questionable as existing fossil fuel-powered installations up to 20 MW will be reconstructed to co-fire biomass. Supporting this type of installation will create a lock-in effect as a complete phase out of fossil fuels is not required. By adding biomass to existing fossil fuel installations, compliance with EU legislation on emissions and air pollution should be achieved, however, at the same time, fossil fuel production capacity is maintained for the long term, although there is much space for reduction of energy consumption and switching to renewables. In addition, support for biomass use is problematic. Slovakia has been exceeding its sustainable forest harvest levels for over a decade. Existing support for heat producers and insufficient legislation on sustainability of biomass energy use have led to disastrous practices such as clearcutting river banks, clearing of forest floors or

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**GRAPH 57:** Split of renewable energy sources by technology.

Source: our own calculations based on approved Operational Programmes according to categories of intervention.

<table>
<thead>
<tr>
<th>Energy Source</th>
<th>Budget (euro)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solar</td>
<td>65'750'000</td>
</tr>
<tr>
<td>Biomass</td>
<td>55'270'000</td>
</tr>
<tr>
<td>Other renewable energy</td>
<td>47'980'000</td>
</tr>
<tr>
<td>Wind</td>
<td>0</td>
</tr>
</tbody>
</table>
clearcutting so-called white areas which are not regulated like forests are. Slovakia will have to introduce strong sustainability criteria for support of biomass projects if it wants to prevent further damage to its ecosystems.

Apart from RES support, the OPQE supports the rehabilitation of centralised heating systems and high-efficiency cogeneration with EUR 185 million. The setup excludes coal-powered installations, but not fossil fuels in general so, in this case, gas powered installations will receive support.

Keeping the existing heating supply systems running has two aspects. On the one hand, bigger systems are more efficient and it is easier to ensure compliance with air pollution standards. On the other hand, the heating market is changing rapidly with energy consumption decreasing and new small-scale technologies such as heat pumps or solar heating emerging. So, large-scale public support to an outdated gas-based heating system will further Slovakia’s import dependency and may prove to be an inefficient burden that acts as a barrier to Slovakia adopting new technologies within the next few years.

The heating sector support clearly shows the business-as-usual approach in energy investments. Priority is given to existing heat providers who need to modernise their equipment and improve their energy mix to fit in with EU requirements. Currently, they still mostly run on lignite, anthracite, heating oil or natural gas. The dirtiest installations are now trying to introduce biomass combustion to improve their climate performance and decrease pollution. These are, however, the traditional medium or large producers and supporting the introduction of cogeneration or combustion of biomass would have limited effects on energy system transformation. It will create lock-in effects for gas and perpetuate unsustainable exploitation of biomass.

What is needed is support for new smartly-designed production capacities tailored to available local renewable resources and local energy needs trying to maximise energy self-sufficiency of regions.

The OP Quality of Environment (OPQE) supports local, low-carbon strategies. However, if these strategies transform to quality projects, the managing authority should ensure that regions trying to implement the strategy will have effective access to funds and are preferred to other beneficiaries. It will also be vital to ensure that private investors trying to produce energy in these regions have to fit within the low-carbon strategies. Furthermore synergy and coordination with other programmes such as OP Research and Development, Integrated Regional OP, Rural Development Programme or the programmes of European territorial cooperation. Conditioning energy-related investments in regions with compliance with local low-carbon strategies would be a first step towards systematic energy transition.

GRIDS: NOT SO SMART

In its Energy Policy, Slovakia states descriptively the importance of smart grids for better inclusion of RES into the distribution network. The same thought appears in the Energy Union fiche. The fact that zero funding is allocated to this action shows the place intelligent energy management really plays in the overall energy economy picture.

The smart grid development support provides the best signal of whether the country really means to transform its energy economy or not. Even small support for pilot projects and testing would have been a sign that Slovakia has started thinking about transformation. Lack of support reveals the emptiness of statements in Slovak Energy Policy. It would need to start serious testing of virtual powerhouses, supply-demand management systems and intelligent energy distribution and storage solutions. The savings potential for households could reach 10 to 15% and, in the case of tailored energy management for buildings, the savings could reach up to 25%, which, combined with the energy savings potential achievable through refurbishment, creates a huge space for energy consumption reduction.

