

## STRATEGIC PLANNING IN POLISH HARD COAL INDUSTRY

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Наведено стратегічне планування в польській вугледобувній промисловості. Обґрунтовано весь процес стратегічного планування та виконання стратегічного плану в вугледобувній промисловості. Визначено, що реалізація найкращих стратегій повинна гарантувати досягнення стратегічних цілей. Однак, слід зазначити, що однією з найважливіших умов для здійснення цієї стратегії є інформація про внутрішні і зовнішні фактори в довгостроковій перспективі. З'ясовано, що у вугільних компаніях стратегічне планування ускладнене невизначеністю, а для інструментом стратегічного контролю є ведення облікового таблицю.

The paper is about strategic planning in Polish hard coal industry. It shows the whole process of strategic planning and execution of strategic plan in hard coal industry. It is a very wide-spread subject to write about. We should be aware that execution of the previously selected best strategy shall guarantee achievement of strategic objectives. However, it should be pointed out that one of the most crucial conditions for execution of the strategy is information concerning internal and external factors in the long-term perspective. From practical point of view concerning strategic planning in coal companies it turns out that information gathered for the purpose of this process is encumbered with uncertainty and a very useful tool for strategic control is the aforementioned Balanced Score Card.

**1. Organisation of hard coal industry in Poland.** Currently, there are 32 hard coalmines functioning in Poland. All coalmines, except for *Lubelski Węgiel Bogdanka S.A.*, are located in the region of Silesia and Lesser Poland. They belong to three coal companies: *Kompania Węglowa S.A.*, *Katowicki Holding Węglowy S.A.*, and *Jastrzębska Spółka Węglowa S.A.* Besides, a two-system coal mine (*ZG Sobieski*, *ZG Janina*) acts within *Południowy Koncern Węglowy S.A.* *Lubelski Węgiel Bogdanka S.A.* and *Siltech Sp. z o.o.*<sup>1</sup> are also acting independently.

**Kompania Węglowa S.A.** in Katowice was established on the 1st of February 2003 as a sole-shareholder company of the State Treasury. It consists of 17 coalmines: *Bobrek - Centrum*, *ZG Piekary*, *Bolesław Śmiały*, *Knurów*, *Sośnica - Makoszowy*, *Szczygłowice*, *Brzeszcze - Silesia*, *Piast*, *Ziemowit*, *Halemba*, *Pokój*, *Bielszowice*, *Polska - Wirek*, *Marcel*, *Jankowice*, *Chwałowice* and *Rydułtowy - Anna*.

**Katowicki Holding Węglowy S.A.** in Katowice was established on the 29th of June 1993 as a sole-shareholder company of the State Treasury. It consists of 5 coalmines: *Wieczorek*, *Staszic*, *Murcki*, *Wujek - Śląsk*, *Wesola - Mysłowice*. These coalmines and *Kazimierz-Juliusz Sp. z o.o.* – established on basis of the assets of *KHW S.A.*, form the so-called *Katowicka Grupa Kapitałowa* (Katowice Capital Group).

**Jastrzębska Spółka Węglowa S.A.** was established on the 1st of April 1993 as a sole-shareholder company of the State Treasury. It consists of the following companies: *Borynia*, *Jas - Mos*, *Krupiński*, *Pniówek* and *Zofiówka*, as well as *Budryk*, which was incorporated on the 1<sup>st</sup> of January 2008.

**2. The role of the Country in planning of coal companies' business activity.** Since coal companies and independent hard coalmines (except *ZGE „Janina”* and *ZGE „Sobieski Jaworzno III”*) belong to the State Treasury, during restructuring process of hard coal industry there was a common area for strategic planning and definition of their business activity. The restructuring process of hard coal

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<sup>1</sup> Business strategy of hard coal industry in Poland in the period of 2007 – 2015. Document approved by the Cabinet on the 31st of July 2007.

industry provided for strategic directions of changes in coal companies and independent coalmines. On the level of the owner (the function of which was performed by the Minister of Economy, and for the LW Bogdanka the Minister of the Treasury) objectives were defined, which set system conditions for running and developing business activity, as well as for the course of restructuring processes.

