

Warsaw, 20 August 2018

## Remarks by the Polish Electricity Association on the European Commission's Joint Research Centre report on "EU coal regions: opportunities and challenges ahead"

The Joint Research Centre of the European Commission has on 31st July 2018 published its Report on the EU coal regions<sup>1</sup>. The Report presents the current coal production levels in these regions, its consumption in power plants, jobs in coal mines and coal-fired power plants. Goals of the Report also include presenting a forecast concerning the future development of coal regions and transitional measures due to discontinuation of coal production for power generation. The scope of the Report covers hard coal and lignite mining sectors as well as the power sector utilising these fuels.

The Polish Electricity Association ("PKEE") welcomes the very fact of publication of the Report as it presents the economic and social impacts of retirement of coal-based power sector. It should be noted that this is the first document of this type. So far, on the occasion of development of similar documents and formal impact assessments for the climate and energy legislation, the economic impact of the proposed solutions was only assessed at the pan-EU level.

We would like to stress the necessity of assessing the consequences of the decarbonisation policy while taking into account local circumstances of those Member States that have relatively high employment in the hard coal and lignite mining sectors and the coal-based power sector – i.e. the coal sector and a high share of coal in their energy mixes. The following presents remarks by the PKEE on the key conclusions from the Report.

## Key conclusions from the Report

In 2015, coal (both hard coal and lignite) accounted for 24% of the power generation mix of all the EU Member States. In the same period, the share of coal in the energy mixes in 14 Member States exceeded 20%, including over  $40\%^2$  share in 5 Member States. At the same time, in 2015, the installed capacity of 207 coal-fired plants (both hard coal and lignite) in the EU was ca. 150 GW, the number of coal mines was 128 and the combined annual production of hard coal and lignite was ca. 500 million tonnes. The EU's coal sector employed, according to 2015 data, ca. 237 000 people, of which ca. 80% were employed in

<sup>1</sup>Alves Dias P. et al., *EU coal regions: opportunities and challenges ahead*, EUR 29292 EN, Publications Office of the European Union, Luxembourg, 2018, ISBN 978-92-79-89884-6, doi:10.2760/064809, JRC112593, available at: <a href="http://publications.irc.ec.europa.eu/repository/bitstream/JRC112593/kina29292enn.pdf">http://publications.irc.ec.europa.eu/repository/bitstream/JRC112593/kina29292enn.pdf</a>

<sup>&</sup>lt;sup>2</sup> The European Commission, Energy – Country datasheets – June 2018, available at: <a href="https://ec.europa.eu/">https://ec.europa.eu/</a>



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hard coal and lignite mining sectors. The number of indirect jobs in the EU dependent on coal activities was about 215 000 in 2015. This means that in 2015, in the entire EU the coal sector and dependent sectors employed ca. 452 000 people and these jobs are concentrated in just a few regions including the Silesian Region in Poland, Yugoiztochen in Bulgaria, Severozapad and Moravskoslezsko in the Czech Republic, Muenster in Germany and Sud-Vest Oltenia in Romania.

The number of jobs in Poland's coal sector is ca. 112 000, constituting ca. 50% of all jobs in this sector in the entire EU. According to the Report, only in 2018, 31 mines are planned to be closed in the EU. It is also estimated that the number of mining jobs at risk is ca. 109 000, being ca. 60% of all jobs in the sector. In parallel to the retirement of mines also coal-fired power plants will be gradually decommissioned, leading to a reduction of the installed capacity of such power plants from ca. 150 GW in 2016 to ca. 105 GW in 2025 and ca. 55 GW in 2030. This will result in an additional loss of 15 000 jobs in 2020-2025 and further 18 000 jobs in 2025-2030. In Poland, by 2025 ca. 35% and by 2030, a further 30% of installed capacity in coal-fired power plants is to be retired. Assessments indicate that, in total, the closing of coal mines and decommissioning of coal-fired power plants in the EU will result in a loss of ca. 27 000 jobs by 2020. However, the cumulated loss of jobs in the mining sector will be up to 77 000 in 2025 and 160 000 in 2030 in the entire European Union. Just in the Silesian Region of Poland the number of coal sector jobs will decrease by 2030 by 50% i.e. ca. 40 000. According to the maps showing the number of jobs at risk in the coal sector by 2030 at NUTS-2 level, the possibility of losing jobs in this sector covers most of Poland, with only three of voivodeships not affected.