BUSINESS SUPPORT: A MISSED OPPORTUNITY

Mainstreamed business support amounts to EUR 189 million and contains support for energy efficiency and for

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161 Slovak Energy policy, Page 70.
163 Data from Siemens and ČEZ published at http://www.asb.sk/tzb/energie/inteligentna-elektrina-virtualne-elektrarne-inteligentne-siete
environmentally-friendly production both for SMEs and large companies. This represents only 10.7% of total business support designated from all OPs. Most of the allocation (56%) goes to generic support within which low-carbon activities can be supported, but will not be preferred unless the contribution of EU funds’ support for businesses is subject to a climate performance evaluation. The same applies to R&D support which gets 31.9% of the overall EU funds allocation.

Large companies should receive EUR 34.3 million, and the rest goes to SMEs. In business support, it is vital to have both synergy and innovation as key conditions. An example of synergy is support for Energy Saving Companies [ESCOs] that can, in the end, produce more energy savings than support of individual companies. Energy savings should result from innovative processes, going beyond the usual replacement of written-off production facilities. Support for commercially viable projects needs to be excluded as well as those businesses which have capital available for investments into energy efficiency.

**HOUSEHOLDS: THE BIGGEST POTENTIAL IS HARD TO REACH**

Almost half of the Slovak population lives in single family houses, out of which only 15% have undergone some form of refurbishment\(^{164}\). No public support scheme has been set up so far to tackle this and EU funds ignore this segment as well. Fear of slow implementation rates and of possible complications arising from communication with large numbers of small beneficiaries is high. Inspiration could be drawn from the small RES installation support managed by the Slovak Innovation and Energy Agency. To make an impact, the size of the scheme would have to be significantly higher and conditions more simple. So, for now, this potential will remain untackled.

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GRAPH 58: Business support planned from Cohesion Policy funding.

Source: our own calculations based on approved Operational Programmes according to categories of intervention

- **56%** General business support for SMEs: 989,044,647 euro
- **32%** R&D support: 562,261,955 euro
- **11%** Low-carbon development business support: 189,036,301 euro
- **1%** Support in ICT total: 24,585,183 euro

TRANSPORT: MORE SPACE FOR SUSTAINABLE MODES

While road transport still retains a slight majority (54.4%) of the total allocation swallowing EUR 1.9 billion, significantly bigger space for investment into sustainable transport opens for this programming period. Clean urban transport gets roughly EUR 455 million to invest in all eight regional capitals and for the first time the investments will be bound to regional and urban transport plans. This allocation is probably hitting the limit of what the local beneficiaries are able to absorb when it comes to preparation and implementing of bigger transport projects.

There is, however, one loser - cycling. Only EUR 24 million was allocated within the new Integrated Regional OP, although the investment need for cycling infrastructure projects that are ready for implementation reaches EUR 61 million and they are just the beginning of what would be possible if the money was on the table. Reaching the over-ambitious target to increase modal share of bikers from the current 1.5% to 10% in seven years would be a miracle.

IMPACT AND CLIMATE PERFORMANCE EVALUATION: LEARNING FROM THE PAST

The Ministry of Transport Construction and Regional Development has been one of the authorities most heavily hit by scandals and issues around compliance with environmental legislation and problems around public
participation in assessment procedures.

In order to avoid mistakes from the past, the Ministry of Transport Construction and Regional Development invested a significant amount into becoming as bullet proof as possible so as not to get into trouble with constructing huge transport infrastructure links. An example for their increased scrutiny is their evaluation of compliance with the Water Framework Directive. Whereas the responsible Ministry of the Environment did not mind addressing legal and methodological deficiencies in compliance with this Directive, the Ministry of Transport did when planning transport funding for the 2014-2020 period.

