UNITED
NATIONS

E

Economic and Social
Council

Distr.
GENERAL

ECE/ENERGY/NONE/2003/16
4 March 2004

Original: RUSSIAN

ECONOMIC COMMISSION FOR EUROPE

COMMITTEE ON SUSTAINABLE ENERGY
Ad Hoc Group of Experts on Coal in Sustainable Development

THE COAL INDUSTRY IN THE RUSSIAN FEDERATION: CURRENT STATUS AND FUTURE TRENDS IN STRUCTURAL CHANGE

I. Introduction

1. This paper discusses the basic issues relating to the current status and prospects for the coal industry in the Russian Federation, including the restructuring of the industry as a basis for further growth.

II. The current status of the coal industry in the Russian Federation

2. Russia is a major coal power, a world leader in coal reserves. The coal industry always has been a subject of public and governmental concern.

3. Overall listed coal reserves in Russia (grades A+B+C) amount to around 200 billion tonnes, or 11.3 per cent of the world total. There are over 24 billion tonnes listed in currently operating mines, 18 billion of which are industrially exploited.

4. The industry comprises 240 mining ventures, 110 pits and 129 open-cast mines with an aggregate capacity of over 281 million tonnes of winnable coal per year, plus 40 enrichment plants which process roughly 120 million tonnes of raw coal per year. It employs 300,000 people and, with their families, supports no less than one million.

5. Russia ranks fifth in the world for coal output, behind China, the United States of America, India and Australia. It accounts for 5 per cent of all coal mined and ranks eighth among coal exporters. Output in 2003 is expected to be 272 million tonnes.

6. The industry has been in the throes of reconstruction for about ten years now; this is an inevitable aspect of the adaptation to market conditions which began in the early 1990s. The principal upshot of the development of the industry has been its virtually complete and successful emergence into the market economy.

7. As a result of the restructuring, over 93 per cent of the most unprofitable, unpromising and geologically dangerous mining ventures have ceased production and gone into liquidation over the period. A series of welfare provisions for employees of the closed mines and pits has been devised and put into operation, and most ventures have been corporatized and privatized. The industry has been purged of extraneous ventures, and mining corporations are now independent operators on the domestic and foreign coal markets.

8. Over 500 ventures have been corporatized and privatized during the restructuring period. A consolidation of shareholdings has brought most of them together into 60 large corporations and holding companies (Fig. 1).

9. Companies in the industry are currently forging alliances and setting up modern, integrated production complexes.

Coal-mining ventures and companies, and where they are based

Fig. 1

10. The economic underpinnings of the industry have changed. Today sales of output are the sole source of finances. Privatization of coal corporations began in 1997 with the sale of shareholdings owned by the Russian Federation. The overall return from the sale of Federal holdings in deals concluded between 1997 and 2001 was US$ 430.2 million, and altogether US$ 376.1 million went into the Federal budget.

11. Coal mined by private companies now amounts to 86 per cent of the total. As new owners have joined the management, efforts to put coal companies on a profitable footing have become more focused. Industry-wide, return on output in 2001 was 6.4 per cent, whereas in all preceding years, when losses at a large range of coal-mining ventures were made good with grants out of the State budget, the industry as a whole displayed negative profitability.

12. Overall, the change of ownership in the industry has have a positive effect on corporations: debts have been settled more quickly out of earnings, and marketing, financial and economic activity has been stepped up. The industry has emerged from deep crisis at a level of profitability never seen during the time of the Soviet Union.

13. The intensity of mining operations continues to rise. Taking the generally accepted measure, quantities loaded at the face increased by 140 tonnes/day over 2001; in mines with mechanized supports, they rose by over 200 tonnes/day. Over the whole period of restructuring within the industry, daily average quantities loaded at highly mechanized faces have more than doubled to 1500 tonnes today.