In the period of past economic transformation of coal industry basic objectives for strategy and strategic plans of particular companies, as well as of independent coalmines – were set up within governmental restructuring programs.<sup>2</sup>

Presently, the role of governmental restructuring programs for hard coal industry has been weakened, and strategies worked out by the Ministry of Economy are of system nature and indicate the elements of the Country policy towards the sector. The governmental restructuring program dated 2007 and named “Strategy of hard coal industry business activity in the period of 2007 – 2015”<sup>3</sup> pointed out that the aim of the Country policy towards hard coal industry is „reasonable and efficient management of coal deposits located in the area of the Republic of Poland so that these deposit might serve future generations of Polish people”. Strategic objective should be achieved through actions aiming at performance of the following partial aims<sup>4</sup>:

1. Ensuring power safety of the Country by meeting national demand for hard coal, including utilisation of coal for the purpose of liquid and gas fuel production.
2. Maintaining competitiveness of Polish hard coal under conditions of free market economy.
3. Ensuring stable hard coal supplies of required quality to domestic and foreign customers.
4. Utilisation of modern technologies by hard coal industry in order to increase price competitiveness, safety of work, environmental protection, and in order to establish basis for technological and scientific development, in particular of the Silesia and Lesser Poland.

From the point of view of strategic planning for hard coal industry, objectives established by the owner define directions of activities performed by particular coal companies and independent coalmines in the process of defining their business strategy, which is a basis for elaboration of strategic plans. Taking this into account one should assume that the process of strategic planning in hard coal industry consists of the following:

- Sector level (network), on which elements of the country policy towards the industry are defined;
- Company (corporations), on which strategies of coal companies and independent coal mines are defined;
- Business level (business units), on which strategies of coal mines as well as units belonging to coal companies, are defined;
- Functional level, on which functional strategies of coal companies and independent coalmines are defined.

**The process of strategic planning in hard coal industry** includes two stages: initiating of planning and elaboration of strategic plan (illustration 1).

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<sup>2</sup> Since 1993 the following restructuring programs of hard coal industry were carried out:

1. Restructuring program for hard coal industry in Poland – performance of the 1st stage in 1993 within financial capacity of the country. Warsaw, 15th of March 1993.
2. Bankruptcy control program for coal mine industry in Poland. Warsaw 1993.
3. Restructuring of hard coal industry – the program of the 2nd stage in the period of 1994 – 1995. Warsaw 1994.
4. The program of hard coal industry’s adaptation to free market and international competitiveness „Hard coal industry. The State and Sector’s policy for the years 1996 – 2000”. Warsaw, 30th of April 1996.
5. Reform of Polish hard coal industry during 1998 – 2002. Warsaw, 1st of July 1998. Amended governmental program “Reform of Polish hard coal industry during 1998 – 2002”. 21st of December 1999.
6. Restructuring of hard coal industry in the period of 2004 – 2006, as well as strategy for the years 2007 – 2010. Document approved by the Cabinet on the 27<sup>th</sup> of April 2004.

