

12. 12. 2021

# Assessment of Operational Program for Technologies and Applications for Competitiveness (OPTAK)

Centrum pro dopravu a energetiku

## **Consistency with FF55**

The overall level of ambition is pretty low. Czech strategic documents are outdated and operational programs do not set up the ambitions higher. On the contrary, we can find alarming statements such as "renewables are another alternative to coal alongside nuclear and fossil gas" or "the Czech Republic has already reached its target for gross energy consumption from RES amounting to 13% for the year 2030 in 2013."

The political representation is clearly polarized toward FF55. The Senate approved the so-called reasoned opinion, which may lead to the activation of the yellow card mechanism at EU level, for proposals: taxation of energy products and electricity; implementation of infrastructure for alternative fuels, tightening of CO2 emission performance standards for new passenger cars and new light commercial vehicles; promotion of energy from renewable sources; promoting energy efficiency; revision of the EU ETS and market stability reserves.

### **DNSH** principle

The DNSH principle is not part of any of the assessed operational programs (e.g. the term "DNSH" does not appear at all). The SEA has been conducted for the OPTAK (approved).

### **Public participation**

Public participation is still an ongoing issue. The two most problematic aspects are:

- 1. Lack of transparency leading to fraud and corruption
  - a) Troubles with accessing information about concrete projects and their outcomes as well as clear documentation and explanation of decision-making
  - b) Lack of external assessment leading to corruption on the state level.
- 2. Participation of non-state actors in development and monitoring of the programs
  - a) The role of monitoring committees is still mostly formal. For example, in the operational program supporting businesses only 1 out of 30 members was from the environmental sector and one third was represented by the governmental agencies.

In Czechia, the state fails to <u>efficiently communicate</u> the opportunities related to the use of EU money which can lead to a repeatedly limited pool of final beneficiaries, mainly big companies with bigger expertise and experience in the administration of the EU funds.

# Operational program OPTAK Background

OPTAK stands for Operational Program for Technologies and Applications for Competitiveness. Its priorities continue to be research, development and innovation, support for small and medium-sized enterprises, energy and climate policy and the digitalization of the economy. OPTAK is financed from EFRD.

Total allocation is EUR 3,2 billion distributed across 5 priority areas. These areas are:

- 1. Enhancing the performance of enterprises in research, development and innovation and their digital transformation (1,22 billion)
- 2. Entrepreneurship development and SME competitiveness (400 million)
- 3. Development of digital infrastructure (200 million)
- 4. Moving towards a low carbon economy (1,14 billion)
  - 1. Energy efficiency and lowering the GHG emissions (510 million)
    - 2. Support for RES (260 million)
    - 3. Development of smart energy grids and storage (300 million)
- 2. More efficient use of resources (150 million)
- 3. Technical assistance (90 million)

According to the Ministry of Industry and Trade, 38% of the total allocation contributes to the climate goals. This figure depends highly on the implementation phase but at the moment, given that 1,14 billion eur (35%) is dedicated towards the low-carbon solutions, the figure is reached.

## **Horizontal aspects**

Horizontal principles are supposed to be part of the evaluation of each proposed project.

"As part of the evaluation, it will be assessed whether the project is in line with horizontal principles, ie. promoting gender equality, non-discrimination and sustainable development. Projects that would negatively affect these topics will not be supported. Any problems are then reported to the monitoring committee and all complaints will be given due consideration. Project implementers and other affected persons can then fully protect their rights before courts and administrative authorities in accordance with Article 47 of the Charter and Czech procedural regulations."

OPTAK **is not consistent** with the FF55 package. It states that EC set up the emission reduction target at 50% by 2030. The number 55% appears only in combination with "ideally". Furthermore, the document states that RES are "another alternative" to coal powered energy system alongside nuclear and fossil gas. This wording is troubling as it points out to generally low ambition in the operational program. On top of that it is stated that the RES target for the EU is 32% (not current 40%) and that the Czech Republic has already reached its target for gross energy consumption from RES (13%) for the year 2030 in 2013. All of these numbers are outdated and **have to be** updated. Neither the number 13% is accurate. In the current NECP (which has to be updated as well) the target for Czechia is 22%.

The document also polemicized the applicability of RES due to their impact on architecture, landscape and environmental impacts. That is quite inappropriate given that environmental impacts of renewables have been quantified and are substantially lower than those of fossil fuels. In terms of its impact on landscape and architecture this point is also inappropriate given that solar panels don't need to be installed on buildings with a historical heritage value. Furthermore monocultural landscapes already destroy the biodiversity and landscape aesthetics. A small percentage of agricultural land covered with solar panels or windmills don't substantially alter the ecosystem dynamics determined by current agricultural practices. What's more, agrivoltaics even provide benefits in terms of combined use of land for energy purposes alongside higher agricultural yields.

Another conflicting statement is that "the continued operation of emitting sources holds prices energy commodities at a low level, making investments in RES without subsidies unprofitable and therefore not implemented by investors to a greater extent. In particular, investment support may therefore partly reduce risks, although in itself it is not the only solution." As we have seen in the last months, fossil fuels don't keep the energy prices low and it is exactly their continued public support that is giving them advantage over RES. It is therefore not only the subsidization of RES but also removal of subsidies from fossil fuels which is the solution.