The same applies to climate performance evaluation. Although no specific guidelines came from the Ministry of Environment, the Ministry of Transport did their share to prove that their investments would have positive impacts on air pollution and greenhouse gas emissions. The ministry uses the COPERT IV model methodology of the EU models EMEP/CORINAIR and calculated 622,915.8 tonnes of CO\textsubscript{2} equivalent emissions savings until 2023 excluding public transport projects.

Although the approach seems sound, there are two issues that heavily influence the accuracy and explanatory value of this figure: first is the issue of traffic induction which occurs everytime the transport infrastructure is improved and its capacity increased. This improvement strengthens the share of the mode of transport. This is exactly the point behind strategy inconsistency when all modes get relatively equal shares of support.

The second issue is about the quality and reliability of statistical data on expected changes in transport intensity, speed and fuel consumption. Proving expectations and estimations will require real time monitoring of transport behaviour change after the infrastructure is in place.

It will be crucial to evaluate the contribution of the allocations both for clean urban transport and railway modernisation as well as to road transport. As the strategy sets equally large amounts of investments for both low-carbon and road transport next to each other, it is possible that they will cancel each other out in the end.

A strategy behind the investment is necessary and Slovakia has been working hard on the transport masterplan to meet the ex-ante conditionality set by the European Commission. Yet, it is covering everything and nothing, and failing to draw a transformation path to lead to a decarbonised transport system.

The investments from EU funds in this sense can be seen as a continuation of general infrastructure development resulting from accessible funding rather than a strategy moving the
Slovak transport sector to better carbon performance.

**CLIMATE MAINSTREAMING: MONITORING REQUIRED**

Climate mainstreaming is formally embedded into all Cohesion Policy documents. Slovakia visibly defines indicative allocations for climate related objectives in the Partnership Agreement and in all relevant OPs.

Slovakia meets its designated mainstreaming target and declares which priorities will contribute to climate action of the EU. Slovakia declares EUR 2.63 billion as being for climate related action.\(^{166}\) But if we take into account only those categories of intervention that have a possible direct impact on climate mitigation, we get to EUR 1.78 billion. Leaving out adaptation, biodiversity, resource management and environmental infrastructure is useful in order to have a better picture, as the impact of these interventions is indirect and hard to evaluate without a rigorous methodology.

The evaluation method of performance of these funds is also yet to be seen. The Partnership Agreement mentions the CO2MPARE tool in the chapter on the sustainable development horizontal principle.\(^{166}\) Individual OPs, however, do not include any description of the evaluation process.

The Integrated Infrastructure OP does not include CO\(_2\) emissions reduction in its evaluation system at all, although it declares almost 15% of its budget for climate action. The only place where the Quality of Environment OP plans CO\(_2\) emissions savings is in Priority Axis 4. The rest of its mainstreaming effort is in adaptation. The other three OPs declare contributions as well and set target values for the savings.

The OP RaI (see box on page 97) sets an emissions reduction target of 4,900 tCO\(_2\) equivalent while allocating EUR 41.4 million to climate action. This would make each tonne of CO\(_2\) equivalent reduction cost EUR 8,400, more than three times more than in the Quality of Environment OP. Without a serious set of benchmarks, it is hard to say whether this is adequate. This is another reason why there is a need for an evaluation.

Without this, it is very difficult to say what the actions will look like, what the selection process between projects will be and whether the target values for CO\(_2\) emissions reduction are adequate for the allocation declared. An evaluation and monitoring system has yet to be set up to allow for a climate performance assessment of individual projects. Especially in transport, it will be very interesting to observe as the only climate contribution presented in the 2007-2013 period has been the paradigm of highways decreasing CO\(_2\) emissions through decreased congestion.

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165 Partnership Agreement, page 105.
166 Partnership Agreement, page 114.
The Integrated Infrastructure OP sets decrease of CO₂ emissions as a desired outcome for most of its priority axes including highway construction. However, when it comes to evaluation criteria, none of them is focused on thematic issues or horizontal principles. The only evaluated issues are technology, administration and cost-effectiveness.

