THE CZECH REPUBLIC
STRATEGY FOR SUSTAINABLE DEVELOPMENT

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I. Introduction

Sustainable development provides a new framework for the strategy of civilisation development. The concept is based on the classic and broadly accepted definition adopted in 1987 by the World Commission on Environment and Development, under which development is considered sustainable if it meets the needs of the present generation without compromising the ability of future generations to meet their own needs. The content was subsequently developed at national as well as international levels; the most recent of major events, the World Summit on Sustainable Development (Johannesburg 2002), emphasised that the objective was to achieve development ensuring a balance between the three fundamental pillars: social development, economic development and environmental protection, as was symbolically proclaimed in its motto: people, planet, prosperity. The essence of sustainability lies in the attainment of the following three basic objectives:

- social development respecting the needs of all,
- efficient protection of the environment and prudent use of natural resources, and
- the maintenance of a high and stable standard of economic growth and employment.

The need for sustainable development ensues not only from environmental limits, but also from economic and social limits resulting from the increasing competition pressures of the global economy. This is evidenced by developments within the European Union (EU). The Lisbon Summit (March 2000) was a significant factor formulating the social and economic priorities of the EU. At the Barcelona Spring Summit (March 2002), this concept was extended to include the conclusions of the previous EU summit in Gothenburg, Sweden (June 2001), where the European Union Strategy for Sustainable Development, with an emphasis primarily on environmental issues, was adopted. The Lisbon Process thus acquired its current form, which stresses the need for development and mutual balance between the social, economic and environmental pillars so that none prevails over the others. In this context, the Czech Republic must meet its international sustainable development obligations from the position of an economically developed country, i.e. it is obliged to share global and regional responsibility while respecting the specificities and interests of the Czech Republic.

The Strategy for Sustainable Development is not an unchangeable document, it is historically conditioned, and will continue to evolve, grow, and change as time passes. Its primary role is to provide timely warning of any existing or potential problems that might endanger the Czech Republic's transition to sustainable development, and to initiate measures designed to prevent such threats or at least mitigate their impact and deal as efficiently as possible with any consequences. The Strategy, in unfavourable events, provides a response to an emergency; in hospitable conditions, it ensures the optimisation of development within existing limits. Sustainable development is comparable to other systems of values, such as the system of human rights and freedoms, which do not have any definitive form either but should be interpreted and redefined within the relevant historic context. Sustainable development should be grasped as a "normative" idea, a constant challenge stimulating the social process of learning and self-organisation. Besides the surmounting of objective disparities, it should be noted that breathing life into the vision also requires the overcoming of the barriers of social and psychological stereotypes, including, inter alia, consumption patterns and preferences, and also the belief that science and technology will provide a solution to objective disparities without the need for any change in the behaviour and attitudes of individuals. It is also necessary to bear in mind that unless society, on both a European and global scale, adapts to the established environmental, economic and social limits, the stability of the social system could be threatened.

Therefore, the Strategy should become a consensual framework for the processing of additional documents of a conceptual nature (sectoral policies or action programmes). It should serve as an important basis for the strategic decision-making of individual ministries and for inter-ministerial co-operation and co-operation with major groups.

The basic timeframe for the Strategy has been set up to the year 2014, but certain considerations and objectives are aimed at the year 2030 or beyond, depending on the nature of the area in question (e.g. the energy sector). Differentiation between shorter- and longer-term frames will prospectively become an important feature of the Strategy; in this respect, the Strategy will focus in particular on harmonising short-term and long-term objectives, which need not be identical.

The Strategy is conceived as a long-term framework for political decision-making in the context of international obligations which the Czech Republic has accepted or intends to accept in connection with its membership of the United Nations (UN), the Organisation for Economic Co-operation and Development (OECD) and the European Union, while respecting the specific conditions and needs of the Czech Republic.

The Strategy reflects the current situation of human knowledge and the system of values on which modern developed society is based; this provides positive motivation in the search for ways of safeguarding the high standard of living enjoyed by human beings. However, the system of values is, to a certain extent, a limiting factor. Historically, the current development trajectory has been based on the values of progress and growth (especially in the technical sense of the words), but has often conflicted with the need to adopt certain restrictions ensuing from, for example, environmental limits or the limits related to the healthy lifestyle of social communities of all types (rural, urban, etc.). Yet this problem is not limited solely to the territory of the Czech Republic. Other EU Member States and developed countries are currently facing similar issues. Documents of the sustainability-strategy type have served as an incentive in the search for the means and in making corresponding decisions and measures that will lead to necessary modifications to the system of community values, and associated changes to patterns of consumption and production. These principal transformations must be implemented at both national and global levels.

The strategic and partial goals and instruments of the Czech Republic Strategy for Sustainable Development are formulated to eliminate, as much as possible, any imbalance between the economic, environmental and social pillars of sustainability. They are designed to ensure the highest attainable quality of life for the present generation and to create preconditions for the high-quality life of future generations (with consideration for the fact that future generations' idea of the quality of life may differ from that of our generation). This is to be attained through the following **strategic goals**:

- ❑ maintain the stability of the economy, ensuring it is resistant to adverse effects;
- ❑ encourage economic development respecting the carrying capacity of the environment and ensuring the sustainable funding of public services (sustainable economy);
- ❑ develop and universally support the knowledge-based and skill-based economy, and increase the competitiveness of industry, agriculture and services;
- ❑ in the territory of the Czech Republic, safeguard the good quality of all components of the environment and the functioning of their basic relations, as well as harmonic relations between ecosystems, and also preserve, to the largest extent acceptable in economic and social terms, the natural resources of the Czech Republic so as to ensure that they can be delivered to future generations, and preserve and not reduce biological diversity;

- ❑ systematically support recycling, including, inter alia, the recycling of construction materials (to reduce exploitation of the landscape and the consumption of imported raw materials);
- ❑ minimise conflicts of interests between economic activities and the protection of the environment and cultural heritage, both tangible and intangible;
- ❑ safeguard the protection of non-renewable natural resources (including agricultural land);
- ❑ maintain strategic food self-reliance of the Czech Republic;
- ❑ defend and promote the Czech Republic's national interests in the framework of the broadest international relations, major international organisations, and bilateral relations;
- ❑ fulfil the Czech Republic's international obligations in the field of sustainable development;
- ❑ contribute to the search for solutions to the key global issues of sustainable development;
- ❑ keep the population of the Czech Republic stable and progressively improve its age structure;
- ❑ constantly reduce unemployment to a rate that ensures the economic and social motivation of the population to engage in labour activities;
- ❑ encourage the development of human resources and achieve maximum social cohesion;
- ❑ ensure constant growth of the level of education within society, including education in culture, thus ensuring the competitiveness of the Czech society;
- ❑ develop ethical values in accordance with European cultural traditions;
- ❑ preserve appropriate forms of diversity of cultures, life in rural areas and conurbations. Safeguard cultural diversity and the diversity of lifestyles. Ensure the equal rights of communities and the availability of services based on their different living needs and priorities;
- ❑ make the arts accessible to all people, in particular with regard to the fact that culture is a fundamental part of a knowledge-based society and a developmental factor;
- ❑ promote the sustainable development of municipalities and regions;
- ❑ support the development of public services and social infrastructure;
- ❑ allow the general public to participate in the decision-making process and in the drafting of strategies in matters relating to sustainable development, and achieve the broadest possible consensus for the transition to sustainable development;
- ❑ prevent a rise in the capacity of lobbyist and activist groups to pass off their own particular interests as the interests of sustainable development and promote their own interests on such grounds to the detriment of the interests of the whole;
- ❑ increase the efficiency of performance and improve the activities of public administration in accordance with the requirements of sustainable development;
- ❑ adopt measures, with a view to ensuring external and internal security, that reflect the requirements needed to provide protection from international conflicts and the changing forms of crime, including international crime and terrorism in particular.

The draft Czech Republic Strategy for Sustainable Development drew on broad discussions throughout society. The implementation of the Strategy and the successful application of sustainable development are tasks not only for the Government, but also for all partners and interest groups from the public and private sectors.

The purpose of drafting the Strategy was to prepare a policy acceptable across society, which, if freely respected and continuously updated, will permanently improve the lives of citizens and reinforce the democratic political system of the Czech Republic.

II. Situation in the Czech Republic

II.1 Economic pillar

Developments in the period 1993 – 2003

During the period in question, basic macroeconomic indicators developed as follows:
- GDP grew, with the exception of a temporary minor decrease in 1997 and 1998.
- The inflation rate essentially reported a decreasing tendency, with the exception of a temporary increase in 1998.
- The general unemployment rate increased.
- The share of industry in gross value added decreased slightly, while the share of services increased slightly.
- National debt and public debt increased with progressively growing dynamism.
- Household consumption rose steadily.

At present, the Czech Republic is a country with a relatively stable economy. GDP is on a constant growth trajectory, with the highest post-1989 increment recorded in 1995. Notwithstanding the growing importance of services, the share of industry in the generation of GDP is still very large. The large share of the cost of gross fixed capital generates potential for the favourable development of the economy in the years to come. The Czech Republic's economy is highly open, with a large share of foreign trade. Machinery and vehicles account for more than one half of exports from and nearly one half of imports to the Czech Republic. Exports of products and services were redirected in the 1990s, with more than 70% routed to western markets. The balance of foreign trade has been negative, as the Czech Republic has to import practically all the crude oil and natural gas it needs, together with numerous other raw materials. Nearly one half of all sales in industry are attributable to companies controlled by foreign entities, whose share of industrial production exports is more than 70%. Labour productivity in these companies is rising faster than in other private or public companies. Production is shifting to products with a higher added value. Investment incentives have resulted in a very steep increase in foreign direct investments in recent years.

Although the financial sector has stabilised, the condition of public finances is unsustainable in the long run, as the Czech Republic's indebtedness continues to increase. The country's state debt, constituting a dominant part of the public debt (amounting to 89.9%), accounted for 20.5% of GDP (CZK 493.2 billion) as at 31 December 2003. The deficit in the current account of the balance of payments amounted to 6.2% of GDP (2003). Significant dynamism can also be seen in the rate at which municipalities incur debts. "Internal debt" is another major problem.

Present condition

From the perspective of sustainability, the following can be considered as **strengths** of the Czech Republic's economy and its most important sectors:
- Stabilisation of the financial sector (banking, insurance sector).
- The growing share of services in GDP, including environmental and industrial services.
- The shift of industrial production towards products with a higher added value.
- Tradition in certain industries, in particular processing industry.
- A skilled work force.
- A high share of coverage of energy requirements covered out of the country's own sources, and the improving diversification of sources.

- Self-reliance and reliability in electricity generation thanks to the fact that the Czech Republic has not abandoned nuclear energy.
- The decreasing share of solid fuel in the consumption of primary energy sources.
- A progressive reduction in the energy intensity of GDP.
- A reduction in the negative effects of industrial and agricultural activities on the environment, in particular air and water.
- The high density of railway and road networks.
- Public transport systems in cities, covering a high share of transportation capacity, and the introduction of integrated transport systems in large conurbations.
- A dramatic increase in the share of vehicles with catalysers in the total number of vehicles; a generally progressive improvement in the technical condition of vehicles.
- The highly dynamic development of communication networks (mobile telephones and the Internet).
- The attractiveness of the Czech Republic in terms of natural and cultural values.
- The potential of "live" culture and regional specificities.
- Agriculture ensures the maintenance of landscape.
- Agriculture is of a predominantly mass-production nature.
- Agriculture, for the most part as the sole employer, maintains economic activities in rural areas.

From the perspective of sustainability, the following should be considered as **weaknesses** of the Czech Republic's economy and its most important sectors:
- The condition of public finances is unsustainable in the long term.
- The underdeveloped capital market.
- Underdeveloped alternative forms of financing enterprises, and their excessive dependence on the banking sector.
- In certain sectors, a lack of investments necessary for the introduction of modern technologies (e.g. agriculture).
- Lower labour productivity compared with the "old" EU Member States.
- Low intensity of innovations in industry and persistent insufficient state support for such innovations.
- The low flexibility of the labour market.
- The energy intensity of GDP is higher than in EU traditional Member States (almost double).
- The high material intensity of GDP – the difference between the Czech Republic and EU traditional Member States is even higher here than in the case of energy intensity.
- A prevailing share of leased land, excessive fragmentation of land ownership.
- The rising negative effects of transport, in particular road transport, on the environment, mainly on the quality of air.
- Insufficient regard for efficiency, evenness and environmental considerations in the creation and/or application of economic instruments (subsidies, grants, incentives).
- The orientation of new investments towards "greenfield" projects instead of the re-use of *brownfields*.
- Insufficient (missing, obsolete or inadequately maintained) water and energy infrastructure (service networks, waste water treatment plants, etc.) in most regions of the Czech Republic (e.g. Central Bohemia and the City of Prague).
- Missing segments of motorways and speedways, the absence of bypasses, insufficient maintenance and inadequate condition of transport routes, insufficient use of the opportunities offered by electric traction in transport, insufficient use of combined means of transport.