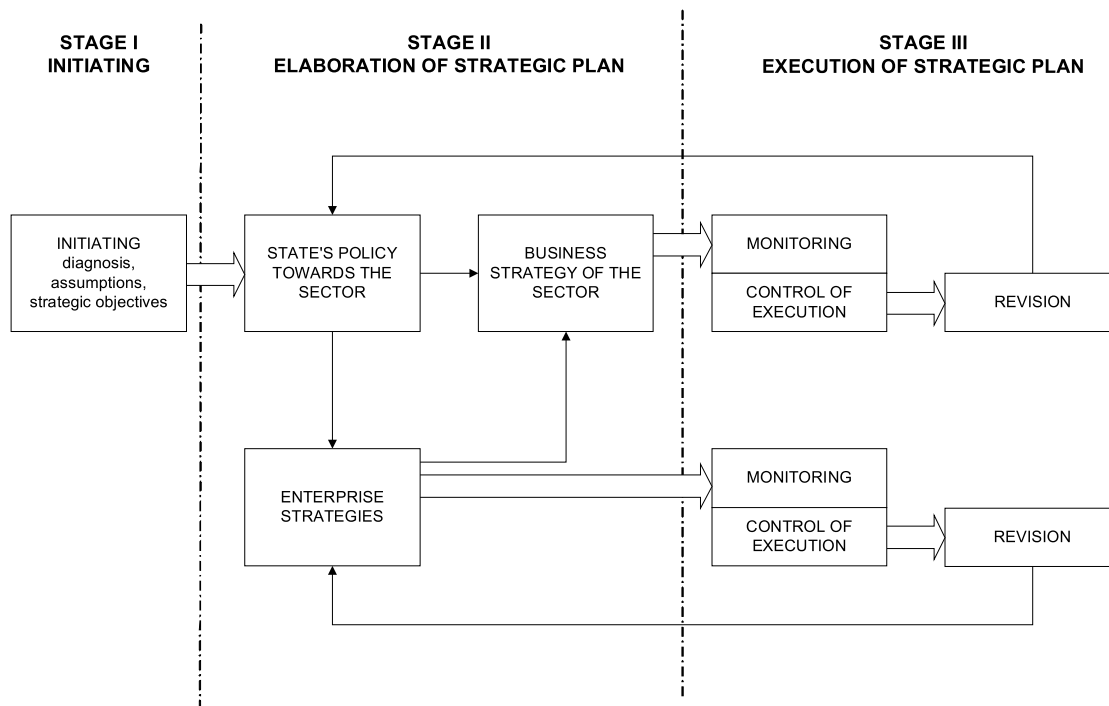
<sup>3</sup> Business strategy of hard coal industry in Poland in the period of 2007 – 2015. Document approved by the Cabinet on the 31st of July 2007.

**Stage I** is performed on the ownership level of coal companies and independent coal mines and includes the following:

1. Diagnosis of the current status of the sector.
2. Settlement of assumptions for strategic planning.
3. Settlement of strategic objectives for the sector.

**Stage II** is performed on the ownership level, as well as on the level of coal companies and independent coalmines and it includes the following:

1. Elaboration of business strategy of particular coal companies and independent coal mines by their management boards.
2. Elaboration of the strategy for the sector.



*Illustration 1. The process of strategic planning and execution of strategic plan in hard coal industry*

*Source: Karbownik A., Wodarski K.: Directions and scope of further adaptation process of coal industry in Poland up to 2010; Monography. Z. 87. Publication of the Technical University of Silesia. Z. 87. Gliwice 2005*

**3. Strategic planning in coal companies.** Strategic planning on the level of coalmine industry is closely related with the process of strategic planning in coal companies, as well as in independent coalmines. Generally, the process of strategic planning in coal companies does not differ from the strategic planning in other large production enterprises. It has been confirmed by own studies, as well as by studies carried out by other authors, which have been included in publications concerning strategic planning and management in hard coal industry<sup>5</sup>. Since strategic planning for coal companies is a complex process it

<sup>5</sup> Wodarski K.: [Strategic planning for integrated group of hard coal mines. PhD thesis. Technical University in Gliwice – Faculty of Mining and Geology. Gliwice 1996 (non-published)].

Karbownik A., Wodarski K.: [Directions and scope of further adaptation process of hard coal industry in Poland up to 2010. Monography. Z. 87. Publication of the Technical University of Silesia. Gliwice 2005.

Karbownik A., Wodarski K.: [About the need for strategic planning in hard coal industry in: “Modern industry and services – 2005. Theory and Practice”. Collective work: J.Pyka. Publication of TNOiK Katowice. Katowice 2005.

Przybyła H., Karbownik A.: [Strategic planning in business entities of coal industry. Part I. Planning procedures. Mining News 1997, Issue 10.