14. An especially telling outcome of restructuring in the Russian coal industry has been the growth in miner productivity, which is now at its highest level in the history of Russian coalmining – over 120 tonnes per worker per month. In 2001 alone, productivity rose by 7 per cent, and the upward trend is continuing. The labour intensity of mining has fallen correspondingly: over half the mining workforce has been laid off in the course of restructuring.

Basic indicators of the outcome of restructuring

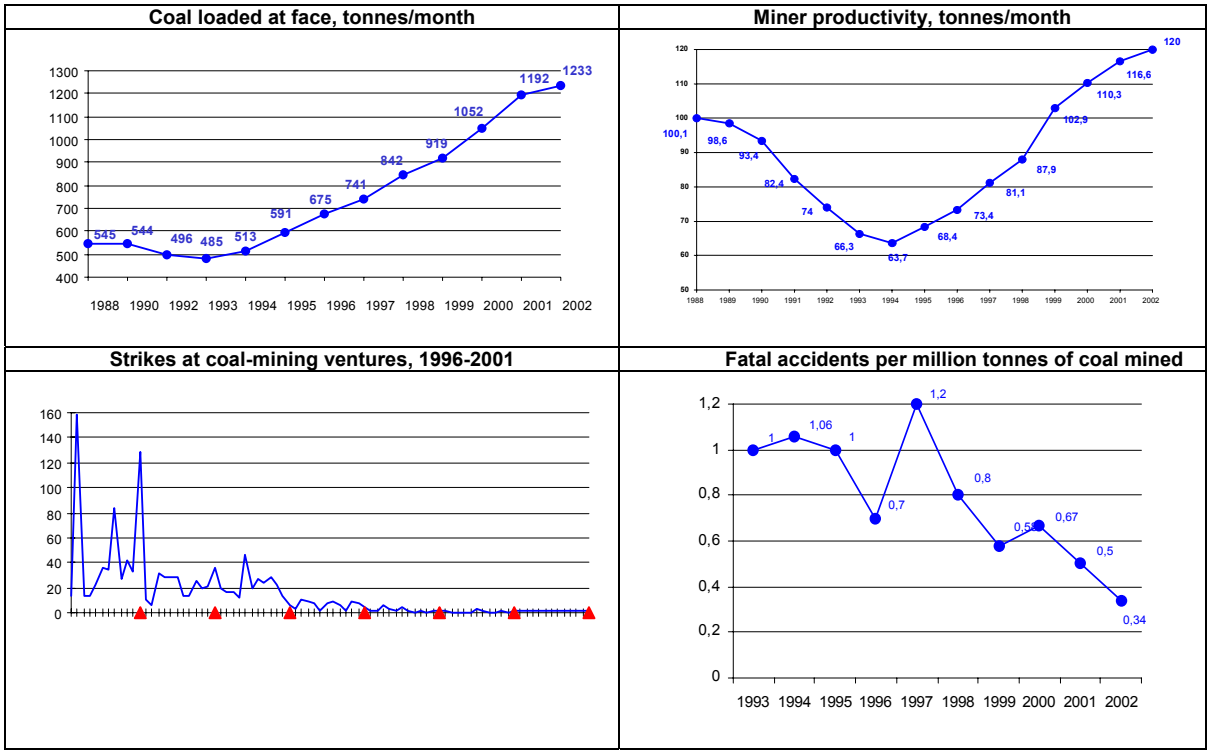


Fig. 2

15. A whole range of measures have been taken to provide for the welfare of the workers laid off and to improve living conditions for miners at ventures still in operation. Unemployment levels have been brought down substantially and the proportion of expenditure going towards wages has risen.

16. The restructuring of the coal industry has had a positive effect on labour protection and safety equipment. A series of measures to ensure safe, healthy working conditions in Russia's coal ventures is now in full operation.

17 Lethal injuries declined from 328 in 1993 to 132 in 2001; the number of lethal injuries per million tonnes of coal won has fallen by over 30 per cent over the same period.