The only place where climate performance is quantified is the project application, where applicants have to state how many emissions they plan to save through project implementation. However, it is not clear how this statement will be verified. The Ministry of Transport Construction and Regional Development will have to present a methodology.

The Quality of Environment OP, as the primary climate-related OP, more thoroughly includes CO₂ emissions monitoring. The gap, though, is in the evaluation of contributions of projects in renewables and energy efficiency where a connection to CO₂ emissions savings is not visible. In energy savings, the connection would enable the prioritisation of projects leading to overall energy consumption reduction.

It is crucial to consider what parts of the production chain will be included in the evaluation. For biomass utilisation, the whole production chain should be considered including forest management, processing and transport. In cogeneration support, the preference should be given only to projects that decrease total CO₂ emissions, not only relative. So, again, the methodology will be decisive.

When it comes to the feasibility and level of ambition of local and regional sustainable energy and climate action plans, much will depend on the methodology for calculation of energy savings potential and usable potential of energy sources. Monitoring of performance in the later stage when the plans are put into practice will also be important. The overall impact of strategies on carbon impact reduction will also depend on what access to funding the municipalities and local stakeholders have.

The Slovak Innovation and Energy Agency (SIEA) will play a crucial role in filling the methodology gap. It will get support for development and implementation of a wide variety of monitoring tools, capacity building schemes, instruments and methodologies as well as for general awareness-raising in the area of climate protection and the low-carbon economy. As experiences with this institution have been positive so far, the confidence and resources placed in its hands could prove vital for climate action in the future.

It is now up to the European Commission to require exact evaluation and up to the Slovak authorities to respond properly and move from declaratory mainstreaming to solid climate action.

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167 Evaluation criteria for the selection of projects for OP Integrated Infrastructure as approved by the members of monitoring committee.
RECOMMENDATIONS

INVESTMENT STRATEGY

1. Support transformation
Support transformation through allocating funding to testing of new systems and modes of operation such as intelligent energy management, energy supply demand matching, industrial symbiosis, circular economy processes or smart energy distribution. Prioritise projects which have multiplication potential, require innovation, promote projects that create capacity to manage energy, resources and processes and projects that result in behavioural change.

2. Ensure the highest possible climate performance
During implementation, require all projects to contribute as much as possible to climate action objectives. Insist on clear emissions reduction statements from all projects during project selection and evaluation. Set climate performance evaluation in all OPs by making climate mainstreaming implementation part of the evaluation of individual OPs and of the Partnership Agreement.

IMPLEMENTATION

1. Strengthen climate performance evaluation
A strong binding methodology for climate performance needs to be in place for those actions that are declaring a contribution to climate action. Existing methodologies produced by the European Commission and tools such as CO2MPARE should be utilised.

Clear methodologies for evaluation of climate performance in all projects are necessary. The results should feed a nationwide climate performance evaluation.

Benign benchmarks for cost-efficiency of climate action should become part of the evaluation to judge the ambition of climate allocations and CO₂ reduction targets in individual OPs.

The Office of Government as a Central Coordination Authority needs to play a strong role in the process with active assistance from the EC.

The European Commission must require transparent climate mainstreaming reporting from all the OPs and, within the mid-term evaluation, should judge the adequacy of both the invested resources and of target values.

2. Ensure sustainability of biomass support
All support for biomass energy projects under the Partnership Agreement needs to be subject to binding sustainability criteria. The criteria have to ensure the efficiency of energy production, efficiency of consumption of the energy produced, and sustainability of the resource base. The criteria need to be applicable without an excessive administrative burden and monitored based on currently collected data and field inspections and bound to existing technical norms and regulatory conditions. Beneficiaries have to be accountable for the whole supply chain.

3. Provide technical assistance to small and new energy producers
In addition to the existing stated preference for small installations, the authorities should ensure that small and emerging local energy producers have at least the minimum capacities to be able to produce and submit their project application and to manage the project properly.

4. Create leverage to compensate the RES/EE investment gap
Maximise support for energy projects through utilisation of financial instruments. Ensure that their setup is suitable for all types of beneficiaries regarding level of income, capacity to apply and fulfil administrative requirements.