The Report also shows that the regions with the highest risk of job loss are located in relatively low-income Member States, namely Poland, Bulgaria, Czech Republic and Romania. Moreover, relatively high coal mining and power generation job loss risk is present also in Germany.

According to the Report transitional measures adequate to the magnitude of the challenges faced by the coal regions are: Carbon Capture and Storage (CCS), re-use of mine sites as locations for renewable energy sources including hydro power, reclamation of mine sites and creation of jobs in industry and services. Unfortunately, these measures are described in the Report in a rather general manner, often without providing any details.



The European Commission confirms that coal-dependent regions are less affluent and thus require significant financial investments in transformation, not being able to fund it themselves. At the same time, the regions to be most affected by the negative impact of coal mine closures and coal power plants decommissioning include those located in Poland. The level of risk of losing direct and indirect jobs in the coal sector in Poland and the geographical extent of these losses indicate that these issues have a structural character although this is not mentioned in the Report. In our opinion, it is desirable to develop and implement systemic solutions at the pan-EU level so as to assure funding for the low-carbon transition in lower-income Member States.

In our opinion the remedial measures proposed by the European Commission are far from adequate for the correctly identified scale of challenges faced by the coal-dependent regions. First and foremost, they do not account for the risk relating to the unprofitability of the CCS technology and the expected resistance by local communities to construction of underground carbon dioxide storage facilities in their neighbourhoods. Controversies may also arise out of the conversion of decommissioned coal mines and power plants to wind farms and PV plants, as suggested in the Report. In our assessment, the continued growth of RES will not compensate the disproportion between jobs lost and the potential "green" employment. This is a result of not only totally different technology environment, but also limited demand for operational labour in RES installations. Even more doubts may be raised by the proposed transformation of the coal regions into tourist attractions without conducting a reliable analysis of how such a transformation should be undertaken.

The weakest point of the Report is the lack of quantification of possibilities of worker retraining taking into account the actual level of development of clean coal technologies and the potential for development of RES in the specific coal regions. The European Commission's Report does not also contain a reliable analysis of how a retraining programme for nearly half a million employees threatened with loss of jobs should be conducted.

A significant source of financing may come from the Regional Policy and Cohesion Funds. Nevertheless, with the increased post-2021 reduction ambitions already approved with the EU ETS Directive revision, the funds available for this purpose are to be reduced in the Multiannual Financial Framework for 2021-2027. The conclusions stemming from the Commission's Report confirm the necessity to establish a special fund dedicated solely to coal-dependent regions in transition – the Just Energy Transition Fund. However, the postulate by the European Parliament for the establishment of such a fund was not reflected in the legislative proposals recently presented by the EC.

The European Commission points out that the coal regions at present have low unemployment rates, which should allow them to absorb the consequences referred to above. Unfortunately, the Report fails to include present European experiences in



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employment restructuring in coal regions. Closure of the coal industry may lead to structural and long-term social and economic problems – as exemplified by the post-industrial region of Wales.

The assumption of decommissioning ca. 70% of coal-fired power plants' installed capacity in Poland by 2030 is at the same time completely unrealistic. Its fulfilment would result in a serious threat to energy supply security. This would result in the entire Polish economy having to pay the cost of implementing the decarbonisation policy.

In summary, the European Commission's Report minimises the impact assessment of the negative consequences of the coal sector restructuring that will affect mainly local communities. The Report fails to indicate well-justified proposals for remedial measures and at the same time ignores the consequences such as depopulation of coal regions as a result of migration, loss of human capital or increase in poverty. The Report leads to the conclusion that it will be local communities which will pay the most for meeting obligations, benefits of which will be distributed on a global scale. Therefore a just distribution of the costs of decarbonisation coupled with sources of financing adequate to the scale of the identified challenges should be a necessary precondition of the transformation to a "green" EU economy.