1) In connection with the latest decisions by EU authorities (end of tri-partite negotiations concerning the Renewable Energy Sources directive, Energy Efficiency directive and EU energy market management directive till 2030), the ETS ruling in the case Poland vs European Commission regarding reform of EUA trading system, BREF/BAT conclusions adopted in 2017 and an increase in EUA price to over 16 euros per tonne of CO₂, PGE Group’s strategic option form the strategy for 2016-2020 assuming an easing of EU’s energy and climate policy is unlikely. When does PGE S.A. intend to update its strategy and adapt it to the realities of 2018 and the coming years?

Response: The Company is continuously monitoring its market and regulatory surroundings, including international. PGE’s strategy until 2020 was updated in September 2016. Plans to change the emission trading system and the scope of BREF/BAT conclusions had already been known back then. The three main development options for the Group after 2020 are dependent primarily on the changing climate policy and the country’s energy policy.

2) Through subsidiaries, PGE S.A. continues its efforts to obtain a lignite mining concession for the Złoczew deposit. In the context of changes in the business surroundings, is PGE S.A. still considering mining lignite from this deposit and, if so, when should a decision on the investment in mining this lignite deposit or withdrawal from this investment be expected?

Response: Developing new lignite deposits, assuming a significant easing of the climate policy, is one of PGE’s three strategic options after 2020. PGE continues its efforts to obtain a concession for the Złoczew deposit in order to secure fuel for selected, most effective units at the Belchatów power plant once the deposits currently being mined are depleted. The concession for Złoczew is expected to be secured before the end of 2018. However, implementing this investment depends on the future shape of the climate policy and the role of lignite in the country’s energy policy.

3) How is PGE Group’s cost of capital and ability to re-finance debt and implement its investment programme affected by decisions being made by foreign banks and institutional investors to discontinue financing coal projects (coal mines and power plants) and financing for companies that produce over 30-50% of electricity from coal? Particularly, does the Management Board anticipate increase of financial costs in 2019-2020?

Response: PGE’s on-going investments have a positive impact on reducing CO₂ emissions. A sustainable investment policy is a topic of discussion with banks and financing institutions. The cost of financing is driven also by a range of other factors aside from individual decisions by financing institutions. PGE’s credit ratings confirm its good financial situation and ability to meet its liabilities, including investment plans. PGE does not publish financial forecast, including forecasts concerning financing costs.
4) When does PGE S.A. intend to draft a strategy that specifies how the company will reach greenhouse gases emission neutrality (mainly CO₂) by 2050, together with a trajectory of getting to this emission neutrality and the estimated levels of CO₂ emissions in 2020, 2025, 2030, 2035, 2040 and 2045?

Response: Diversifying the generation portfolio and reducing environmental footprint, including CO₂ emission reductions, are important elements of PGE Group’s strategy. By 2020, decisions will be made as to strategic growth options. Of key importance to these decisions will be the direction in which the climate policy develops and the shape of the country’s energy and commodity policy.

5) Does PGE S.A. intend to continue activities aimed at obtaining a lignite mining concession for the Gubin 2 deposit? If so, when does PGE S.A. expect to receive this concession?

Response: Developing new lignite deposits, assuming a significant easing of the climate policy, is one of PGE’s three strategic options after 2020. PGE continues its efforts to obtain a concession for the Gubin 2 deposit. The concession is expected to be obtained in 2020. The potential implementation of this investment depends on the future shape of climate policy and the role of lignite in the country’s energy policy.

6) How does PGE intend to reconcile decarbonisation plans with the mining and combustion of lignite from the Złoczew open pit mine, which is expected to begin after 2030?

Response: Developing new lignite deposits, assuming a significant easing of the climate policy, is one of PGE’s three strategic options after 2020. PGE continues its efforts to obtain a concession for the Złoczew deposit in order to secure fuel for selected, most effective units at the Belchatów power plant once the deposits currently being mined are depleted. Implementing this investment depends on the future shape of the climate policy and the role of lignite in the country’s energy policy.

7) A report published by the Institute of Environmental Economics and Financial Analysis (IEEFA) at the beginning of June 2018 proves that a radical change in PGE S.A.’s strategy and investments in renewable energy sources combined with a withdrawal from modernisation investments at coal-fired plants that do not meet the BAT conclusions requirements and, as a consequence, the shutdown of these units after 2050, would mean 3 billion euros less in expenditures for the company than if the current status quo were to be maintained. Moreover, the IEEFA’s report uses a very conservative scenario for EUA price growth. Is PGE’s management board able to show based on which assumptions it makes its decisions on the adaptation or withdrawal from the modernisation of the company’s coal units in order to adapt them to BAT conclusions?

Response: This report is just an expression of its authors’ opinion on the market growth scenarios and PGE’s situation. At no stage of creating this document did the authors seek comment from PGE or verified the assumptions used in their analysis, which is standard practice in this type of analysis.
Decisions concerning the adaptation of units to BAT conclusions are made on the basis of an investment feasibility calculation, which uses standard financial concepts such as internal rate of return or net present value. The company is additionally taking into consideration arguments related to the country’s energy security.

8) Like the report’s authors, I have the following question for PGE’s management board: what sort of internal rate of return does PGE’s management board expect from the modernisations that adapt PGE’s coal plants to BAT conclusions?