- Constantly increasing transportation volumes of road passenger and freight transport and a decreasing share of railway transport in total transportation volumes.
- Inadequately defined and supported public interest in a high quality transport service in municipalities and regions, unequal economic conditions for public and individual transport as a result of the non-payment of external costs by direct users, lack of interest among the general public in public transport.
- More than one half of registered vehicles are not equipped with a catalyser, and the average age of vehicles remains high.
- A low standard of services in some sectors and regions.
- Considerable economic differences between regions.
- Insufficient infrastructure for tourism in terms of quality. Underestimation of the quality of nature and a harmonic landscape as a tourist attraction.
- Imperfect institutional environment, especially in terms of barriers to business, and insufficient promptness in the rendering of verdicts by courts of justice.

Trends

We can assume that the share of services in the generation of GDP will increase while the share of industry and agriculture will diminish. Industrial production will continue to shift towards products with a higher value added. Labour productivity will grow and unemployment will be difficult to reduce. Efforts at meeting the Maastricht criteria for accession to the European Monetary Union should lead to the stabilisation and progressive decrease of state debt (or deficit in public budgets) and, in the long-term perspective, to the drafting of balanced budgets. This requires a reform of the social system and savings by the Government. In the years 2007 to 2009, the transition periods with the lower VAT rate will expire (heat, housing construction work), energy markets will become fully liberalised, certain investment incentives will cease to be advantageous, the Maastricht criteria will need to be fulfilled, and the possibility of applying national monetary instruments of economic policy will be restricted. In accordance with the European trend, the share of renewable sources in primary sources of energy will continue to rise.

Threats to the sustainable development of the Czech Republic's economy and its most important sectors include, unless additional measures are taken, the following:
- The reform of public finances is inadequate.
- Growing competition in global markets, the inability to win third markets.
- Underdevelopment of the capital market.
- Persistent insufficient flexibility of the labour market, insufficient support of intangible factors of competitiveness (training new workers in required fields, putting the results of research and development into practice, inadequate corporate governance).
- The timing of accession to the European Economic and Monetary Union.
- The inappropriate structure of the economic environment, threatening the existence of small and medium-sized enterprises.
- The inappropriate structure of the legal environment, in particular for the development of small and medium-sized enterprise.
- The scaling-down of railway transport (mainly regional) and a decline in railway transportation volumes, with increasing road transportation volumes.
- Roads in municipalities and conurbations congested by heavy freight vehicles and cars.
- A lack of funding for the maintenance and development of transport infrastructure, and issues related to the renovation of the vehicle fleet.
- The insufficient development of services.
- Widening gaps between regions.

- Economic underestimation of the non-productive (environmental and social) functions of woodlands.
- Underrating of the importance of multifunctional agriculture, and insufficient development of organic farming.
- A lack of funds, and thus insufficient replenishment of used nutrients, with a constant decrease in the fertility of the soil.
- A lack of skilled work force in agriculture.
- Lagging behind in the field of information technologies.
- The concentration of investments and jobs in a small number of enterprises, the slow development of the local economy and small enterprises, resulting in a deterioration in social and economic stability and an increase in regional disparities.
- Constant economic underestimation of the importance of culture as a developmental factor; underrating of the importance of investments in the care of cultural heritage; underestimation of the economic importance of "culture industries" and the need of their development.

The **opportunities** for the sustainable development of the Czech Republic's economy and its most important sectors include, if additional measures are taken, the following:
- The prompt and successful finalisation and implementation of the reform of public finances.
- The restructuring of industry and agriculture, the levelling of conditions in the market (the acceleration of bankruptcy proceedings for non-viable companies).
- The increasing productivity and competitiveness of industry and agriculture, and a shift towards the manufacture of products with a high added value, including the "culture industry".
- Development of the labour market, a rise in the mobility and flexibility of the work force.
- The development of education and training, research and development, especially in technical fields.
- The exploitation of the potential of activities designed to protect the environment for the purpose of technical and technological innovations (eco-efficiency).
- The introduction of a revenue-neutral environmental tax reform, which will encourage promising efficient technologies and sectors and at the same time will have social and environmental benefits.
- The development of services in desirable sectors (tourism, the arts, information), with the support of investment incentives.
- The application of selective incentives and economic instruments encouraging the development of technologies and other activities that are environmentally friendly.
- A rise in the role of information technologies.
- The high potential of energy savings.
- The potential of using renewable sources, in particular biomass, wood and combustible waste.
- The installation of modern energy-efficient, low-emission and low-waste technologies as part of Integrated Pollution Prevention and Control (IPPC).
- The routing of trans-European multi-modal corridors, friendly to the environment and human health, via the territory of the Czech Republic.
- The qualitative and quantitative development of municipal public transport and integrated transport systems, the development of combined transport.
- The development of ecological (alternative, organic) farming.
- The introduction of new biotechnologies (e.g. methyl ester, bio-ethanol).
- The development of multi-functional forestry management, safeguarding the ability of forests to perform appropriate environmental, economic and social functions.

- Support of the development of the tourist infrastructure, the development of agro-tourism.
- Support for the care of natural and cultural heritage in its tangible and intangible form.
- The gradual elimination of environmentally harmful subsidies.
- The harmonisation of economic development in the Central European region, with a maximisation of the benefits for the social and environmental pillars, with regard to the strong interconnection of economic activities (e.g. industry, investments, transport, trade, work force migration).

International comparison

In the framework of the OECD, in terms of per-capita GDP, the Czech Republic ranks 24th and as such places highest among the new EU Member States (Slovenia is not an OECD member country). Furthermore, the Czech Republic ranks third in terms of the share of industry in gross value added (GVA), first in terms of the share of costs in the formation of gross fixed capital, and twelfth in terms of tax burden. The openness of the Czech Republic's economy is evidenced by the country's fifth place in terms of the exports/GDP index, and fourth place in terms of the imports/GDP index.

Conclusions

Based on an analysis of the circumstances described above, the following **main conclusions** can be drawn:
- At present, the Czech Republic's economy can be considered as stable, although this stability may be severely disrupted in the short to medium term by certain internal threats (consumption growth faster than GDP growth, a rise in wages faster than labour productivity growth, national debt growth faster than GDP growth).
- As regards sustainable development, one of the chief negative factors is the emphasis placed on the quantitative aspects of growth regardless of social and environmental quality.
- The Czech Republic's economy is and will be burdened by internal debt.
- Despite significant improvements in recent years, economic sectors continue to generate certain negative pressures on the environment.

The principal **elements of balance** in the relationship between the economic pillar and the other pillars which need to be strengthened include:
- A majority consensus, from the aspect of general interest, in respect of both economic growth and environmental protection.
- The support of research and development with a view to the development of new technologies that will help to improve the competitiveness of the Czech Republic's economy.
- The increasing willingness of a part of the economic sector to engage in voluntary environmental activities (EMAS, ISO 14 000, the production of environmentally friendly products, voluntary agreemtns).
- The launch of a revenue-neutral environmental tax reform in accordance with the EU, which will support the development of a "value added economy" with low material and energy inputs.
- The development of entrepreneurship in the field of products and services designed to protect the environment, resulting in the creation of new jobs.
- Support for the development of environmental technologies.
- The efficient application of economic instruments in the field of environmental protection (the elimination of undesirable subsidies, the initiation of environmental tax reform).

- A majority consensus on the need for further economic growth to satisfy social needs.
- A developed "social infrastructure" (institutions and mechanisms of health care, social support and pension security).
- A high level of economic activity within the population.

The principal **elements of imbalance** in the relationship between the economic pillar and the other pillars which should be suppressed include:
- A conflict of interests between environmental protection (especially the protection of nature and the landscape) and economic development (especially the building of transport infrastructure and commercial buildings), the persistent structure of the economy causing high specific emissions of greenhouse gases and high intensity in terms of natural raw materials and the production of waste.
- The radicalisation and polarisation of points of view regarding the relation between the economy and environmental protection, the absence of partnership and dialogue.
- The absence of a majority consensus on the need to carry out fundamental reform of social systems.
- The escalation of "internal debt" (e.g. imbalance between the growth of labour productivity and wages).
- Social systems (health care, pension insurance) are drawing near their economic limits and will cease to be financeable in the long term.
- The structure of the labour market is not compatible with the needs of the economy (especially the mobility of the work force, flexibility, skills).
- The augmentation of regional disparities (employment, housing, work force structure, the environment, etc.).
- The preference for a short-term profit-generating service or processing economy over long-term investments, and investments in the knowledge-based economy in particular.

The main challenge faced by the economic pillar of the sustainable development of the Czech Republic is to strengthen the competitiveness of the Czech economy, primarily by:
- **preserving the stability of the economy and improving its resistance to negative effects,**
- **creating conditions for environmentally and socially sustainable economic growth,**
- **creating conditions for a flexible economy based on knowledge and skills,**
- **technological innovation,**
- **fostering the efficient partnership of the public and private sectors and increasing their responsibility for the implementation of sustainable development,**
- **applying the principles of remaining within the limit of the regenerative capacity of the environment, preserving the capability of the environment to absorb the negative effects of economic growth, and progressively eliminating any ecological damage (non-absorbable economic externalities).**

II.2 Environmental pillar

Developments in the period 1990 – 2003

In the late 1980s, the state of the environment in the Czech Republic was one of the worst in Europe and, in certain respects, even globally. This alarming situation was one of the impulses for the social changes in 1989. Between 1990 and 1992, as a result of economic transformation, many energy-intensive and polluting manufacturing processes were scaled down or even halted, and the environmental burden slowly began to lift. At the same time, new legislation was promptly enacted. The effects of the new legislation began to emerge between 1993 and 1998. Air and water pollution declined by approximately 10% year on year, unsecured landfills were shut down, and environmental impact assessment became a routine practice. Investments in environmental protection, at that time exceeding 2% of GDP, were channelled primarily into the protection of the air (the dedusting, desulphurisation and denitrification of power plants and large heating plants) and water (the building of sewage systems and large waste water treatment plants). Most environmental investments in the 1990s focused on end-of-pipe rather than modern production technologies. Certain corrections were made at this time to applicable legislation in line with OECD requirements, and the transposition of the Community acquis commenced. At an international level, the Czech Republic acceded to most global and regional multilateral environmental agreements. In the years 1999 to 2003, the rate of the decline in pollution slowed down and the state of the environment became stabilised to a certain extent, which can be explained by the fact that most of the measures called for by the new legislation were implemented at the end of 1998. Efforts then concentrated on the completion of the transposition and implementation of the Community acquis.

Present condition

At present, the **strengths** of the state of the environment in the Czech Republic in terms of sustainability include:
- A reduction in, and subsequent stabilisation of, greenhouse gases emissions at a level more than 20% lower than that in 1990.
- Discontinuation of the production of, and a substantial reduction in, the use of substances depleting the ozone layer of the Earth.
- A reduction in the volume of primary mineral extraction.
- The existence and development of nuclear energy sources allowing for a substantial reduction in the production of greenhouse gases.
- A developed central heat distribution system, which is more friendly to the environment than local heating; the introduction of gas heating.
- Stabilisation of the reduced level of emissions into, and pollution of, the air.
- A continuing increase in the number of inhabitants connected to the public sewage system and supplied with water from public water distribution systems.
- A significant reduction in emissions into water from point sources of pollution, sewage and industrial waste water, and a reduction in emissions from non-point (area) sources, in particular by reducing the use of fertilisers and pesticides.
- The dynamic development of organic farming, the adoption by the Czech Government of the Action Plan of the Czech Republic for the Development of Organic Farming up to 2010.
- The existence of a network of specially protected areas with various levels of protection.
- The designing and definition of the Territorial System of Ecological Stability (TSES) as an instrument for the general protection of nature and the landscape.

- A progressive moderate increase in the acreage of forest land; a moderate increase in the share of permanent grassland and a decline in the acreage of arable land.
- An increase in the production of plants not entering the food chain (technical and energy crops, medicinal herbs, etc.).
- The progressive development of systems to minimise the production of waste; waste sorting; in the framework of recycling, the use of waste as a source of material or at least energy.
- The gradual introduction of good practice in the handling of chemicals and genetically modified organisms and products, with the application of subsequent control mechanisms.
- The existence of a stable legal and institutional framework, and economic and voluntary instruments in the field of environmental protection.
- Accession to most global and regional multilateral environmental agreements, in some cases with very effective and efficient implementation.