18. Besides the basic indicators supporting the fundamental argument that restructuring is a fairly efficient way for the modernizing coal sector to go, one can also consider a number of new trends that have recently emerged in the Russian coal industry.

19. The first of these is the break in the decade-long (1989-1998) downward trend in annual coal output, investment and replacement of working capital. Just as 'Rosugol' forecast in 1995, coal output began to rise in 1999 and the growth has continued. From 1999 to 2001, the amount

of coal mined increased by a total of 37 million tonnes (16 per cent); the increase in 2001 was 11 million tonnes, to over 269 million tonnes. The geographical distribution of coal output is changing, with a rise in the proportion of competitive grades of coal from the Kuznetsk basin and a fall in expensive production at the mines in the Urals, the Eastern Donbass and the Moscow region (fig. 3).

Coal mined in Russian basins and deposits (millions of tonnes)

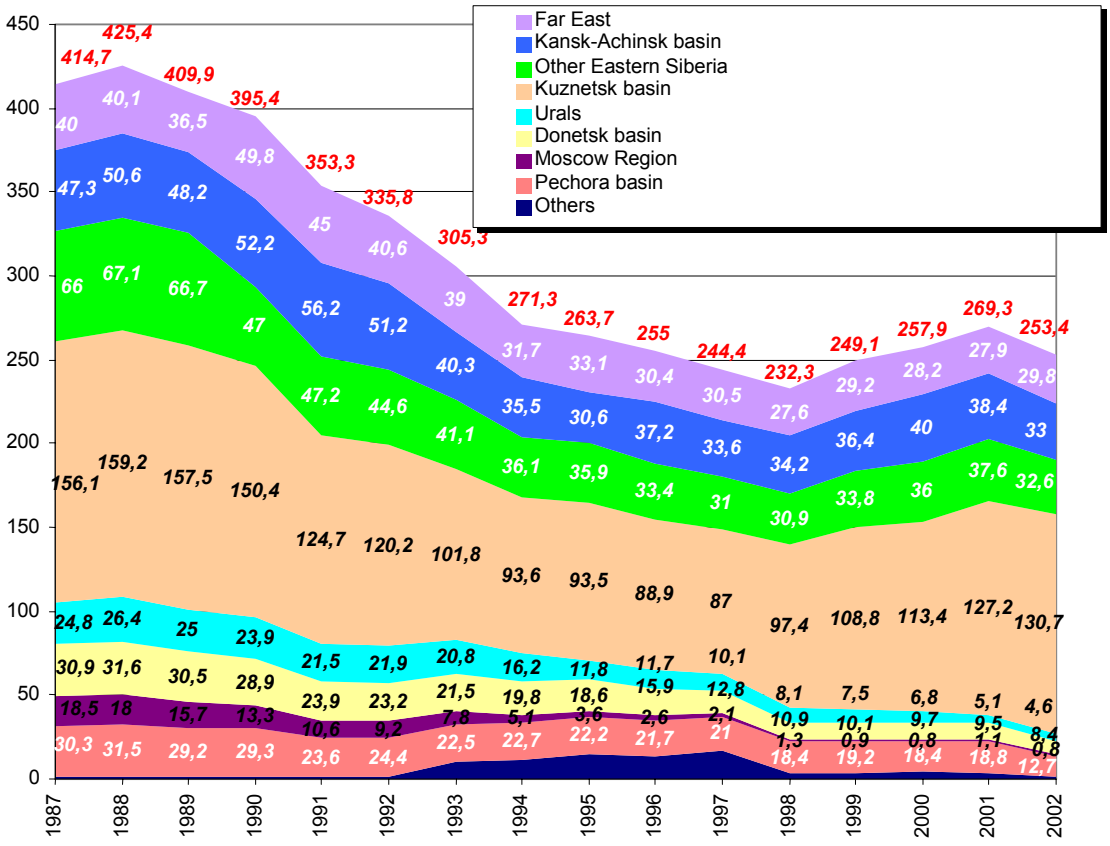


Fig. 3

20. Coal is consumed in all 89 constituent entities of the Russian Federation, and produced in 24. Only six regions fully meet their coal consumption from their own production, and 65 are wholly dependent on deliveries from coal-producing areas.