Przybyła H., Karbownik A.: Strategic planning in business entities of coal industry. Part II. Essential scope of the plan. Mining News 1998, Issue 1.

requires appropriate structural solutions and dedicated consulting and planning teams, both on the level of particular coal mines and on the level of particular plants belonging to them<sup>6</sup>. General structure of inter-relations between the levels of strategic planning process in a coal company has been presented on illustration 2.

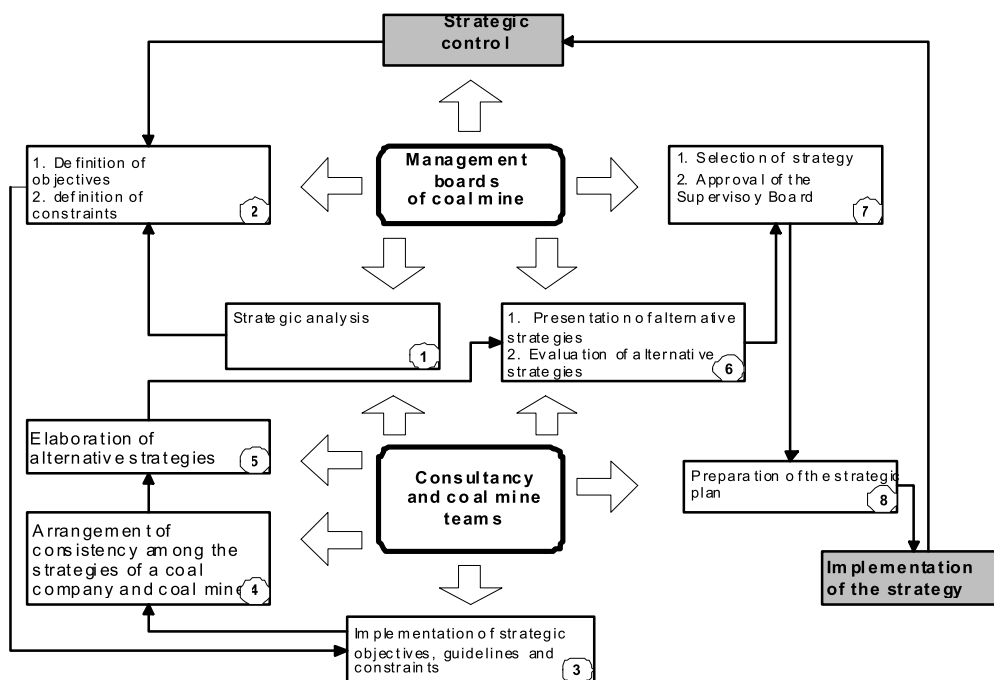


Illustration 2. Diagram of inter-relations between the levels of strategic planning in a coal company Own study

Strategic planning in coal companies and independent coalmines includes particular actions related with strategic analysis and definition of the strategy.

**Strategic analysis of a coal company** should aim at solving problems concerning demand for coal supplies from its coalmines, and consequently necessary production capacities. These problems make it necessary to analyze coal resources and have an influence on the processes of planning, organisation, co-ordination and controlling concerning mining, processing and distribution of coal. These processes are related with the necessity to consider modern technologies of excavation and coal enrichment, as well as technical and organisational solutions (including labour safety) in order to increase productivity of coalmines and plants belonging to the coal company.

From the productivity point of view it is crucial to carry out analysis of several-year forecasts concerning basic economic parameters, such as sale price of coal, its production costs, as well as external and internal factors influencing these parameters.

From the point of view of pace, directions and scope of development of a coal company it is important to carry out analysis of competition between coal producers on domestic and foreign market, as well as to get an answer to a question whether a given coal company will be competing alone or in a specified alliances, and to decide about competition tools, such as the price, promotion, sales tools and other<sup>7</sup>.

Skowron S.: Basics of strategic analysis in mining enterprise. Mining News 2000, issue 1.