Response: The main economic criterion applied in analysis is achieving a rate of return on investment above the Group’s weighted average cost of financing. In the case of individual decisions concerning specific assets, the life cycle of specific generation units and the alternative cost in the event of it being necessary to replace them with new assets are also taken into account.

9) What assumptions are the basis for these expected rates of return on investment, e.g. annual payments in connection with securing contracts as a result of winning capacity auctions, EUA price, electricity price and number of hours in operation for specific units during the year in the national power system)?

Response: Each of the analysed units has a different profile, stage in the investment’s life cycle and local technical conditions as well as significance for the country’s energy security. Of course, analyses also take into account market forecasts for electricity prices, CO₂ emission rights prices, demand for district heating in specific locations, demand for electricity and potential use of units for national power system purposes.

10) What is the expected IRR, assuming no revenue from the capacity market?

Response: The expected return on investment depends on numerous market factors. For PGE, the key decision criterion is achieving the rate of return specified in PGE’s Investment Policy. Normally, this should be higher than the weighted average cost of capital, which currently is 7.29%.

11) What impact has an EUR 10 increase in EUA price on the expected IRR?

Response: The expected return on investment depends on numerous market factors, such as those listed in the response to question 9. For PGE, the key decision criterion is achieving the rate of return specified in PGE’s Investment Policy. Normally, this should be higher than the weighted average cost of capital, which currently is 7.29%.

12) Which coal units at industrial-grade power plants and heat-and-power plants owned by PGE will be shut down as a result of requirements stemming from BAT conclusions?

Response: PGE’s strategy seeks to optimise investment expenditures. This also pertains to investments that are necessary to meet the BAT conclusions. In the case of several locations, analysis is still on-going and final decisions have not been made yet. Implementing the
District Heating Strategy, we plan to eventually replace inefficient coal boilers with gas sources in numerous locations.

13) According to press reports (Gazeta Wyborcza article “PGE and PAK are cheating EU on mercury emissions”), PGE’s power plants in Belchatów and Turów do not meet BAT conclusions concerning mercury emissions. What costs does PGE expect to incur in 2018-2021 in order to adapt its power plants to the level of mercury emissions mandated by BAT conclusions?

Response: The power plants in Belchatów and Turów will meet the emission requirements specified in BAT conclusions. These requirements will be in effect from August 2021. The EU document gives 4 years to adapt generation assets to the new requirements. Based on technical and economic analyses carried out thus far, the cost to adapt to BAT conclusions concerning mercury emissions is as follows:
- Belchatów power plant: approx. PLN 35 million net
- Turów power plant: approx. PLN 40 million net

These amounts are already taken into account in the overall investment expenditure plans concerning adaptation to BAT conclusions, as communicated by the company.

14) Are you aware of any cases in which the obligations resulting from the act on trade unions were not met as regards trade units – this matter concerns Monika Stawińska.
(Question from a shareholder addressed to CEO Henryk Baranowski)

Response: Given the on-going court dispute between employer and employee, the company is not commenting on this case.

15) In our country, there is a war on fraud consisting of failure to pay due remuneration to employees, lowering this remuneration, payment of part of remuneration “under the table.” How are you overseeing subcontractors who are retained in your area of supervision so as to prevent these incidents when it comes to money spent by PGE S.A.?
(Question from a shareholder addressed to Marek Pastuszko)

Response: PGE Polska Grupa Energetyczna S.A. expects its business partners to not only abide by law in doing business but also to respond business ethics rules, as specified in the Code of Conduct for PGE Group’s Business Partners (the “Code”). As regards contracts executed by PGE Polska Grupa Energetyczna S.A., the obligation to submit a declaration that both the business partner and its co-workers and subcontractors respect the law in doing business and especially laws concerning respect for employee rights and workplace health and safety regulations. In addition, business partners are required to declare that in matters concerning contract implementation for PGE Group companies, they will abide by ethics rules contained in the Code and will make a due effort to ensure that their employees, co-workers, subcontractors or other persons performing the contract will also abide by these rules.
If, during the term of a contract, doubts arise as to whether a business partner or its employees, co-workers or subcontractors are abiding by the law and ethics standards, this business partner is required to take corrective action.

16) It is known that Paweł Śliwa is also a member of the Małopolskie council, member of 4 committees in this council and, probably given these duties, travels frequently to work at this council. Does he use a company car, company car with chauffeur for these trips and, if so, does the company charge company car costs to Paweł Śliwa?  
(Question from a shareholder addressed to Paweł Śliwa)

Response: Members of the management board of PGE Polska Grupa Energetyczna S.A. use the company cars based on management services contracts and internal regulations concerning car fleet management.

17) A rule was introduced at the company according to which the subsidy for electricity is awarded only to those employees who changed electricity suppliers and moved to the sales area. I would like to ask if this rule or such actions in the area supervised by you are also made in respect of any other legal entities, social organisations seeking money from PGE S.A. Are they also required, as part of new customer acquisition, to change suppliers and become electricity customers of PGE Obrót or PGE Centrum before they receive any money?  
(Question from a shareholder addressed to Ryszard Wasilek)

Response: The electricity subsidy is awarded only to PGE Polska Grupa Energetyczna S.A.’s employees and retired employees, no other group of entities received this subsidy, in connection with which no entity is required to become an electricity customer of PGE Obrót S.A. or PGE Centrum S.A.