21. About 48 million tonnes of coal are transported between economic regions. The largest suppliers among the coal-producing regions are Western Siberia, which exports 30 per cent of its resources, and Eastern Siberia, which exports about 20 per cent.

22. Shaping local coal consumption patterns and organizing flows of coal resources within the country is one of the principal tasks of regional energy policy (fig. 4).

Principal flows of coal traffic

Fig. 4
(Figures for imports (from Kazakhstan) and internal flows are given in millions of tonnes; figures for exports are given in thousands of tonnes)

23. Inter-regional coal links will for the most part remain stable, but changes in freight tariffs are giving rise to new links between energy-rich and –poor regions and a degree of localization of hard-fuel consumption in the regions where it is produced. The Kuznetsk basin will continue to be the main supplier of coal to virtually all regions of the country. Coal mined in most parts of Eastern Siberia and the Far East will be consumed there.

24. With its massive coal resources, the Russian Federation is a traditional supplier of coal fuel on the world market. It currently accounts for no more than 6 per cent of world exports.

25. Twenty per cent of all the coal mined in Russia is exported (fig. 5). Exports amounted to 50 million tonnes in 2002. Russia's coal imports – 20 million tonnes in 2002 – come mainly from Kazakhstan, and the imported coal is consumed mostly in the Urals and in Omsk and Tula oblasts.

Russian coal imports and exports, millions of tonnes

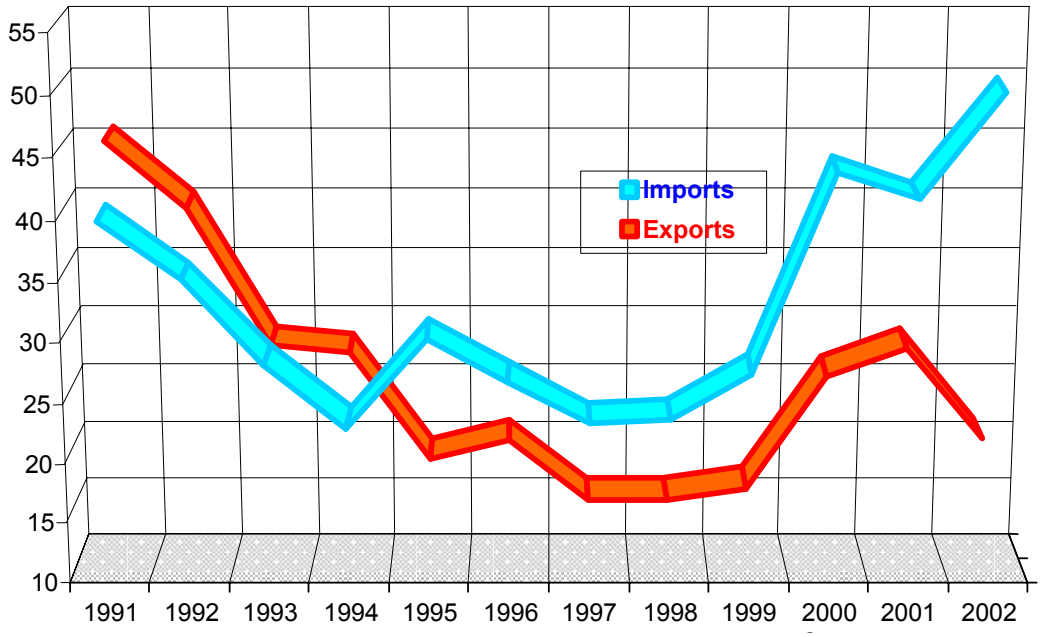


Fig. 5

26. The assumption underlying State policy on Russian coal exports is the need to ensure steady coal sales so that fluctuations in demand for coal on the domestic market can be smoothed out.