Skowron S.: Management in mining from strategic perspective. Lublin WU Politechnika Lubelska 2000.  
Sitko W.: Strategic management in mining industry – opportunity and necessity. Mining News 2001, issue 10.

<sup>6</sup> Karbownik A., Wodarski K.: [Directions and scope of further adaptation process of hard coal industry in Poland up to 2010. Monography. Z. 87. Publication of the Technical University of Silesia. Gliwice 2005.

<sup>7</sup> Karbownik A., Turek M.: Consolidation of business entities as a way of improving management efficiency. A paper delivered during the conference: market company management, a way to efficient management of the company in market economy. Kazimierz Dolny 2000. Szlązak J.: Power – mining industry, together or separately? Mining News 2001, issue 7-8.

Within strategic analysis of a coal company one should consider problems related with maintenance or reduction of market share, or possible entry onto new geographical or product areas within the market. An important aspect of the strategic analysis is the study of the coal company's possible impact on its customers, suppliers, competitors, and even on the policy of regional authorities<sup>8</sup>.

Another aspect to be considered during strategic analysis is related with organizational structures of the company, coalmines and plants, as well as with management system<sup>9</sup>. From the strategic point of view they should meet three criteria:

- Create conditions for development of resources and technological skills as well as for strategy of a coal company,
- Create conditions for efficient establishment, implementation, control and verification of the strategy.

Besides, the strategic analysis should provide for a very important area that is the impact of mining activity onto natural environment and possibilities to protect against its negative impact<sup>10</sup>.

To sum up, the strategic analysis provides for the following areas of activities of the coal company, and of coalmines and plants belonging to it:

- area of production and technological development,
- area of sales and marketing including:
- area of employment,
- area of organisation and management,
- area of economy and finances,
- legal area.

Strategic analysis of coal company carried out in the above-mentioned scope shall enable identification of its strategic position towards surrounding environment. Forecasts of changes, which may take place in the company environment will enable definition of scenarios concerning development of the surrounding environment, as well as settlement of synergies on the level of: surrounding environment – coal company.

Strategic analysis of coal company provides basis for settlement of **strategy for the whole company, strategy of particular units, and functional strategies.**

Strategy of coal companies includes three levels (illustration 3):

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<sup>8</sup> Wizner L., Kaszuba A., Bednorz B.: Regional aspect of Polish mining industry reform in the activity of Nadwiślańska Spółka Węglowa S.A. Material for the conference named: Reform of hard coal industry in Poland. Innovation management. Szczyrk 2001. Maciejczyk M., Paszcza H.: Programs of new job positions in mining communes as a regional instrument of active support to reform of hard coal industry. Material for the conference named: Reform of hard coal industry in Poland. Innovation management. Szczyrk 2001. Impact of closing-up hard coal mines onto local and regional economy. Collective work under editorial supervision of F. Kuźnik. Publication of the University of Economy. Katowice 2003.

<sup>9</sup> Karbownik A.: Decisions and actions, as well as changes in the management system of hard coal industry within restructuring program during 1998 – 2002 [in:] Managing adaptation process in hard coal industry towards existing experiences. Monograph. Collective work under editorial supervision of A. Karbownik. Publication of Technical University of Silesia. Gliwice 2005. Bendkowski J., Przybyła H., Stachowicz J.: Elaboration of sample (uniform) organizational structure of a coal company. Technical University of Silesia. Gliwice 1993 r. (non-published). Drzęzła B., Kot A., Kozyra J., Przybyła H.: Integration of coal mines as an element of restructuring process of mining industry in Poland. The School of Underground Exploitation. Szczyrk 2003. Lisowski A.: Interchange management problems related with restructuring of hard coal industry. The School of Underground Exploitation. CPPGSMiE PAN. Kraków 1994. Sitko W., Skowron S.: Mining entity in the process of organizational change. Material from the Conference named: Reform of hard coal industry in Poland. Innovation management. Szczyrk 2001.