Weaknesses of the state of the environment in the Czech Republic in terms of sustainability include:
- The continuing high specific emissions of the main greenhouse gas – carbon dioxide.
- High specific emissions of sulphur dioxide and nitrogen oxides (per GDP).
- Local pollution by nitrogen dioxide, suspended particles of PM_{10} fraction, polycyclic aromatic hydrocarbons (PAHs) and heavy metals, and non-point source pollution by ground-level ozone, resulting in particular from car traffic.
- Nearly one quarter (22.6%) of the population lives in houses not connected to public sewage; nearly 8% of the water discharged into the sewage system remains untreated, and hundreds of municipalities or municipal districts with a population of more than 2000 equivalent inhabitants do not yet have an adequate waste water treatment system in place.
- Some segments of water courses are still classified as "strongly polluted" or "very strongly polluted" water, while a considerable proportion of major water courses reports increased concentrations of specific pollutants and/or is microbiologically contaminated or substantially technically regulated (regulation, sewage, straightening, etc.).
- The quality of surface and ground water is affected by diffuse pollution, mainly the excessive flushing of nutrients from soil in the scope of agricultural mass production; 45% of agricultural land is classified as a "vulnerable area"; the whole territory of the Czech Republic is classified as a "sensitive area" in the context of requirements regarding the treatment of municipal waste water.
- A significant percentage of water reservoirs (including fish ponds) suffers from eutrophication, resulting in the substantial seasonal development of toxic algae and cyanobacteria; most stagnant water bodies are contaminated by microbes and are not suitable for bathing.
- Neither the decline in the production of pollutants nor the ongoing revitalisation measures have, as yet, had any great positive effect on the functions of ecosystems or the condition of the cultivated landscape.
- The character of the landscape is still strongly influenced by insensitive human activities, urbanisation and suburbanisation; care of the cultivated landscape is insufficient.
- The species composition and the age and spatial structure of forests is adverse in certain areas; in places, forest soil has been cumulatively degraded over long periods of time, and two thirds of woodland area reports various levels of damage caused by pollution.
- The slow progress in general landscaping modifications, resulting in delays in the implementation of necessary environmental measures.

- The very low retention capacity of the landscape, augmenting the risk of flooding, is the result of ongoing intensive farming, forestry management, and the management of water courses and flood plains.
- The persistent contamination of soil and rock masses in certain conurbations; the existence of *brownfields* and their insufficient regeneration and re-utilisation. Inadequate registration and remediation of contaminated areas.
- Landfilling continues to be the most frequent method of waste disposal (approximately 20% of total production). Inadequate application of systems to minimise, separate and material use of waste.
- There is still a high incidence of ecological accidents, fires, and leaks of hazardous substances, and more recently there is a threat of terrorism with potential significant impacts on the environment and natural resources (especially sources of drinking water).
- A high percentage of the population is exposed to excessive noise.
- The absence of a conceptual approach to the issue of invasive alien species.
- Inappropriate amelioration and drainage on agricultural land, resulting in the accelerated runoff of water from the landscape and a decline in ground water levels.
- The augmentation of the impacts of mass tourism on the environment, especially in specially protected areas (in relation to the natural value of the area and the carrying capacity of the environment).
- A considerable reduction of the area of wetland ecosystems, the negative impact of drainage and eutrophication.

Trends

Threats to the sustainable development in the field of environmental protection in the Czech Republic include, unless additional measures are taken, the following:
- An increase in, or even the preservation of, the high level of carbon dioxide emissions.
- Low potential for a reduction in overall emissions of nitrogen oxides.
- As a result of automobile traffic, limited possibilities to reduce the excessive pollution by nitrogen dioxide, suspended particles of the PM_{10} size fraction, polycyclic aromatic hydrocarbons (PAHs) and tropospheric ozone.
- The potential risk of the contamination of water and soil from closed, insufficiently secured landfills and certain industrial sites.
- An increasing amount of waste, especially municipal waste.
- A reduction in biological and landscape diversity.
- Excessive claiming of agricultural land and woodland for construction and other purposes.
- A growing quantity of *brownfields* in cities and rural areas.
- The risk of a further deterioration in the vitality of forest vegetation in some locations as a result of the delayed effects of past pollution, a decline in the ecological stability of forest ecosystems as a result of inappropriate species composition and spatial structure of woodland.
- The persistent risk of the release of firedamp from abandoned coal mines in the Ostrava-Karviná coal field, and of the release of other hazardous and toxic substances from environmental burdens from the past.
- A deterioration in the state of the environment, especially in the quality of air, and noise pollution in conurbations resulting from increasing volumes of individual and commercial road traffic and the diminishing use of public city transport and railway transport.
- The biological risk of genetic contamination associated with the cultivation and genetic modification of new forms of organisms and with the spreading of inappropriately introduced, geographically alien, invasive and genetically modified organisms.

- The chemical risk associated with escapes and leaks of chemical substances into the environment (heavy metals, persistent organic pollutants, endocrine disrupters), mainly from industrial processes and transport, due to ecological disasters, as part of agrochemicals (pesticides) and if used as a material in consumer products.
- The risk of natural disasters and "anthropogenic" accidents and acts of terrorism.
- The risk of damage to natural resources by excessive tourism.

The **opportunities** for the sustainable development in the field of environmental protection in the Czech Republic include, if additional measures are taken, the following:
- The exploitation of the technical possibility of reducing emissions and other impacts on the environment in the framework of Integrated Pollution and Prevention Control (IPPC).
- The existing considerable potential for a further reduction in carbon dioxide emissions.
- A further moderate reduction in stationary source air emissions (due to new requirements regarding the operation of sources).
- A moderate reduction in mobile source air emissions in absolute figures and a significant reduction in specific figures in relation to performance (if renewal of the vehicle fleet continues at a faster pace than the increase in transport performance as has hitherto been the case, and if road cleaning and maintenance improves).
- A further significant reduction in point source and non-point source water pollution (in connection with the ongoing installation of sewage systems, waste water treatment plants with level III treatment, the introduction of new technologies, and the implementation of measures in agriculture).
- Intensified implementation of revitalisation projects leading to the transformation of aquatic and wetland ecosystems with a view to renewing their natural functions.
- The gradual cultivation of conditions, mainly by adaptive management, for a reduction in the number of endangered varieties and species of plants and animals and the preservation of biodiversity.
- The development of natural resource management and a gradual improvement in the ecological stability of landscape and all its ecological functions, especially its retention function.
- An expansion in areas of, and care of habitats of wild flora and fauna.
- The regeneration and, in necessary cases, remediation of *brownfields* and their subsequent use for construction and other purposes.
- A gradual improvement in the health of forests as a result of the decreasing pollution burden, an improvement in the ecological stability of forest ecosystems by the gradual modification of the species composition and spatial structure of forest vegetation so as to achieve harmony with natural conditions and the functional bearings of woodlands.
- The gradual and effective remediation and recultivation of past environmental burdens.
- A gradual reduction in the amount of waste from packaging and the amount of biologically degradable waste disposed of in landfills.
- A reduction in noise pollution due to the renovation of the vehicle fleet, the application of new technical requirements regarding products and the implementation of passive measures in respect of transport infrastructure.
- The support of municipal and local public transport and local and regional railway passenger transport as socially appropriate and environmentally friendly, and national and international freight railway and combined transport as environment-friendly and economically beneficial; the support of bicycle transport in the framework of the development of environmentally sound forms of tourism.
- The development of environmentally sound forms of tourism; defining the status of authorised tourist guides in protected areas.

- The support and implementation of Territorial Systems of Ecological Stability (TSES), especially as part of overall zoning modifications.
- The adoption of practical measures to halt the loss of biodiversity.
- The definition and application of indicators of biological diversity while measuring the progress achieved in efforts to lessen the diminution of biodiversity.
- The development of environmental technologies.
- A reinforcement, and increase in the efficiency, of economic instruments relating to the environment (including environmental tax reform).
- The application of the precautionary principle in day-to-day practices.

International comparison

A comparison of the values of selected indicators in the Czech Republic with average values in the EU-15, OECD-30 and values in some of the new members of the EU-25 (see, for example, the Report on the Environment in the Czech Republic in 2002, the updated State Environmental Policy of the Czech Republic - 2004) indicates that serious problems still include, for instance, specific emissions of carbon dioxide due inter alia to the high share of solid fuels (mainly coal) in the domestic structure of the consumption of primary energy sources, as well as the low energy efficiency of GDP unit generation and high specific emissions of nitrogen oxides. Additional issues include a critically low level of biodiversity, and the poor health conditions and species composition of forests. In many respects, however, the situation in the Czech Republic matches the average EU-15 values, while in comparison with the average OECD-30 values the situation in the Czech Republic is often much better.

One of the comprehensive indicators of sustainable development is the "ecological footprint", which determines the quantity of natural resources that a country consumes annually. Individual resources are converted to an amount of biologically productive land and water surface necessary for their production and for the assimilation of waste while using available technology. As the Czech Republic's citizens also use the resources of other countries and the pollution they produce may have a transboundary impact, the country's ecological footprint must also include "foreign" territories.

Based on a 2002 report of the World Wildlife Fund (WWF – International, Living Planet Report, 2002), which assesses the ecological footprints and available ecological capacity of 152 countries of the world, representing 99.7% of the Earth's population, the Czech Republic's total ecological footprint was 4.8 global ha/person (based on 1999 data). This value is more than double the available biocapacity of the Czech Republic (2.3 global ha/person) and the global biocapacity (1.9 global ha/person). The Czech Republic thus generates an "ecological deficit", which it compensates by "biocapacity imports" from abroad.

Conclusions

Based on an analysis of the circumstances mentioned above, the following **main conclusions** can be drawn:
- Compared to the disastrous situation in the late 1980s, there has been a substantial improvement in virtually all possible areas in the past 15 years.
- Nevertheless, the state of most components of the environment is not fully satisfactory and negative effects of the state of the environment on the physical and mental health of the people are still non-negligible.

- The support of organic farming, renewable sources of energy, employment and development of rural areas should continue.
- In the future, we can no longer expect any significant reduction in pollution comparable to the dynamics experienced in the 1990s; high carbon dioxide emissions are still an extraordinary problem.
- A further reduction in pollution will be more difficult and costly.
- It is necessary to carry on the implementation of environmental protection measures, with priority being given to the protection of nature and the landscape and the Earth's climatic system.
- A remarkable improvement in the condition of ecosystems can, for objective reasons, be expected to occur in the medium to long term.
- It is necessary to improve environmental education and awareness and education, and generally promote a comprehensive, structural and functional conception of the ecosystem approach to the environment.

The principal **elements of balance** in the relationship between the environmental pillar and the other pillars which should be strengthened include:
- A majority consensus, from the aspect of general public interest, in respect of economic growth and environmental protection.
- The development of a "value added economy" with low material and energy inputs.
- The development of business in the field of products and services intended for the protection of the environment, resulting in the creation of new jobs; the development and implementation of environmental technologies.
- The increasing willingness of a part of the economic sector to engage in voluntary environmental activities (EMAS, ISO 14 000, the production of environmentally friendly products, voluntary agreements).
- An increase in the quality of life by reducing pollution and by active landscaping and generally "space-shaping" measures (including an improvement in the functions of spatial planning).
- An intensification of economic incentives for the transition to sustainable patterns of production and consumption.
- The increasing effect of education and awareness raising in the field of changes to patterns of behaviour.

The principal **elements of imbalance** in the relationship between the environmental pillar and the other pillars which should be suppressed include:
- A conflict of interests between environmental protection (especially the protection of nature and the landscape) and economic development (especially the building of transport infrastructure and commercial buildings).
- The radicalisation and polarisation of points of view regarding the relationship between the economy and environmental protection; the absence of partnership and dialogue.
- A preference for resolving urgent social or economic needs over environmental issues; the positive effects of which will become visible after an initial delay.
- Continued lagging behind in modernisation and innovation.

The main challenge faced by the environmental pillar of the sustainable development of the Czech Republic is to take into account the requirements of the present population and future generations in the framework of the entire ecosystem; to ensure the satisfactory quality of all components of the environment, ecosystems, and their mutual relations; to minimise conflicts of interests between the protection of the environment and economic development; and to

contribute to solutions to global environmental problems (in particular the protection of the climate and the protection of biodiversity) and social problems (employment, health care).

II.3 Social pillar

Development in the period 1993 – 2003

Despite the profound transformation of the Czech Republic's political and economic system after 1989, the country has always had well functioning basic social institutions and mechanisms in place in the fields of health care, social security, law and justice, education and culture. However, negative trends have manifested themselves in numerous areas, associated in particular with the noticeably unfavourable demographic development and an increase in the rate of unemployment. An analysis of developments indicates that the growth of expenditures related to health care and pension insurance is considerably faster than the growth of economic performance.

Present condition

At present, the health care system and the pension system in particular, though still functional, appear to be approaching their economic limits, considering the current system of financing.

The **strengths** of the Czech Republic's social system in terms of sustainability include:
- The high economic activity of the population.
- An established mechanism of active employment policy.
- A developed social system.
- A relatively wide network of governmental and non-governmental social care facilities.
- A developed health care system and a high standard of technical equipment in a number of health facilities.