# Topics

OPTAK identifies insufficient interconnection of the electricity and gas sectors in the form of their convergence (sector coupling) as a problem without clear indication on what types of gases and for what purposes. Furthermore, a substantial amount of money is allocated under the code 052 for the so-called "renewable gases".

The reality is that the obsolete gas infrastructure is not dimensioned for hydrogen distribution and its blending (in percentage units) only allows energy companies to continue distributing fossil gas with minimal emission reductions. Moreover, in the case of hydrogen, only "green hydrogen" (i.e. hydrogen for the production of which we need clean electricity from renewable sources) can be considered as decarbonised gas. Other forms of hydrogen produced from fossil fuels produce <u>higher emissions</u> than the direct use of fossil gas. Similarly, in the case of biomethane and synthetic methane, questions arise about the cost, production capacity and energy efficiency of these solutions. Energy efficiency and electrification can comfortably and often more effectively serve the needs of the end user, who is currently dependent on fossil gas. Gas solutions should only be used in sectors where their use makes sense both in terms of emission intensity and in terms of price. We do not see much potential in the use of "renewable gases" and we perceive them as a potential mechanism for locking the energy system into dependence on obsolete energy solutions.

In terms of **energy efficiency**, the measures supported could be more ambitious as OPTAK states that building renovation will be supported according to "minimal" requirements as outlined in the directive.

OPTAK does not deal with the question of **energy communities** as we are still waiting for a proper legal framework in the Czech context. Development of this legislation shall be supported by the NRRP.

In terms of **biodiversity and nature**, OPTAK is focused on water management in the industry and development of the circular economy in the commercial sector. Both of these measures are highly necessary. Problematic is the support for the use of biomass as an energy source which is problematic due to high GHG emissions and degradation of ecosystems due to unsustainable land-use. In terms of public health, the use of biomass in the production of heat and electricity carries the risk of air pollution with benzopyrene.

# Recommendations

In relation to the 4th priority area we have several recommendations related to financial allocation.

#### SC4.1. CODE 039

According to Table 4 in chapter 2.1.4.1.3. the specific area SC4.1. code O39 is allocated a total of EUR 9,998,850. Given that this financial support is allocated specifically to large enterprises, it would be more sensible to move this amount below code O40, which also allows support for large enterprises, but sets a higher target for energy savings.

#### SC4.1. CODE 056

According to Table 4 in chapter 2.1.4.1.3. the specific area SC4.1. code 056 is allocated a total of EUR 14,998,277. As this is a replacement of coal-based heating systems with gas-based heating systems, we demand the removal of this support, as fossil gas is a greenhouse gas with cumulative emissions comparable to coal (considering the whole supply chain). We see it as necessary to invest European money directly into clean technologies which are already scalable (e.g. heat pumps).

#### SC4.2. CODE 047/049

In Table 4 in Chapter 2.1.4.2.3. EUR 38,366,950 is allocated to code O49 to support energy from biomass and EUR 12,788,983 (code O47) to support wind energy.

According to Regulation (EU) 2021/1060 of the European Parliament and of the Council of 24 June 2021, the allocation under code 049 is for the support of "biomass", while the allocation under code 050 is for the support of "biomass with high greenhouse GHG savings", we recommend one of the following options:

- 1. change the allocation to code 049 to code 050
- 2. transfer the allocation of code O49 to code O47 (due to insufficient development of wind energy in the Czech Republic)

### SC4.3. CODE 052

According to Table 4 in chapter 2.1.4.3.3. the area SC4.3. code 052 is allocated EUR 58.748.586.

According to our communication with the Ministry of Industry and Trade this allocation will be mainly supporting:

- Construction of Power-to-Gas equipment (electrolysers) for the conversion of electricity from RES into new types of gases, construction of methanation units (for the production of synthetic methane or biomethane from hydrogen and CO2), connection of both facilities to the gas system (used to produce hydrogen by electrolysis, or subsequent production of synthetic methane or biomethane from hydrogen and CO2)
- 2. Construction of CO2 capture facilities / stations (CCU technology)
- 3. Construction of hydrogen production facilities (production of hydrogen from biomethane or synthetic gas)
- 4. Connection of equipment for production of hydrogen, biomethane and synthetic methane to the gas system (measurement of quantity and quality of produced new types of gases,

construction of connecting pipelines, injection equipment of produced new gases into gas systems, two-way pressure reduction stations for connection of new production of gases to lower pressure levels, etc.)

- 5. Construction of infrastructure for storage, liquefaction and distribution of hydrogen, synthetic methane or biomethane
- 6. Installation of gas expansion turbines connected with the production of electricity
- 7. Adaptation of the gas system to ensure compatibility with clean gases, which will enable both transport and distribution of a mixture of natural gas and new types of gases (hydrogen, biomethane and Bio-SNG, synthetic gas), separate transport and distribution of hydrogen and adaptation of gas storage facilities for biological methanation.
- 8. Installation of intelligent elements in gas networks and software for the purpose of development / creation of smart grids and for effective management of integration of new types of gas
- 9. And other measures focused on the development of electricity grids (which are not the focus of following recommendations).

Financial allocation for these projects should be substantially reduced and relocated to measures supporting development of other RES (geothermal, energy efficiency) and specified. Only projects related to **green** hydrogen and bio methane should be supported (no support of synthetic methane). These should have strict provisions on applicability (e.g. green hydrogen used only in sectors where the use of electricity is severely obstructed, not as a wider replacement of fossil gas across the economy). No blending of hydrogen and other gases should be supported.