<sup>10</sup> Bzowski Z.: Environmental Monitoring as a tool for assessment of recovery of waste coal piles. Mining News 2000, issue 9. Chaber M., Krogulski K.: Environmental fees as a basic economic instrument of environmental protection. Mining News 1998, issue 5. Chaber M., Krogulski K.: Issues concerning mine water in hard coal industry. Mining News 1998, No. 7-8. Chaber M.: Environmental protection in Polish hard coal industry towards EU regulations. Mining News 2003, issue 5. Czaplicka K., Chaber M.: Ecological problems and economic instruments in environmental protection of Polish hard coal industry towards regulations of the European Union. Mining News 2001, issue 12.

- strategy of coal company – on the corporate level,
- strategies of coal mines and plants,
- functional strategies.

The Strategy of the coal company, including coalmines and other plants integrated with it, is defined by its management board<sup>11</sup>. It is the role of the management board to define strategic objectives and priorities, as well as guidelines for settlement of the strategy and providing resources necessary for its execution.

The strategy defined on the level of the management board of the coal company is transferred to particular coalmines and plants, as well as distributed among particular functional strategies. This is the first stage of work on action plans for particular coalmines and plants belonging to the coal company. The task and problem scope of particular functional strategies includes:

1. Within the scope of research and development:
  - working out technical restructuring programs for coal mines,
  - searching optimum technical and production models for coal mines,
  - planning activities aiming at improvement of labour and operational safety of coal mines,
  - planning implementations and innovations,
  - working out the rules of co-operation with scientific centres;

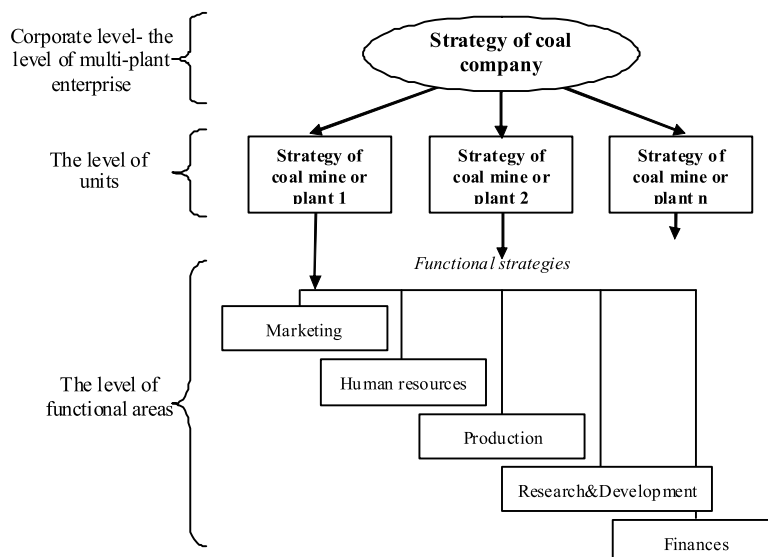


Illustration 3. Levels of strategy within a coal company

### Own study

2. Within development of production capacities:
  - Working out development program for production capacities of the company,
  - Planning new investments in production capacities,
  - Establishing profitability criteria and rules for exploitation of deposits,
  - Supervision over reasonable utilization of resources;
3. Within the scope of marketing:
  - Analysis of domestic and foreign coal,
  - Working out forecast of coal demand,
  - Definition of marketing strategies for the coal company,

<sup>11</sup>More information concerning definition of the strategy in the coal company has been included in:

Wodarski K.: Strategic planning for an integrated group of hard coalmines. PhD thesis. Technical University of Silesia – Faculty of Mining and Geology. Gliwice 1996 (non-published).

Karbownik A., Wodarski K.: Directions and scope of further adaptation process of hard coal industry in Poland up to 2010. Monograph. Z. 87. Publication of Technical University of Silesia. Gliwice 2005.