The **weaknesses** of the Czech Republic's social system in terms of sustainability include:
- The birth rate in the Czech Republic has dropped to its lowest level ever – 1.14 children per woman (assuming that the population replacement rate[1] is 2.1 children per woman). The Czech Republic is therefore among the countries with the lowest birth rate globally.
- Growth in the numbers of long-term unemployed; persistent and, in some respects, deepening regional differences.
- The employment policy is not yet pro-active enough (it aims to strengthen the social network rather than create new jobs).
- An insufficient share of flexible forms of work organisation and the low mobility of the work force.
- Poor correlation between regional housing policies and the needs of work force mobility.
- There is no system to foresee the need for skilled workers.
- The ongoing depopulation of rural areas.
- Insufficient support of families with children; social and economic developments deterring a greater natural increase in the population.
- Problems with the medium-term and long-term financeability of the pension system.
- Insufficiently developed capital forms of financing the individual needs of seniors.
- Abuse of the welfare system.
- Low motivation to seek employment among groups threatened by social exclusion.
- Problems with the medium-term and long-term financeability of the health care system; the vulnerability of the system to abuse.

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[1] Replacement rate expresses the number of children per woman necessary for the population to reproduce.

- The synergic effects of certain persistent negative impacts of the current state of the environment on the physical and mental health of the population (noise, quality of air and water, chemical substances, allergic disorders).
- Insufficiently provided care for endangered groups of the population (the physically and mentally handicapped, drug addicts, ethnic minorities, immigrants).
- An inadequate supply of field-based social services.
- Latent racism and xenophobia in a certain part of the population.
- The underrating of the importance of cultural activities as a factor preventing the incidence of, and helping to eliminate, socially pathological phenomena.
- Insufficient attention is paid to the quality and availability of public culture services.

Trends

The most significant **threats** to the sustainable development of the Czech Republic's social system include, unless additional measures are taken, the following:
- A continuing decline in the birth rate (a significant decline in the number of newborn infants, a significant decline in the number of children in all age categories).
- Unfavourable demographic developments (the "ageing of the population").
- A rise in the financial problems of the pension system in the long run.
- Further growth of structural unemployment on a national scale and in problematic regions.
- Growing unemployment in certain age (graduates, people over 50 years of age) and skill categories (especially low-skilled persons; to a certain extent due to the ready availability of a low-skilled work force from abroad).
- The rising proportion of socially marginalised groups (in particular long-term unemployed low-skilled persons).
- An increasing number of people using the social care system.
- Abuse of the systems of social welfare and health care.
- The increasing occurrence of social and ethnic conflicts.
- The drain of the highly skilled and medium-skilled work force, with a negative impact on domestic sectors (research and development, health care, information technology).

The most important **opportunities** for the sustainable development of the Czech Republic's social system include, if additional measures are taken, the following:
- **Active measures against poverty and social exclusion.**
- **Public finance reform (including the "streamlining of public administration").**
- **Pension system reform.**
- **Health care system reform.**
- **Changes to the social care system.**
- **Active support of families with children.**
- **Improvements in the flexibility of the labour market and work force mobility.**
- **Active and comprehensive employment policy.**
- **The development of the economy.**
- A responsible migration policy adopted by the Government.
- Support for the establishment of new colleges of further education and universities in all regions (besides university towns).
- The implementation of the goals of the culture policy.

The reform of public finances, the pension system and the healthcare system are considered to be a requirement of long-term development, not a one-off act that can be achieved over a short space of time.

International comparison

Problems in the fields of health and social care are common to all EU countries and ensue from downward demographic developments combined with favourable developments in life expectancy (the number of persons contributing financially to the healthcare and pension insurance systems is steadily declining, while the number of persons drawing funds from these systems is steadily increasing). These problems are compounded by the fact that the Czech Republic has the second lowest birth rate worldwide.

Conclusions

Based on an analysis of the circumstances described above, the following **main conclusions** can be drawn for the Czech Republic:
- Highly unfavourable demographic developments.
- Healthcare-related expenditures growing faster than revenue from health insurance.
- Future pension expenditures growing faster than revenue from pension insurance.
- Unemployment-related expenditures growing faster than expenditures related to the active employment policy.
- The currently high unemployment rate, fuelled by the low mobility and flexibility of the work force, and low investments in small enterprises in local economies, and also by the tax system (the high indirect taxation of jobs).

The problems of the social pillar are fully dependent not only on economic developments but also, in the long term, on the state of the environment (the health of the population, recreational facilities, tourism, employment).

The principal **elements of balance** in the relationship between the social pillar and the other pillars which should be strengthened include:
- The creation of appropriate social and economic conditions for starting and maintaining a family.
- A majority consensus on the need for further economic growth to satisfy social needs.
- Developed social systems (institutions and mechanisms of health care, social assistance and pension security).
- High level of economic activity of the population.
- An increase in the quality of life by reducing environmental pollution and by means of active landscaping and generally "space-shaping" measures.
- The development of entrepreneurship in the field of products and services designed to protect the environment, resulting in the creation of new job opportunities (ecotourism, organic farming).
- The development of rural areas (the development of small business, environmentally sound tourism, reducing the migration of the population to cities).
- An increase in the quality of life by improving the quality and availability of public culture services.

The principal **elements of imbalance** in the relationship between the social pillar and the other pillars which should be suppressed include:
- The economic and social handicap of families with dependent children.
- The absence of a majority consensus regarding the need for social system reform.
- Social systems (social aid, health care, pension insurance) will approach their economic limits and will cease to be financeable in the long perspective.

- The labour market does not match economic needs (mainly the mobility, flexibility and skills of the work force).
- The globalisation of culture.

Besides the necessary reform of the pension system, social care system and healthcare system, the main challenges faced by the social pillar of the sustainable development of the Czech Republic are at least to maintain a stable number of inhabitants and ensure, in the long run, a gradual increase in the number of inhabitants and an improvement in the age structure, a reduction in unemployment, the support of human resource development and the ready availability of public culture services, and the consolidation of social cohesion.

II.4 Research and development, education

Development in the period 1990 – 2003

Since 1990, the number of universities and faculties has increased, and new colleges of further education and six- and eight-year grammar schools have been established. Private schools at all levels have been set up to complement the network of state schools. The number of pupils and students of secondary schools and universities has increased, and the structure and mission of the Academy of Sciences of the Czech Republic have been transformed and modified. Some departmental research institutes were dissolved, others privatised. Although expenditures related to the schools system and to research and development are rising, the growth dynamics are lower than in other OECD countries. In recent years, efforts have been made to change the goals and content of education, to draft a system for the care of the quality and evaluation of education, to improve the quality of teachers and managers, and to implement numerous other changes.

Present condition

At present, the Czech Republic has an overly extensive network of primary schools and schools of secondary and further education. Although the university network is sufficient, the establishment of non-university state tertiary colleges can be expected in certain regions with a view to increasing the level of education and, in particular, training scholars with a higher level of education. Research and development is carried out primarily by universities, the Academy of Sciences of the Czech Republic, and departmental research institutes, and to a certain extent by the private sector.

The **strengths** of the Czech Republic in the field of research, development and education in terms of sustainability include:
-   A high level of involvement in primary and secondary education.
-   A relatively dense network of schools with adequate regional accessibility.
-   The sufficient existing capacity of adult education facilities and advice centres.
-   High human potential in the field of research and development and art.
-   A significant share of research is conducted in departmental research institutes.
-   A well-established system of ecological learning and guidance towards sustainable development from a pre-school age.
-   An extension in the length of education.

The **weaknesses** of the Czech Republic in the field of research, development and education in terms of sustainability include:
-   The absence of an adult education system.
-   A low level of practical skills among vocational training graduates.
-   Insufficient cooperation between the business sector and schools and science institutions; low involvement of the private sector in the financing of research, inefficient application of the results and findings of research and development.
-   The insufficient social and financial support of research and development (compared with the EU and the US in particular); in many cases, the technical, staffing and financial resources of universities and research sites are of an inadequate standard.
-   Inadequate interrelation between research and development and innovation policy.
-   Insufficient involvement of the private research sector in research and implementation activities.
-   An obsolete technical base in the sphere of research and development and education.
-   The constant drain of highly skilled workers from regions with high unemployment.

- A lack of flexibility in responding to the current global challenges of research and development (especially as regards new multi-disciplinary fields of study).
- A prolonged failure to understand culture as a vital component of education and a developmental factor; a failure to perceive the standard of culture as an indicator of the level of education.
- The unfavourable situation of primary schools in rural areas, resulting in the imbalanced development of communities (rural as compared to urban communities).

Trends

Threats to the sustainable development in the Czech Republic in the field of research and development and education include the following:
- The development of the education system will lag behind the needs of the economy (insufficient focus on technical branches of study).
- The low motivation of adults to continue their education.
- Research and development will lag behind the needs of the national economy and the "knowledge-based society" in general; the migration of Czech experts to other countries.
- Culture will continue to be perceived purely as a sector of consumption, and not as a factor developing human potential.

The **opportunities** for the sustainable development of the Czech Republic in the field of research and development and education include the following:
- The timely drafting of prognoses and the adaptation of the education system at all levels to the needs of the labour market and the "knowledge-based society" in general.
- The direct and indirect support of further education.
- The direct and indirect support of research and development.
- Direct and indirect support for the provision of public culture services and goods.
- The intensification of international co-operation in the field of research and development.
- The orientation of research towards the development of new progressive technologies with low material and energy intensity, reducing the pollution burden on the environment; the dependence of the economy on imports of raw materials, and the foreign trade deficit.

Conclusions

One of the major problems of research and development and education in the Czech Republic, apart from the limited financial resources, is the inadequate technical equipment and staffing (including the drain of skilled workers to other countries in search of better working conditions).

The main challenge faced by the sustainable development of the Czech Republic in the field of research and development and education is to provide a high standard of education in society, and thus to strengthen the competitiveness of the country's economy. This challenge also entails the support of research and development with a view to developing new technologies that will help increase the competitiveness of the Czech Republic's economy.

II.5 European and international context

Development in the period 1993 – 2003

Immediately after its establishment on 1 January 1993, the Czech Republic began taking the steps that would lead to the country's membership of the European Union. The first task was to conclude the Association Agreement, followed by the official submission of an application for accession. As of 1996, work on transposing the set of Community legal regulations into the Czech legal system intensified and contact with "European" structures became more frequent. In the late 1990s, negotiations with the European Commission at the level of individual chapters of *acquis communautaire* commenced and areas requiring transition periods were identified. After all chapters of the *acquis* had been closed, the Treaty of Accession was signed. The Czech Republic became a member of the European Union on 1 May 2004.

The Czech Republic was the first of the post-communist countries to become a member of OECD in December 1995; in March 1999, the country became a member of NATO.

Present condition

The **strengths** of the Czech Republic in terms of sustainability include, in a European and international context, the following:
  - Of the new post-communist members, the Czech Republic has the second highest GDP per capita and per annum (after Slovenia).
  - After 1989, the Czech Republic switched orientation, in political, economic and security terms, to European and Euro-Atlantic structures.
  - The Czech Republic is at present fully involved in the activities of most of the "European" and international structures.

The **weaknesses** of the Czech Republic in terms of sustainability include, in a European and international context, the following:
  - The Czech Republic is not yet ready to enter the European Economic and Monetary Union.
  - A low volume of development and humanitarian international aid is made available by the Czech Republic.
  - An excessively open economy, and thus dependence on foreign trade, in particular on imports of strategic raw materials, reflecting the energy and material intensity of the country's economy and average competitiveness.

Trends

Threats to the sustainable development of the Czech Republic in a European and international context include:
  - The threat of terrorist attacks associated with the Czech Republic's involvement in the anti-terrorism coalition.
  - Failure to accomplish the goals and tasks of the EU Lisbon Strategy and the EU Strategy for Sustainable Development.
  - The inability to exploit the positive features of globalisation and resist its negative features.
  - Growing competitive pressure from some developing countries, especially China and India.

-   The dependence of the economy in terms of energy and materials, and the associated vulnerability to negative reactions of the economy to fluctuations in the prices of energy and raw materials with inevitable social ramifications.

The **opportunities** for the sustainable development of the Czech Republic in the European and international context include:
-   Enlargement of the EU; the successful integration of the Czech Republic into European structures and, in particular, into the European Economic Area.
-   Favourable economic, social and environmental development within the EU.
-   More active involvement in dealing with issues of sustainable development in the framework of major international organisations such as the UN and OECD.
-   Adaptation of the principles of OECD/DAC and an improvement in international complementarity and the coordination of the international development projects of the Czech Republic.
-   The exploitation of the advantageous geographical position of the Czech Republic as a bridge between Western and Eastern Europe (e.g. transport networks, foreign trade, movement of capital, goods and work force).
-   The tapping of the potential offered by culture and science.
-   The promotion of the Czech Republic in the Central European region (co-operation between regions and the local cross-border Agenda 21).