27. Experts forecast an increase in demand for Russian coal, especially on markets in the United Kingdom, Germany, Spain and Poland, totalling up to 30 million tonnes over five years as most coal mines in those countries are wound up. There are also prospects for an increase in demand for Russian coal on such South-East Asian markets as those in Japan, Taiwan and South Korea.

III. Restructuring as the basis for further development of the Russian Coal Industry

28 The outlines of a new Russian energy strategy up to the year 2020 relating to the development of the coal sector have been drawn up on the basis of an analysis of reform in the sector and incorporated into the relevant official documents.

29 Russia's energy strategy, fleshing out the goals, purposes and basic thrust of the Government's long-term energy policy, calls for the coal sector to be developed significantly faster than oil and gas, and for coal to figure much more prominently in the country's fuel energy balance (fig.6).

30 The principal means of accomplishing this is to establish a civilized energy market, adapt to the worldwide relationship between coal and gas prices, and tackle freight and other problems.

The task of the State is to limit its functions as an economic entity and step up its coordinating role as the regulator of the speed and extent of development in the fuel-energy complex.

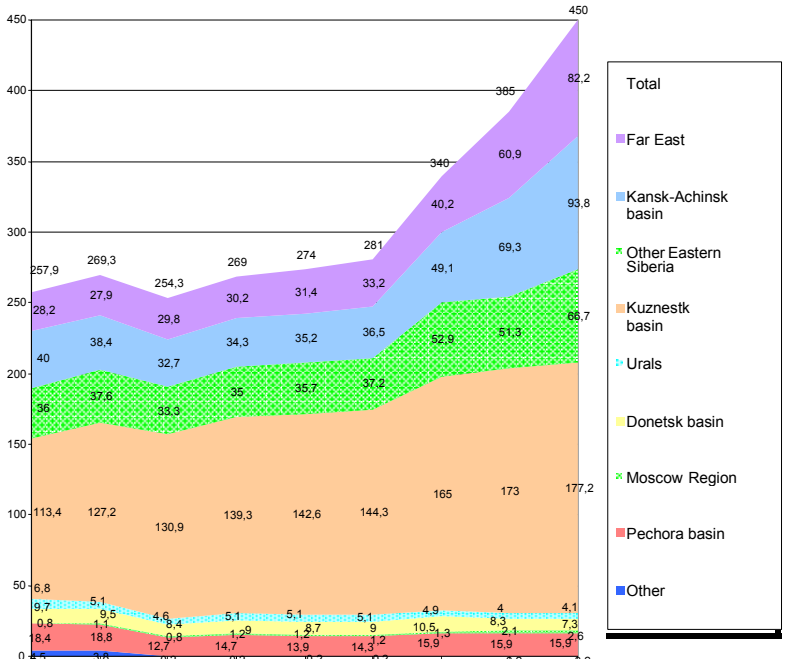
31 The privatization of coal production in basins of Federal and regional importance will be completed over the period 2003-2005; the financial standing of coal organizations will be improved and plans for the economic and social rehabilitation of mining towns and villages will largely be put into effect. Over the same period, the technical process of winding up 190 mines listed in the restructuring programme, at a projected residual cost of 34.77 billion roubles, will in essence be completed.

32 Over the period 2006-2010, arrangements should be made for fuel coal to be put on a competitive price footing with gas both as part of a deliberate governmental pricing policy and as a qualitatively new stage in the process of restructuring, refitting and intensified production.

33 A radical technological and economic change in coal production is forecast for 2011-2012 as mining centres shift to newly installed, next-generation, "super-dynamic technology" plant; coal will become a high-quality end product used, inter alia, in the chemical, energy technology and coal-and-steel industries.