- Monitoring commercial credibility of main customers,
- monitoring of sales and evaluation of marketing efficiency;
- 4. Within economy and finances:
  - monitoring of costs related with business activity of coal mines and other plants,
  - working out the strategy of coal mines financing,
  - observance of the rules concerning settlement of the company liabilities towards the budget and other creditors,
  - working out the strategy of investment financing in the coal company;
- 5. Within human resources:
  - Planning employment in coal mines,
  - Working out remuneration policy of coal mines,
  - Working out the strategy of recruitment for coalmines.

Business activity plans elaborated by coalmines and plants shall enable achievement of particular strategic objectives of the coal company. At the same time, if possible, coalmines shall provide alternative plans of their business activity. They may be different in relation to technical solutions concerning production process, which may result in different production result, with different resources and in different time.

Proposed business activity plans of coalmines and plants are verified by the consulting teams from the coalmine in relation to its strategy. If particular plans of coal mines and plants meet basic guidelines and conditions (e.g. production capacity, excavation, productivity, etc.) and have been sent for further analyses, the next step will be elaboration of alternative plans for the coal company based on alternative plans of coal mines. Alternative plans of Coal Company undergo further analysis and evaluation, which take into account the following:

- Definition of the coal company's potential concerning: development of coal production and development of production in other types of business activity (not related with coal),
- Definition of business structure and description of a coal company in relation to selected strategy,
- Assessment of the coal company's capability to execute the strategy, taking into account previous liabilities (e.g. debts),
- Definition of necessary (desired) changes in plans concerning functioning of coal mines and plants by means of supporting strategies, such as: joint undertakings, incorporation of new areas of activity, closing of non-profitable activity.

Evaluation of particular alternative business strategies of the coal company shall result in selection of the best strategy for the coal company, taking into account the company's capacities under given market conditions. Selected strategy shall be executed, and the related objectives and tasks shall be included in the strategic plan, and later on transferred to particular coalmines in order to execute them. Basic problem within this scope is the necessity to translate the strategy into objectives and measures. A tool, which supports solving of this problem and enables evaluation of deviations in values of execution measures – is the Balanced Score Card. Studies concerning utilization of Balanced Score Card in coal companies<sup>12</sup> indicate that it may be an efficient tool supporting the process of strategic planning and control.

**4. Conclusion.** Execution of the previously selected best strategy shall guarantee achievement of strategic objectives. However, it should be pointed out that one of the most crucial conditions for execution of the strategy is information concerning internal and external factors in the long-term perspective. Such situation is unlikely to happen because of changes in mining industry and its surroundings, as well as possible changes in internal conditions both of the company and coalmines and other plants belonging to it. From practical point of view concerning strategic planning in coal companies it turns out that information

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<sup>12</sup> Karbownik A., Wodarski K.: About the need for strategic management in hard coal industry: "Modern Industry and Service – 2005. Theory and Practice". Collective work under the name of: J.Pyka. Publication of TNOiK Katowice. Katowice 2005.

Wodarski K.: Wykorzystanie Strategicznej Karty Wyników w zarządzaniu strategicznym w górnictwie węgla kamiennego. [w:] Problemy współczesnego zarządzania w ujęciu wielowątkowym. Pod red. Wł. Sitko Wyd. LCM Sp. z o.o. Lublin 2006.

gathered for the purpose of this process is encumbered with uncertainty. Due to uncertainty of information, which constitute basis for definition of the strategy, it is necessary to monitor execution of the strategy in order to adjust it, or even change radically. A useful tool for strategic control is the aforementioned Balanced Score Card.