International comparison

In the regional comparison, the Czech Republic is one of the most developed new members of the EU, which can be attributed in particular to the following factors:
-   the second highest GDP per capita per annum (after Slovenia),
-   a relatively developed infrastructure (transport, environmental),
-   relatively high attractiveness to investors,
-   the highest average amount of funds designated for development cooperation.

The Czech Republic's position in the "quality of life" chart run by the United Nations is also relatively good. The latest known value of the Human Development Index (HDI) for 2004 (0.868) places the Czech Republic 32nd globally. The average value of HDI worldwide (177 countries monitored) is 0.729; the average value for the OECD is 0.911. The highest recorded HDI value is 0.956 (Norway); the lowest is 0.273 (Sierra Leone). A detailed analysis indicates that:
-   all countries of the former EU-15 have a HDI higher than the Czech Republic,
-   of the new post-communist EU Member States, only Slovenia has a higher HDI,
-   of the OECD countries, Poland, Hungary, Slovakia and Mexico have an HDI lower than the Czech Republic (Slovenia is not a member of the OECD).

Conclusion

The position and significance of the Czech Republic within the enlarged European Union are determined primarily by the country's size – it belongs to the group of medium-sized Member States. The Czech Republic is a member of the "club" of the economically most developed countries in the world – the Organisation for Economic Co-operation and Development (the Czech Republic was the first post-communist country to be admitted) and of the defensive alliance NATO. From a global perspective, the Czech Republic belongs to a group of countries which have an internationally recognised high quality of life.

The main challenge for the sustainable development of the Czech Republic in a European and generally international context is to contribute to the consistent enforcement of the principles of sustainable development both within the EU and in the framework of broader international relations, and to take an active part in the solution of key global issues.

II.6 Good governance

Development in the period 1993 – 2003

The Czech Republic started existing as an independent state on 1 January 1993. The country quickly and successfully transformed its fundamental political institutions (the Parliament of the Czech Republic, ministries and other central administrative authorities) from a federal to a national level. The spectrum of political parties became diversified. At the start of the current decade, public administration was reformed. The newly established regional authorities, together with the municipal authorities of municipalities with extended powers, authorised municipalities and ordinary municipalities, superseded the dissolved district offices in the exercise of state administration.

In the period in question, democratic elections at all levels (the Chamber of Deputies and the Senate of the Parliament of the Czech Republic, regional and municipal assemblies) took place on duly scheduled dates, with one exception – extraordinary elections to the Parliament in 1998.

Present condition

At present, the Czech Republic is an internationally respected country with guaranteed human rights, a standard representative democracy and a well-functioning market economy.

In terms of sustainability, the **strengths** of the Czech Republic in the field of good governance currently include the following:
- The Czech Republic has standard mechanisms and institutions of representative democracy in place at all levels.
- The Czech Republic has a standard spectrum of political parties of rightist, centrist and leftist orientation.
- The Czech Republic has a relatively well-developed network of non-governmental organisations engaged in a number of aspects of social life.
- The country's legal system includes mechanisms allowing access to information, the participation of the general public in decision-making, and access to legal protection.

In terms of sustainability, the **weaknesses** of the Czech Republic in the field of good governance currently include the following:
- Insufficient enforceability of the law.
- Corruption (the perception of corruption) at various levels of public administration.
- Excessive intertwining of political and economic spheres; insufficient resistance of the political system to lobbyist pressures.
- The inert attitude of some of the public, demanding excessive "protectionism" from the state instead of acknowledging their own responsibility.
- The failure to provide citizens with equal access to basic local public services.

Trends

Threats to the sustainable development of good governance in the Czech Republic include, unless additional measures are taken, the following:
- Waning interest among the general public, and young people in particular, in elections and political affairs in general.
- Widespread corruption in public administration.

- The persistence of the "lobbyist" interconnection between the economic and political spheres.
- The insufficient transparency and integrity (resistance to corruption) of public administration at all levels.
- Insufficient attention is paid to new and/or increasing forms of crime (international organised crime, terrorism).

Opportunities for the sustainable development of good governance in the Czech Republic include, if additional measures are taken, the following:
- The safeguarding of continuing and increasing public interest in public affairs, the development of a civic society.
- The strengthening of the function of public administration as a service to the public.
- Improvements in the transparency and integrity (resistance to corruption) of public administration and justice at all levels.
- The suppression of remnants of centralism in the decision-making process; consistent respect for the principle of subsidiarity.
- Improvements in the quality of the legal system and an intensification of the instruments of law enforcement with a view to fostering the legal awareness of the population and reinforcing the principles of the rule of law.
- Stricter supervision and accountability of public institutions.
- The reinforcement of strategic medium-term and long-term planning and governance.

International comparison

Institutionally, the Czech Republic is a standard European democracy whose political system does not differ from that of the other Member States of the European Union.

The Czech Republic is a member of the OECD and most of the relevant international organisations.

Conclusions

In terms of sustainable development, the most obvious political problem in the short and medium perspective is the ability, or rather inability, of the country's Government and public administration authorities in general to tackle important elements of imbalance in the relationship between the economic, environmental and social pillars of sustainability. Other problems include insufficient communication between ministries and within individual administration authorities, between the state administration and local government, and between public administration and citizens, difficulty in the enforcement of law, the issue of the transparency of decision-making, inadequate communication between the public and private sectors, and a decline in the social responsibility of the private sector.

The main challenges for the sustainable development of the Czech Republic in the field of good governance are:
- **to strengthen the position of regions and municipalities,**
- **to optimise the system of public administration,**
- **to increase the quality and efficiency of public administration,**
- **to deal with the availability of basic local public services to the general public,**
- **to increase internal and external security,**
- **to strengthen the instruments of enforcement and the enforceability of the law.**

II.7 Summary

An analysis of the balance or imbalance in the relationship between the economic, social and environmental pillars of sustainability is shown in the following table:

Elements of balance	Elements of imbalance
Economic pillar versus environmental pillar	
A majority consensus, from the aspect of general interest, in respect of both economic growth and environmental protection.	A conflict of interests between environmental protection (especially the protection of nature and the landscape) and economic development (especially the building of transport infrastructure and commercial buildings).
The increasing willingness of a part of the economic sector to engage in voluntary environmental activities (EMAS, ISO 14 000, the production of environmentally friendly products, voluntary agreements).	The State insufficiently motivates to enter into voluntary agreements and other voluntary instruments designed to improve the state of the environment.
The development of the "value added economy" with low material and energy inputs.	The radicalisation and polarisation of points of view regarding the relationship between the economy and environmental protection; the absence of partnership and dialogue.
Economic pillar versus social pillar	
A majority consensus on the need for further economic growth to satisfy social needs.	The absence of a majority consensus on the need for social system reform.
Developed social systems (institutions and mechanisms of health care, social assistance and pension security).	Social systems (social care, health care, pension insurance) are approaching their economic limits and will cease to be financeable in the medium- and long-term perspective.
The high level of economic activity of the population.	The labour market does not match economic needs (mainly mobility, flexibility and skills of work force).
Environmental pillar versus social pillar	
The development of entrepreneurship in the field of environmental products and services designed to protect the environment, resulting in the creation of new jobs.	The transfer of production and waste to countries with a lower level of environmental protection.
An enhancement in the quality of life by reducing environmental pollution and by means of active landscaping and generally "space-shaping" measures.	An increase in subsidies to social systems, reducing the availability of funds required for environmental protection.
The creation of new jobs in the tourism sector in connection with the higher attractiveness of "clean" locations.	A preference for tackling urgent social or economic needs over environmental issues.

III. Starting points and principles of the Strategy for Sustainable Development

The principal starting points include the preservation of a representative democratic political system and economic system based on a market economy, and an anthropocentric approach based on the belief that the position of humankind in nature is exceptional for numerous reasons. The Strategy leans on a set of principles, the most important of which is the **principle of respect for human life (the ethical principle), nature and the values of civilisation and culture**. Other relevant principles include:

The **principle of generational responsibility** for preserving and passing on fundamental natural, cultural and civilisation values.

The **principle of social solidarity** is based on the belief that society is obliged to provide adequate care for citizens in need.

According to the **principle of social cohesion**, society should purposefully reduce the number of socially marginalised individuals and groups.

On the basis of the **principle of equal opportunities for individuals and groups**, all entities should enjoy the same conditions wherever possible.

In accordance with the **principle of positive economic stimulation**, the economic environment should stimulate entities to carry out desirable activities.

The **principle of cost-efficiency** stipulates that the costs expended in respect of a measure should always have an optimal effect.

The **principle of integration** stipulates that activities in respect of each of the pillars should take account of impacts on the other pillars with a view to finding a balance between the pillars.

The **precautionary principle** stipulates that prudence is required even in cases where there is no certainty that an undesirable effect will occur.

The **principle of prevention** is based on the experience that prevention is generally more viable and less costly than remediation.

According to the **principle of synergy effects**, in cases of alternative solutions preference should be given to those that will result in favourable direct or side effects in all strategic dimensions.

According to the **principle of subsidiarity**, problems should be resolved at the lowest possible level.

The **principle of the cultivation of public space** requires that the process of shaping and implementing the strategy for sustainable development be open to experts and the general public.

The **principle of partnership** stipulates that relations between environmental, economic and social entities should be based on the principle of partnership, not rivalry.

According to the **principle of openness and transparency**, decision-making processes should be democratically open to and controllable by the public.

The **principle of exactness**, i.e. defining scientifically substantiated, measurable and controllable conceptual tasks and measures; this principle is accomplished by measures of a short-term, medium-term or long-term nature.

The **principle of prudent environmental undertakings**, i.e. environmental undertakings should not be accepted without responsibly assessing their impact.

The **principle of an ecosystemic approach**, i.e. a comprehensive, structural and functional approach to the environment.

According to the **"polluter and consumer pays" principle**, those who adversely affect the environment through their activities will be held liable for any damage caused to the environment.

The **principle of the minimisation of pollution (risk) at source** is based on the experience that the minimisation of pollution or a risk directly at its source is, as a rule, technically and economically more viable.

Based on the **principle of substitution**, wherever technically possible and economically viable, any products and activities harmful to the environment should be substituted by products and activities that are less harmful or are not harmful at all.

The **principle of the minimisation of material and energy inputs** stipulates that wherever technically possible and economically viable, products and services should be provided subject to the lowest possible material and energy intensity.

The **principle of preferring renewable sources to non-renewable sources** requires that, wherever technically possible and economically viable, any material and energy requirements be satisfied by means of renewable sources.

The **principle of not exceeding the environmental limits of economic development and decoupling environmental pressures from economic growth**.

The **principle of preventing the production of waste, and recycling** (the use of secondary raw materials).

The **principle of a progressive preference for the intensive development of society over extensive development**.

The **principle of the preservation of life in rural areas**.

The **principle of renewing and maintaining the cultivated landscape**.

The **principle of comprehensively ensuring a balance of natural, civilisation and cultural values within an area by means of spatial planning instruments** and coordination of activities within the area.

In addition to the above principles and basic starting points, the Strategy is also based on international obligations which are binding upon the Czech Republic due to its accession to numerous programming documents for sustainable development, in particular to the conclusions of the UN Rio and Johannesburg conferences and the UN Millennium Development Goals, as well as the conclusions of the UN Commission on Sustainable Development 2003 session, containing the Multi-year Programme of Work of the Commission to 2017. The starting points of the Strategy also include the declaration of OECD ministers on sustainable development of 2001 and the OECD long-term programme for sustainable development and the European Communities Strategy for Sustainable Development of 2001.

IV. Components of the Strategy

As this document is a governmental strategy, the goals stated below are formulated as goals of the Government, whereby the extent of their accomplishment is, naturally, determined by the instruments available to the Government (especially bills, the implementing regulations of laws – governmental decrees and orders, the regulation of financial flows). The strategic goals are set as mutually commensurable, and partial goals are assigned to each of them.

IV.1 Economic pillar: strengthening the competitiveness of the economy

The prime strategic goal is to maintain the stability of the Czech economy and safeguard its resistance to external and internal negative effects.

This strategic goal is associated with a **set of partial goals** targeting **selected problem areas.**
In the **macroeconomic context**, by means of the instruments available to it the Government will:
- create conditions for macroeconomic stability and, in co-operation with the Czech National Bank ("CNB"), for monetary stability,
- create conditions for the adaptability of the economy to shocks (such as flood, drought, a shock growth in prices or critical lack of strategic raw materials in the global market, serious accidents),
- promote the development and further cultivation of the capital market.