34. With State policy now being refined in all strategic areas so as to win Russia a worthy place in the world community and put economic growth and living standards on a new plane, the experience gained in the restructuring of the country's coal industry between 1993 and 2002 offers the basis for the development of new strategic texts.

Forecast parameters for the development of the Russian coal industry
Forecast coal output per basin and deposit, millions of tonnes



Productivity changes and forecasts and numbers of people employed in the Russian coal industry

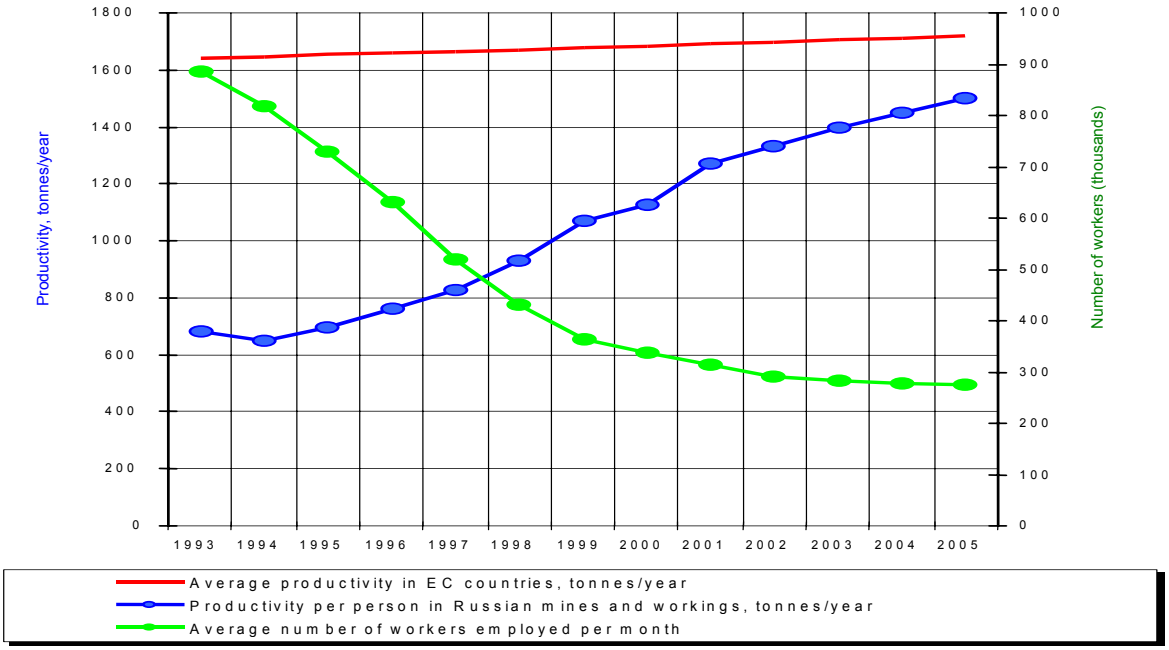


Fig. 6

35. A meeting of the Presidium of the State Council of the Russian Federation was held in the Kuznetsk Basin in August under the chairmanship of President Putin; it praised the outcome of the changes in the coal industry and gave its approval to an outline of State policy for the development of the coal sector, making it more competitive on the domestic and external markets. The outline lays down the principal directions for the future development of the sector:

Formulation of the national fuel-energy balance

- Use of the fuel-energy balance as one of the main tools for the pursuit of current and long-term State energy policy;
- Development of methods for calculating actual and forecast values of the balance and their relationships to budget parameters; monitoring of basic indicators

Making coal more competitive with gas on the fuel-resources market

- Correcting the imbalance in the fuel-energy balance by creating economic conditions that encourage honest competition between different sorts of fuel. Gradual introduction of an economically justified level of correspondence between coal and gas prices by 2010;
- Making organizational and economic arrangements to increase levels of coal use in power generation through the direct substitution of coal for natural gas in gas- and coal-burning power stations and by optimizing power station loads with a corresponding increase in power generation from coal;
- Developing a mechanism to give fuel consumers an economic interest in using environmentally friendly Russian coal in preference to importez Equibastuz coal;

- Taking action to boost coal quality by raising the quantities of coal enriched, developing and introducing State standards for various types of coal use, certifying output, introducing the ISO-9000 International Quality Management System at coal ventures, and monitoring and controlling the quality of the coal mined and dispatched.