1. Bendkowski J., Przybyła H., Stachowicz J.: *Elaboration of sample (uniform) organizational structure of a coal company*. Technical University of Silesia. Gliwice 1993 (non-published). 2. *Business strategy of hard coal industry in Poland in the period of 2007 – 2015*. Document approved by the Cabinet on the 31st of July 2007. 3. Bzowski Z.: *Environmental Monitoring as a tool for assessment of recovery of waste coal piles*. Mining News 2000, issue 9. 4. Chaber M., Krogulski K.: *Environmental fees as a basic economic instrument of environmental protection*. Mining News 1998, issue 5. 5. Chaber M., Krogulski K.: *Issues concerning mine water in hard coal industry*. Mining News 1998, No. 7-8. 6. Chaber M.: *Environmental protection in Polish hard coal industry towards EU regulations*. Mining News 2003, issue 5. 7. Czaplicka K., Chaber M.: *Ecological problems and economic instruments in environmental protection of Polish hard coal industry towards regulations of the European Union*. Mining News 2001, issue 12. 8. Drzęzła B., Kot A., Kozyra J., Przybyła H.: *Integration of coal mines as an element of restructuring process of mining industry in Poland*. The School of Underground Exploitation. Szczyrk 2003. 9. *Impact of closing-up hard coal mines onto local and regional economy*. Collective work under editorial supervision of F. Kuźnik. Publication of the University of Economy. Katowice 2003. 10. Karbownik A., Turek M.: *Consolidation of business entities as a way of improving management efficiency. A paper delivered during the conference: market company management, a way to efficient management of the company in market economy*. Kazimierz Dolny 2000. 11. Karbownik A., Wodarski K.: *About the need for strategic planning in hard coal industry in: "Modern industry and services – 2005. Theory and Practice"*. Collective work: J. Pyka. Publication of TNOiK Katowice. Katowice 2005. 12. Karbownik A., Wodarski K.: *Directions and scope of further adaptation process of hard coal industry in Poland up to 2010*. Monography. Z. 87. Publication of the Technical University of Silesia. Gliwice 2005. 13. Karbownik A.: *Decisions and actions, as well as changes in the management system of hard coal industry within restructuring program during 1998 – 2002 [in:] Managing adaptation process in hard coal industry towards existing experiences*. Monograph. Collective work under editorial supervision of A. Karbownik. Publication of Technical University of Silesia. Gliwice 2005. 14. Lisowski A.: *Interchange management problems related with restructuring of hard coal industry*. The School of Underground Exploitation. CPPGSMiE PAN. Kraków 1994. 15. Maciejczyk M., Paszcza H.: *Programs of new job positions in mining communes as a regional instrument of active support to reform of hard coal industry*. Material for the conference named: *Reform of hard coal industry in Poland*. Innovation management. Szczyrk 2001. 16. Przybyła H., Karbownik A.: *Strategic planning in business entities of coal industry*. Part I. *Planning procedures*. Mining News 1997, Issue 10. 17. Przybyła H., Karbownik A.: *Strategic planning in business entities of coal industry*. Part II. *Essential scope of the plan*. Mining News 1998, Issue 1. 18. Sitko W., Skowron S.: *Mining entity in the process of organizational change*. Material from the Conference named: *Reform of hard coal industry in Poland*. Innovation management. Szczyrk 2001. 19. Sitko W.: *Strategic management in mining industry – opportunity and necessity*. Mining News 2001, issue 10. 20. Skowron S.: *Basics of strategic analysis in mining enterprise*. Mining News 2000, issue 1. 21. Skowron S.: *Management in mining from strategic perspective*. Lublin WU Politechnika Lubelska 2000. 22. Szlązak J.: *Power – mining industry, together or separately?* Mining News 2001, issue 7-8. 23. Wizner L., Kaszuba A., Bednorz B.: *Regional aspect of Polish mining industry reform in the activity of Nadwiślańska Spółka Węglowa S.A*. Material for the conference named: *Reform of hard coal industry in Poland*. Innovation management. Szczyrk 2001. 24. Wodarski K.: *Strategic planning for an integrated group of hard coal mines*. PhD thesis. Technical University of Silesia – Faculty of Mining and Geology. Gliwice 1996 (non-published). 25. Wodarski K.: *Wykorzystanie Strategicznej Karty Wyników w zarządzaniu strategicznym w górnictwie węgla kamiennego*. [w:] *Problemy współczesnego zarządzania w ujęciu wielowątkowym*. Pod red. Wł. Sitko Wyd. LCM Sp. z o.o. Lublin 2006.