The accomplishment of the above-mentioned partial goals will be monitored in accordance with the following **indicators:**
⇨ the inflation rate (%)
⇨ the rate of gross household savings (%)
⇨ the income/expenditure balance of public budgets (% of GDP)
⇨ the total amount of gross investments (% of GDP)
⇨ the total amount of net investments (% of gross investments)

In the **fiscal context**, by means of the instruments available to it the Government will:
- stabilise the composite tax quota stemming from the bills being drafted for public finance reform, whereby the composite tax quota in 2006 will not be higher than in 2003,
- reform public finance so as to ensure the long-term sustainability of basic social services (in particular the pension and health systems), a reduction in "internal debt", and improvements in the growth potential of the national economy,
- in accordance with EU principles, reform the tax system in the sense of revenue-neutral environmental tax reform, which should be considered in the context of the entire fiscal policy and other measures designed to support a competitive environment and job creation,
- provide positive motivation aimed at the promotion of non-productive functions of ecosystems (ecological, landscaping, aesthetic) and the protection of nature and the landscape.

The accomplishment of the above-mentioned partial goals will be monitored in accordance with the following **indicators:**
⇨ the share of mandatory expenditures in total public expenditures (%)
⇨ the share of environmental taxes in total tax revenues (%)
⇨ the share of environmentally harmful subsidies and grants (%)

In the field of **business**, the Government will create long-term legal and economic conditions for the prosperity of small and medium-sized enterprises; in particular, the Government will promote improvements in the enforceability of the law in the economic sector and the transparency of the environment for business activities; it will support alternative forms of corporate financing.

The accomplishment of the above-mentioned partial goals will be monitored in accordance with the following **indicator:**
⇨ the proportion of the employees of small and medium-sized enterprises (up to 250 employees) in the total number of employees by individual sector (%)

In the **energy sector**, within the limits of the instruments available to it the Government will ensure:
-   the maximum possible reliability of the supply of all types of energy, the safety of energy sources and distribution systems, including nuclear safety and radiation protection,
-   the minimum realistically possible dependence on imported energy (especially in high-risk areas),
-   support for the maximum technically and economically realistically achievable exploitation of the potential of energy savings and the share of renewable sources in the generation of energy,
-   the maximum possible capability of the energy sector to cope with emergencies (including the deactivation of large sources or backbone distribution lines),
-   the decoupling of environmental pressures from the development of the energy sector.

The accomplishment of the above-mentioned partial goals will be monitored in accordance with the following **indicators:**
⇨ the domestic consumption of primary energy sources (toe/person/year)
⇨ the structure of primary energy sources (%)
⇨ the energy intensity of GDP (toe per CZK 1000 of GDP, per US$ 1000 of GDP in purchasing power parity)
⇨ the proportion of the consumption of renewable energy sources in the total domestic consumption of primary energy sources and in the total generation of electricity (%)
⇨ the proportion of imported fuel in the gross consumption of primary energy sources (%)

In respect of the **raw-material policy**, within the limits of the instruments available to it the Government will ensure the adequate use of domestic sources of raw materials, with the highest technically possible and economically realistically viable level of recycling, and the minimization of waste produced from the extraction of primary raw materials.

The accomplishment of the above-mentioned partial goals will be monitored in accordance with the following **indicators:**
⇨ the share of recycled waste (%)
⇨ the ratio of imports of raw materials to domestic extraction (% of domestic extraction)

In the field of **transport**, within the limits of the instruments available to it the Government will ensure:
-   a high-quality transport infrastructure (the interconnection of trans-European transport networks, with a preference subsequently focusing on the rehabilitation and renovation of existing transport routes over the construction of new routes, and with measures preferring rail over road freight transport; improvements in the unsatisfactory parameters of the transport infrastructure at regional and local level; good maintenance),
-   a high-quality transport service throughout the Czech Republic,

- conditions for the sustainable mobility of people and freight (user-oriented transport),
- the development of environmentally sound forms of transport (public transport, support of the use of alternative fuels, bicycle tourism).

The accomplishment of the above-mentioned partial goals will be monitored in accordance with the following **indicators:**
⇨ the density of the road and railway infrastructure (in respect of roads categorised as speedway-type roads and others) (km/km^2)
⇨ the total capacity of transport and shipping (road passenger, road freight, coach, railway passenger, railway freight, air) by means of transportation (vehicle-km, passenger-km, tonne-km)
⇨ the ratio of the carrying capacity of public transport (road + railway) to car transport (%)
⇨ the ratio of the carrying capacity of road freight transport to railway freight transport (%)
⇨ the specific performance of freight transport (tonne-km/GDP)

In the fields of **agriculture and forestry**, within the limits of the instruments available to it the Government will create conditions for:
- the preservation of the sufficient production of safe foodstuffs while developing the multi-functional character of agriculture,
- the support of organic farming,
- the reinforcement of the non-productive functions of agriculture in the landscape,
- the preservation of an adequate rate of employment corresponding to the future demands of the sustainable care of the cultivated landscape,
- improvements in the living standards of the farming, and generally rural, population,
- the promotion of multi-purpose forestry and a reinforcement of the relevant non-productive (ecological and social) functions of woodlands in areas of high public interest,
- support for the prompt completion of the system of land adjustments.

The accomplishment of the above-mentioned partial goals will be monitored in accordance with the following **indicators:**
⇨ the proportion of the rural population (%)
⇨ the proportion of organic farming in the total area of farmland (%)
⇨ the proportion of uncultivated farmland in the total area of farmland (%)
⇨ the proportion of arable land in total farmland (%)
⇨ the consumption of fertilisers (kg of pure nutrients per hectare)
⇨ the consumption of pesticides (kg/hectare)
⇨ the proportion of cadastral areas with completed land adjustments in the total number of cadastral territories (%)

In the field of **regional development** it is necessary to create conditions that will alleviate, or even eliminate, regional economic disparities while drawing on opportunities to support the cross-border co-operation of regions and the implementation of local Agenda 21.

The second strategic goal is to create conditions for economic growth which are capable, with minimum environmental impact, of ensuring an optimum rate of employment, public service financing (especially in the social sphere) and a progressive reduction in the public and "internal" debt.

This strategic goal is associated with a **set of partial goals** targeting **selected problem areas.**

With a view to improving the quality of the **legal and institutional framework for business activities**, the Government will ensure, within the limits of the instruments available to it, that

administrative barriers impeding the establishment, running and winding-up of businesses are brought down.

To **support the development of business**, the Government will, within the limits of the instruments available to it, ensure:
- the stabilisation of the composite tax quota stemming from the bills being drafted for public finance reform, whereby the composite tax quota in 2006 will not be higher than in 2003; the Government will draft an income tax bill that will accelerate the writing-off of corporate investments and initiate a general debate on the simplification of income tax with a view to clarifying the terms and conditions for payment of the tax while preserving motivation that will encourage growth and innovation,
- a reduction in the indirect labour cost,
- alternative forms of corporate financing,
- the allocation of public budget expenditures to areas with positive multiplication effects (infrastructure, housing construction, environmental protection).

The accomplishment of the above-mentioned partial goals will be monitored in accordance with the following **indicators:**
⇨ the proportion of the employees of small and medium-sized enterprises (up to 250 employees) in the total number of employees by individual sector (%)
⇨ the share of small and medium-sized enterprises (up to 250 employees) in total added value (%)

In the **energy sector**, within the limits of the instruments available to it the Government will ensure:
- the maximisation of the efficiency of energy consumption,
- the availability, in terms of price and technology, of high-quality energy for all customers,
- the progressive elimination of monopolies, mainly as regards the generation and distribution of electricity.

The accomplishment of the above-mentioned partial goals will be monitored in accordance with the following **indicator:**
⇨ the energy intensity of GDP (toe per CZK 1000 of GDP, per US$ 1000 of GDP in purchasing power parity)

In the field of **transport**, within the limits of the instruments available to it the Government will ensure:
- the conditions necessary for the development of multi-modal and logistic systems of transport, with an emphasis on the development of environmentally sound forms of transport,
- equal access and an equal competitive environment for shippers in the transport market,
- conditions for sustainable development in the inter-sectoral distribution of transportation work.

The accomplishment of the above-mentioned partial goals will be monitored in accordance with the following **indicators:**
⇨ the density of the road and railway infrastructure (in respect of roads categorised as speedway-type roads and others) (km/km^2)
⇨ the total capacity of transport and shipping (road passenger, road freight, coach, railway passenger, railway freight, air) by means of transportation (vehicle-km, passenger-km, tonne-km)
⇨ the ratio of the carrying capacity of public transport (road + railway) to car transport (%)
⇨ the ratio of the carrying capacity of road freight transport to railway freight transport (%)
⇨ the specific performance of freight transport (tonne-km/GDP)

The third strategic goal is to create conditions for a flexible economy based on knowledge and skills and to increase the competitiveness of industry, agriculture and services.

This strategic goal is associated with a **set of partial goals** targeting **selected problem areas:**

In general, within the limits of the instruments available to it the Government will:
- reinforce the competitiveness of industry and agriculture,
- support the use of opportunities offered by the "New Economy",
- support the transfer of knowledge and technologies, especially by means of investment incentives,
- support the maximum possible exploitation of human capital and innovative activities in economic sectors,
- support the development of the "innovation infrastructure" (science and technology parks, business incubators, centres for technology transfer),
- support activities which have a high value added and which return a high level of energy and material input enhancement,
- support the use of the best available environmentally friendly technologies and techniques in industry, agriculture and services,
- support the development of small and medium-sized enterprises in industry and services.

The accomplishment of the above-mentioned partial goals will be monitored in accordance with the following **indicators:**
⇨ GDP per capita (CZK, US$ in purchasing power parity)
⇨ the year-on-year change in GDP (%)
⇨ the gross added value by main economic sectors (agriculture, industry and construction, services; %)
⇨ labour productivity per employed person (CZK, US$ in purchasing power parity per employed person)
⇨ the energy intensity of GDP (toe per CZK 1000 of GDP, per US$ 1000 of GDP in purchasing power parity)
⇨ the material intensity of GDP (kg of domestic material consumption[2] per CZK 1000 of GDP, per US$ 1000 of GDP in purchasing power parity)
⇨ the proportion of the employees of small and medium-sized enterprises (up to 250 employees) in the total number of employees by individual sector (%)

In the **international context**, the Government will stimulate the inflow of foreign investments and support international co-operation in science and technology – benchmarking, patents and innovations.

In the **energy sector**, within the limits of the instruments available to it the Government will:
- support the efficient exploitation of sources of energy throughout their "life cycle" – from acquisition, transportation, storage, transformation, to final consumption of energy,
- support improvements in energy efficiency, the use of all efficient forms of energy saving, and increases in the share of renewable sources in the energy balance.

Maximising energy efficiency will return better value of use of primary energy sources by means of a high added value of products.

The accomplishment of the above-mentioned partial goals will be monitored in accordance with the following **indicators:**
⇨ the energy intensity of GDP (toe per CZK 1000 of GDP, per US$ 1000 of GDP in purchasing power parity)

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[2] Domestic material consumption is the sum of raw materials extracted, biomass produced and imports, less exports.

> ⇨ the ratio of the consumption of renewable energy sources to the total domestic consumption of primary energy sources and to the total generation of electricity (%)

In the field of **transport**, the Government will, within the limits of the instruments available to it, create conditions for efficient transport and will support the establishment of integrated transport systems.

The Government will, within the limits of the instruments available to it, support the development of the information industry and services, promote the research, development and application of biotechnologies and nanotechnologies, and the development of environmentally sound tourism, in terms of both infrastructure and the care of cultural and natural heritage.

> The accomplishment of the above-mentioned partial goals will be monitored in accordance with the following **indicators:**
> ⇨ expenditure on research and development (billions of CZK, US$ in purchasing power parity; % of GDP)
> ⇨ Internet access (millions; % of population, speed)

In **agriculture and the food industry**, the Government will, within the limits of the instruments available to it, support increasing competitiveness in relation to existing and acceding EU Member States and third countries by increasing the efficiency of production, quality, safety and the value added of production, and the regional diversity of products.