Social relationships

- Completing the process of winding up especially unprofitable ventures and dealing with the associated social problems;
- Creating conditions encouraging labour mobility through proportionate development of the housing and laboujr markets in coal-mining regions. Developing a mechanism to stimulate the geographical redistribution of labour within coal-mining regions with due regard for economic rationale;
- Improving the rotating labour-training system in regions subject to extremes of climate with due regard for the needs of coal production based, inter alia, on the development of underground mining;
- Designing and introducing a programme to develop staff potential on the basis of the ISO-9000 international standards;
- Giving priority to labour-protection requirements in investment policy and when designing and introducing new machinery, technological processes, individual protective gear and monitoring devices.

Expanding the industry's export potential

- Ensuring a Russian presence on the world coal market my building and expanding marine coal terminals and port infrastructure and increasing rail freight capacity;
- Improving operating facilities at marine coal terminals, increasing their throughput capacity by, inter alia, refitting them to take larger vessels;
- Offering coal exporterscompetitive rail freight tariffs, which can be offset in part by additional coal freight traffic for export on the railways and by greater coal output;
- Improving operating facilities in export-oriented businesses as part of the current restructuring of the coal industry;
- Guaranteeing respect for State and regional development priorities and the private interests of individual coal producers when boosting Russia's export potential.

Developing the coal industry's mineral reserves

- Re-evaluating the coal reserves of operating businesses and back-up areas so as to identify which parts of them can be worked to economic advantage under market conditions;
- Altering the fiscal approach of the system of taxes on mineral exploitation to stimulate the rational working of deposits at a rate consonant with the judicious supply of fuel to the domestic and foreign markets;
- With a view to the energy security of the country or individual regions and in the course of establishing a State reserve, setting aside essential and adequate stocks of ready coal;

- Further delimiting the areas of responsibility of the Federal centre, the regions and exploiters of mineral deposits as regards the state, exploration and use of the country's mineral resources;
- Offering State backing for coal-mining companies putting money into prospecting for and exploring or further exploring coal deposits.

Creating a favourable investment climate and attracting investment in coal ventures

- Stabilizing the investment climate and improving Russia's credit rating, attaining world-wide levels of profitability on investment in the development of Russian manufacturing generally and the coal industry in particular;
- Stabilizing the financial situation of organizations in the coal industry and making them more attractive to investors by repackaging debts into budgets and extrabudgetary funds with longer amortization periods, writing off penalties and reducing the percentage fee charged for repackaging;
- Exempting imported technological equipment for which no equivalent is manufactured in Russia from value-added tax;
- Extending Sberbank's experience with loans to leasing-based investment projects in the coal industry, for example extending credit to domestic machine-tool manufacturers producing mining equipment.

The following have been laid down as tools for use in the development of the coal industry:

- Russia's energy strategy up to the year 2020
- Pricing and tariff policy for goods and services produced by natural monopolies
- Monitoring of overall production and consumption of fuel and energy resources
- A mechanism for attracting investment in the coal industry
- Monitoring of social and economic programmes in coal-mining regions
- A leasing mechanism for the acquisition of modern, high-output, domestically and produced and imported mining equipment
- A mechanism to regulate the domestic market by stabilizing mine-gate coal prices and rail freight tariffs for coal transport within the country
- A mechanism to regulate minimum social standards governing pay and other guarantees in the coal industry.