IV.2 Environmental pillar: protecting nature, the environment, natural resources and the landscape, environmental limits

The first strategic goal is to ensure that the territory of the Czech Republic benefits from the best possible quality of all components of the environment (including the good functioning of their basic mutual relations)**, and subsequently increase their quality, thus creating conditions for the progressive regeneration of the landscape, for the minimisation – or even elimination – of risks to human health, and for the progressive regeneration of wildlife. Part of the same goal is to preserve the Czech Republic's natural resources** (non-renewable sources, biological diversity and diversity of the landscape) **to the highest extent economically and socially acceptable.**

To achieve this strategic goal, the Government will, within the limits of the instruments available to it, ensure the accomplishment of the following **partial goals**, targeting individual components of the environment:
- As regards **air protection**, to achieve by the set deadlines (2005, 2010) and thereafter not to exceed the pollution limits defined for all categories of air pollutants, and to achieve by the set deadline (2010) and thereafter not to exceed the national pollution cap limits defined for air pollutants.
- As regards **water protection**, to achieve by the set deadlines (2005, 2010) and to maintain the good chemical and ecological condition of surface water and aquatic ecosystems and the good chemical condition and adequate quantities of groundwater. In addition, it is necessary to support the development of infrastructure for the supply of high-quality drinking water and the treatment of municipal waste water.
- As regards **soil protection**, to discontinue the excessive supply of nutrients and other pollutants into the soil and, by the set deadlines, to comply with the limit requirements concerning the content of undesirable substances and thereafter not to exceed such limits, to carry out measures to prevent contamination of soil by old environmental burdens, to ensure the protection of soil against water erosion, wind erosion and unnecessary occupation of land for purposes other than farming and forestry.
- As regards the **protection of forests**, to make continuous improvements to the species composition and age and spatial structure of forests with a view to approaching, gradually, a condition close to natural conditions, or a condition allowing forest ecosystems to perform all their ecological functions, and to support the non-productive functions of forests.
- As regards **agriculture**, to continuously reduce the area of arable land and enlarge the area of permanent grasslands. At the same time, to promote the extensive principles of organic farming. To safeguard the existence of the cultivated landscape by maintaining an equilibrium between the productive and non-productive functions of agriculture. To restore the ecological functions of those parts of farmlands that are disused and thus without prospect in this respect.
- As regards **waste disposal**, to comply with quantified requirements, in particular to reduce the amount of waste produced and the hazardous properties of waste, and to ensure that waste is used to the maximum extent possible in terms of energy and material. The index of material re-use of municipal waste should reach the approved target of 50% by 2010.
- As regards **landscape cultivation**, to continuously implement landscaping measures in support of the desirable environmental and aesthetic functions of the landscape and ecosystems; an emphasis should also be placed on improving the retention ability of the landscape.
- As regards **risk factors**, to continue increasing the efficiency of the management of chemicals (in particular accident prevention), to progressively eliminate highly hazardous

types of substances (persistent and bioaccumulative substances, endocrine disrupters), to insist on their substitution with available safer alternatives and to ensure the safe management of genetically modified organisms and products (GMOs).

- As regards **care for urbanised areas**, to reduce air pollution and noise pollution as far as possible, with an emphasis on the quality of the interior of buildings; this should be facilitated by the regulation of traffic. With regard to spatial planning, to regulate inappropriate urban sprawl and, when drafting local plans, to ensure that a larger share is earmarked for greenery and rest zones.
- As regards **natural resources management**, to minimise, within realistic technical and economic limits, the material and energy intensity of products and services, to minimise inputs of non-renewable sources, and to maximise the use of renewable sources.
- As regards the **protection of biological and landscape diversity**, and in the framework of spatial planning procedures, to support the development of natural and landscape infrastructure along with a reinforcement of the retention capacity of the landscape, and to protect valuable areas by appropriate measures.
- To gradually lift **"environmental burdens from the past"** so as to minimise or even eliminate any risks ensuing from them, and to use the development potential of *brownfields*.

A significant instrument for the protection of most components of the environment is Integrated Pollution Prevention and Control (IPPC), under which the environment is perceived "as a whole".

The accomplishment of the above-mentioned partial goals will be monitored in accordance with the following **indicators**:

⇨ specific emissions of nitrogen oxides (t per km^2)
⇨ specific emissions of sulphur dioxide (t per km^2)
⇨ the ratio of areas with impaired air quality to the total area of the Czech Republic (%)
⇨ pollution discharged into water (emissions of undissolved substances, dissolved organic salts and oily products in tonnes per year)
⇨ the proportion of the length of water courses of quality class III, IV or V (in respect of any parameter) in the total length of water courses monitored (%)
⇨ the consumption of fertilisers (tonnes per hectare)
⇨ the consumption of pesticides (kg per hectare)
⇨ the proportion of deciduous trees in the total area of forest area; deviation of the actual structure from the natural species composition in respect of spruce; the intensity of timber harvesting (%)
⇨ the proportion of arable land in total farmland (%)
⇨ the proportion of the use of farmland for renewable sources of energy in the total area of farmland (%)
⇨ the proportion of organic farming in the total area of farmland (%)
⇨ forest cover (%)
⇨ the production of municipal waste per person (kg per person)
⇨ the production of industrial waste per unit of GDP (tonnes per CZK 1000 of GDP, per US$ 1000 of GDP in purchasing power parity)
⇨ the proportion of municipal waste used for material (%)
⇨ the proportion of the consumption of renewable energy sources in the total domestic consumption of primary energy sources and in the total generation of electricity (%)

The second strategic goal is to minimise conflicts of interests between economic activities and environmental protection, and gradually to decouple environmental pressures from economic growth.

To achieve this strategic goal, the Government will, within the limits of the instruments available to it, ensure the accomplishment of the following **partial goals**, targeting **selected problem areas**:

- In the field of the **generation and consumption of energy**, to continuously increase the efficiency and use of efficient forms of energy savings and to maintain an appropriate ratio of the consumption of primary energy sources with an emphasis on renewable sources.
- In **industrial production**, to continuously reduce, wherever economically viable, the consumption of primary raw materials and to substitute them with secondary materials and separated waste products. To support closed production and consumption cycles, the development and application of low-emission, low-waste and low energy-demanding technologies (best available technology) and all economic activities with low material input and high added value with a view to continuously increasing their share in economic production. To support the production of environmentally friendly products and products made of renewable raw materials and waste usable as material.
- In the field of the **construction of transport infrastructure**, to minimise the required appropriation of land and, by technical measures, to reduce the impacts of line construction on various components of the environment (at preparatory stages).
- In **strategic planning**, to reduce demands in terms of space and transportation capacity at the level of the state, regions and municipalities.
- As regards **spatial planning procedure**, in the context of drafting local plans and the Policy of Territorial Development of the Czech Republic, to ensure that the preference focuses on the use of *brownfields* and to define the Territorial System of Ecological Stability.
- It is **generally** necessary to support the gradual transition from the "supplies of commodities" approach to the "supplies of services" approach (in the energy sector, for example, transition from the supply of amounts of energy to the supply of energy services).

An important instrument designed to reduce conflicts of interests between environmental protection and economic development is Integrated Pollution Prevention and Control (IPPC), under which "economic and environmental optimisation" is carried out.

The accomplishment of the above-mentioned partial goals will be monitored in accordance with the following **indicators**:
⇨ the energy intensity of GDP (toe per CZK 1000 of GDP, per US$ 1000 of GDP in purchasing power parity)
⇨ the domestic consumption of primary energy sources (toe per person)
⇨ the structure of primary energy sources (toe according to the type of energy source)
⇨ domestic material consumption [3] (tonnes, tonnes per person)
⇨ the material intensity of GDP (kg of domestic material consumption per CZK 1000 of GDP, per US$ 1000 of GDP in purchasing power parity)

An important factor here is to exert an influence through education and awareness provided to individuals and entities with a view to changing the patterns of their behaviour, production and consumption towards sustainability. To this end it is necessary to grant the general public access to relevant information, actively support environmental education at all levels and environmental awareness. In addition, it is necessary to encourage and support the voluntary activities of the business sector in environmental matters.

The third strategic goal is to make a contribution, commensurate to the possibilities and significance of the Czech Republic, towards the solution of European and global environmental issues (specifically the threat of climatic changes and depletion of the Earth's ozone layer, as well as the loss of biodiversity).

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[3] Domestic material consumption is the sum of raw materials extracted, biomass produced and imports, less exports.

To achieve this strategic goal, the Government will, within the limits of the instruments available to it, ensure the accomplishment of the following **partial goals**, targeting individual problem areas:

- With regard to **climate protection**, to continuously reduce (especially by savings of energy, including the consumption of fuel by vehicles, and by the utilisation of renewable sources) emissions of greenhouse gases, in particular carbon dioxide from the combustion of fossil fuels and methane from waste dump sites. Emissions of carbon dioxide should be reduced at such a rate that by 2020 they are at the approved limit of approximately 8.7 tonnes per person per year. Special attention will be paid to reducing emissions of fluorinated greenhouse gases (F-gases).
- With regard to the **protection of the Earth's ozone layer**, to discontinue the production and to reduce the use of substances damaging the ozone layer, and to ensure effective measures to reduce their release from existing devices and facilities that still contain them. Special attention should be paid to the removal of substances depleting the ozone layer from discarded used products and devices, mainly in order to neutralise these substances.
- With regard to the **protection of air, water and soil**, to reduce the consumption and discharges of persistent organic pollutants and heavy metals, bioaccumulative substances and endocrine disrupters into the environment.
- With regard to the **protection of ecosystems and habitats of wild-growing plants and wildlife**, to stop their territorial and spatial reduction and preserve all their natural functions.
- With regard to the **protection of biological diversity**, to continuously increase biological diversity at all three levels (genetic, generic and ecosystemic).

The accomplishment of the above-mentioned partial goals will be monitored in accordance with the following **indicators**:

⇨ specific emissions of greenhouse gases (kg of $(CO_2)_{equiv}$ per person, per CZK 1000 of GDP, per US$ 1000 of GDP in purchasing power parity)

⇨ specific emissions of carbon dioxide (kg of CO_2 per person, per CZK 1000 of GDP, per US$ 1000 of GDP in purchasing power parity)

⇨ the consumption of substances depleting the ozone layer (kg of substances depleting the ozone layer, weighed according to ozone depletion potential – ODP)

⇨ the development of populations of selected species of birds (changes in numbers)

⇨ the ratio between declining and increasing species of butterflies (%)[4]

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[4] Data for this indicator will be available as of 2007.

IV.3 Social pillar: strengthening social cohesion and stability

The first strategic goal is to support human resource development with a view to maximising social cohesion.

This strategic goal is associated with a **set of partial goals**. To accomplish the partial goals, the Government will, within the limits of the instruments available to it:
- continue to guarantee the minimum income necessary to maintain a worthy living standard and to prevent social exclusion;
- support families threatened by poverty;
- assist families in reconciling their professional and parental duties better by promoting flexible forms of employment;
- improve the protection of the family (including children and elderly people) from socially pathologic phenomena;
- promote the prevention of crime among children and young persons;
- as part of aid provided to handicapped persons, the Government will continue their integration into society;
- continue supporting the regeneration of rural areas;
- remove economic and legal barriers preventing the functioning of a housing market and will introduce/create a special sector of social housing in co-operation with municipalities;
- introduce measures to increase the responsibility of people for their own health;
- maintain an adequate extent of financial participation by patients in health care;
- safeguard the interconnection of health and social care at municipal level by establishing a system of integrated community care;
- create a new system of financial aid (social benefits) for the needy with a view to limiting long-term dependence on social benefits and providing a closer tie between social benefit payments and measures assisting in finding employment;
- ensure the transition of the pension system to a financially more sustainable system while preserving the pay-as-you-earn system, in order to ensure a sufficient level of pensions, merit-based payments, and solidarity;
- continue to support culture.

The accomplishment of the above-mentioned partial goals will be monitored in accordance with the following **indicators:**
⇨ the number of flats per 1000 inhabitants (number)
⇨ the set of social benefits designed to prevent social exclusion
⇨ the population living below the poverty line before and after social transfers (%)
⇨ the Gini index of income inequality (dimensionless)
⇨ the tax progressivity index (the Suits Index) (-1 to +1)
⇨ the proportion of mandatory expenses in total public expenditure (%)
⇨ source-based health expenditures (billions of CZK, US$ in purchasing power parity; % of GDP)
⇨ standardised mortality by cause of death (cardiovascular diseases, neoplastic diseases, suicide, etc.) (number per 100,000 persons)
⇨ the proportion of expenditures on culture in total public budget expenditures (%)

The second strategic goal is to continuously reduce unemployment to a rate where people are economically and socially motivated to engage in gainful activities.

This strategic goal is associated with a **set of partial goals**. To accomplish the partial goals, the Government will, by means of the instruments available to it:

- ensure the creation and development of an "integrating" labour market in accordance with the national economic policy, and support employment and employability;
- react to ongoing structural changes;
- support the development of preventative and advisory activities;
- support the motivation and activation of the unemployed and persons threatened by unemployment to seek and accept employment and to take part in consultation and retraining programmes;
- create preconditions ensuring that working is more beneficial than passively receiving social welfare allowances;
- support an increase in employability through appropriate retraining activities;
- increase the employment and employability of disadvantaged groups, such as persons with health impairments, persons from a socially and culturally disadvantaging background, elderly persons, migrants, etc.;
- focus the activity of employment authorities on the implementation of preventative measures and on increasing selectiveness in the provision of financial subsidies.

The accomplishment of the above-mentioned partial goals will be monitored in accordance with the following **indicators:**
⇨ the general rate of registered unemployment by age category (%)
⇨ the employment rate by age category (%)

The third strategic goal is to maintain a stable number of inhabitants in the Czech Republic, and to increase the population over time and improve its age structure.

This strategic goal is associated with a **set of partial goals**. To accomplish the partial goals, the Government will, by means of the instruments available to it, ensure:

- the formulation of a concept for a pro-natality family policy with a view to attaining higher aggregate fertility;
- the protection of the family from pressures ensuing from contemporary civilisation, in particular pressures caused by the participation of family members in economic activities;
- the constancy of special protection for mothers during an adequate period of time before and after childbirth;
- financially accessible housing for young families;
- the formulation of a long-term migration policy, taking account of factors such as age, skills, culture, etc., and support for the integration of foreigners by creating appropriate living conditions for them;
- stimulation for the creation of new job opportunities for the young.

The accomplishment of the above-mentioned partial goals will be monitored in accordance with the following **indicators:**
⇨ population growth (% year-on-year)
⇨ the proportion of persons above 65 and below 15 years of age in the total population (%)
⇨ the aggregate fertility rate (number)
⇨ the unemployment rate in young persons up to 25 years of age (%)
⇨ the unemployment rate in elderly persons above 55 years of age (%)
⇨ the number of flats per 1000 persons (number)
⇨ the social allowance for families with children (number)

IV.4 Research and development, education

The strategic goal in the field of research and development and education is to attain a high level of education in society, and thus to ensure the competitiveness of Czech society and develop ethical values in accordance with European cultural traditions.

This strategic goal is associated with a **set of partial goals**. To accomplish the partial goals, the Government will, by means of the instruments available to it:
- modernise the content of education with regard to the needs of the general development of the personality (with a special emphasis on functional literacy) and of the labour market;
- apply modern European trends in life-long learning;
- coordinate the structure of the supply of professional training, with due regard for the needs of regions and requirements for the professional training of teachers;
- develop the professional training of pupils in co-operation with major employers, with a focus on small and medium-sized enterprises.

In addition, the Government will, as far as possible, support:
- the development of the teaching of adults by introducing a module-based system of teaching at schools, with the use of public libraries, including teaching in relation to culture;
- the constant improvement of the professional standard of teachers at all levels of the education system;
- improvements in the position of teachers in society, thus reversing the current undesirable developments leading to the departure of young teachers and to a constant increase in the average age of employees in the school system;
- constant improvements in the equipment of universities and scientific institutions;
- the finalisation of curricular reform, which makes it possible to react to trends in the development of the society and economy and to the new concept of life-long learning;
- a conceptual approach to the development of research and development, in particular in terms of defining priorities so that they react to the changing needs of society and become competitive in an international context;
- co-operation between state research and business research;
- financial coverage for research and development out of both public and independent resources;
- use of the EU Structural Funds and the delimitation of their use for the purposes of education at all levels, research and development;
- the periodical assessment of the needs of those who use the findings and results of research and development, the needs and possibilities of focused research via thematic programmes, and the needs and possibilities of research and development as a whole;
- the adequate financial compensation mainly of young experts in order to prevent the migration of professionals and talented young experts to other countries;
- the development of the information society, including the development of information services provided by public libraries.

The accomplishment of the above-mentioned partial goals will be monitored according to the following **indicators:**

⇨ the level of education attained (proportions of inhabitants based on the level of education attained and age categories)

⇨ expected duration of education (years)

⇨ the proportion of enrolled pupils or students in the total population born in the relevant year (secondary and tertiary education) (%)

⇨ expenditures on education (billions of CZK, US$ in purchasing power parity; % of GDP)

⇨ expenditures per student, by level of education (CZK, US$ in purchasing power parity)

⇨ the number of Czech students studying abroad and number of foreigners studying in the Czech Republic, by school type and country (numbers)

⇨ expenditures on research and development (billions of CZK, US$ in purchasing power parity; % of GDP)

⇨ the number of Czech applications for inventions (number per 1000 persons)

⇨ Internet access (millions; % of population, speed)

IV.5 European and international context

The first strategic goal in an international context is to advocate and promote the principles of sustainable development in the framework of the broadest international relations, in international global and regional organisations, and as part of bilateral relations. This involves co-operation and initiative at all international levels and, in particular, efforts towards overcoming ethnic, economic, ecological and social conflicts between different cultural communities.

This strategic goal is associated with a **set of partial goals**. To accomplish the partial goals, the Government will, by means of the instruments available to it:
- contribute to the reinforcement of a peaceful, stable, prosperous and uniting Europe and the entire international community;
- endeavour to create an international environment focused on the development of political, economic, cultural and environmental co-operation, where those involved will jointly identify and handle risks and threats, preferentially by political and peaceful means;
- adequately contribute to and increase the quality (aimed at international compatibility) of development assistance and humanitarian international aid with a view to contributing to the accomplishment of the Millennium Development Goals, the World Summit on Sustainable Development Plan of Implementation, and the partnership initiatives adopted there;
- continue the integration into NATO in the field of the military, and support the reinforcement of the trans-Atlantic partnership as the backbone of Europe's security system;
- continue co-operation in the framework of the Visegrád Group and other European and global associations (e.g. UN agencies).

The accomplishment of the above-mentioned partial goals will be monitored in accordance with the following **indicators:**
⇨ involvement in foreign missions – military, humanitarian, etc. (expended funds in CZK, US$ in purchasing power parity and numbers of the persons involved)
⇨ overall international development assistance in relation to gross national income (%)

The second strategic goal is to be an active member of the EU and contribute to the EU's becoming a functioning and prosperous community, provided that the prosperity of the EU increases the living standard of Czech citizens, and improve the quality of their lives, security and freedom.

This strategic goal is associated with a **set of partial goals**. To accomplish the partial goals, the Government will, by means of the instruments available to it:
- seek to contribute to the sustainable, socially and environmentally favourable economic growth of the EU;
- seek the fastest possible approximation of the Czech Republic to the most developed member states of the EU;
- thoroughly embrace the processes and principles of work of the EU and make efficient use thereof;
- take an active part in reinforcing the democratic structure of the EU;
- promote a new approach to the future policy of cohesion, which should, to the maximum extent possible, facilitate a high level of competitiveness over the entire territory of the EU, also from a global perspective;

- actively contribute to the accomplishment of goals and tasks ensuing from the EU Lisbon Strategy and the EU Strategy for Sustainable Development;
- support measures designed to reinforce freedom and security with the EU, and seek to ensure that security measures do not disproportionately interfere with the fundamental rights and freedoms of EU citizens;
- in the enlarged EU, participate in the formulation of values common to all EU Member States, seek the preservation and further support of the diversity of European heritage as a source of spiritual uniqueness and future development.

IV.6 Good governance

The first strategic goal is to ensure the gradual approximation of the constitutional system to the needs of the society for purposes of transition to the trajectory of sustainable development.

The second strategic goal is to ensure that regions/municipalities are granted a status corresponding to their prospective functions in ensuring an equilibrium between the several pillars of sustainable development.

This strategic goal is associated with a **set of partial goals**. To accomplish the partial goals, the Government will, by means of the instruments available to it:

- support the creation of such conditions, including tax and fiscal instruments, which will induce regions to optimise the use of their own resources;
- support the development of organic farming, in particular on arable land, and the utilisation of local sources of secondary raw materials, and the preferential use of renewable sources of energy with maximum use of the regions' potential;
- encourage the integration of Czech regions into European structures;
- support the alleviation of regional disparities, mainly through the development of local economies of municipalities, cities and micro-regions and small-sized enterprises, and create conditions for such alleviation and thus for the balanced development of the regions and the activation of their internal resources;
- focus – in connection with improvements in the transport service and transport networks – on ensuring easy access to employment, education, social services and to markets for investors, without reducing the quality of the environment;
- support the development and accessibility of public cultural services, and care of the tangible and intangible cultural heritage;
- encourage the broadest possible involvement of individuals and civic initiatives in cultural and art activities, non-professional art activities, and care for regions with traditional folklore; at the same time, the Government will support cultural diversity in individual regions;
- support the implementation of local Agendas 21, including the associated funding;
- create conditions for the integration of the principles of sustainable development into regional development policies.

The accomplishment of the above-mentioned partial goals will be monitored in accordance with the following **indicators:**
⇨ the proportion of organic farming in the overall area of farmland (%)
⇨ the proportion of public expenditures of local authorities in total consolidated public expenditures (%)
⇨ GDP per capita per NUTS 3 region (CZK, US$ in purchasing power parity)
⇨ the proportion of revenue from tourism in the total revenues of regions (%)
⇨ the percentage of local authorities that have implemented Agenda 21 (%)
⇨ the proportion of expenditures on culture in total public budget expenditures (%)

The third strategic goal is to improve conditions for the participation of the public in decision-making in matters concerning sustainable development, and to create the broadest possible consensus in respect of the transition to sustainable development.

This strategic goal is associated with a **set of partial goals**. To accomplish the partial goals, the Government will, by means of the instruments available to it:

- enable the participation of individuals and civic associations in the drafting of legal regulations and in the preparation, adoption and control of decisions relating to all three pillars of the Strategy at all levels of decision-making;
- increase the financing of non-profit non-governmental organisations, for instance by favouring the write-offs of amounts provided to such organisations by business entities;
- extend the application of the criteria of the UNECE Convention on Access to Information and Public Participation in Environmental Decision-Making and Access to Justice in Environmental Matters to all areas related to sustainable development;
- create conditions that generate greater interest in public life among young persons;
- ensure that the public is informed in a timely, full manner about the use of resources from EU funds so that individuals and non-profit non-governmental organisations (NGOs) can participate in their use and the decision-making concerning their use.

The accomplishment of the above-mentioned partial goals will be monitored in accordance with the following **indicators:**
⇨ participation in elections based on age and type of elections (%)
⇨ the percentage of the population involved in the work of NGOs (%)

The fourth strategic goal is to set up and develop institutions and forms of work of public administration in accordance with the requirements of sustainable development.

This strategic goal is associated with a **set of partial goals**. To accomplish the partial goals, the Government will, by means of the instruments available to it:

- complete fiscal decentralisation as a follow-up with a new structure of territorial public administration;
- ensure that the focal point of state administration will shift from direct rendition of services to conceptual, coordinative, methodological and regulatory activities;
- ensure that the content and organisation of public administration complies with the requirements concerning its functioning in the EU (e.g. the requirement of service to the public, accountability to the public);
- seek to overcome the present unsatisfactory status of law enforcement;
- overcome the effect of partial (sectoral) approaches to duties and tasks of administration and underestimation of "supra-sectoral" coordination;
- reinforce the status of the Government Council for Sustainable Development as an organ coordinating activities aimed at accomplishing the goals of the Strategy;
- reinforce the position of self-governing regions in the budgetary system of the state, and reinforce the independence of municipalities;
- ensure that high-quality legal regulations are adopted in respect of public tenders and that compliance with the terms and conditions of public tenders is consistently monitored, principally by their timely and broadest possible distribution.

The accomplishment of the above-mentioned partial goals will be monitored in accordance with the following **indicators:**
⇨ the percentage of court cases lasting more than one year / three years (%)
⇨ the Corruption Perceptions Index (non-dimensional scale of 0 to 10)
⇨ the proportion of public expenditures of local authorities in total consolidated public expenditures (%)

The fifth strategic goal is to ensure that the measures to be taken, with a view to supplying external and internal security, reflect the requirements of protection from changing forms of crime, including international crime and terrorism in particular.

This strategic goal is associated with a **set of partial goals**. To accomplish the partial goals, the Government will, by means of the instruments available to it:
- ensure that security authorities pursue priorities ensuing from the transformation of criminal activities, in particular from activities of international crime and terrorism;
- reform the armed forces, which will ensure that the Czech Republic meets its obligations concerning national and NATO tasks and the elimination of security risks;
- ensure the most extensive possible involvement of the Czech defence industry, with a view to achieving a certain level of military self-sufficiency as a precondition for maintaining necessary manufacturing capacities;
- approximate the powers of security services to changes and developments in criminality;
- create legal, economic and organisational preconditions for the prevention of corruption in public administration;
- ensure the consistent enforcement of the law at national and regional level;
- promote effective legal, administrative, financial and institutional measures targeted at the prevention and combating of organised crime;
- support the Integrated Rescue System's capacity for action and provide professional resources and background for crisis planning, coordination and management, and for the coordination of action of public administration entities, legal entities and enterprising natural persons while making preparations for crises, and ensure the interconnection of crisis management plans with regional development plans;
- create preconditions for the existence of a system of internally coordinated emergency planning (coordination between national and regional emergency plans);
- provide a functioning civil defence system, also involving the actions of basic components during rescue and liquidation work in the event of emergencies.

The accomplishment of the above-mentioned partial goals will be monitored in accordance with the following **indicators:**
⇨ the percentage of court cases lasting more than one year / three years (%)
⇨ the number of criminal offences ascertained, by type of offence (number per 1000 inhabitants)
⇨ the percentage of criminal offences solved, by type of offence (%)

V. Financing

The adoption of the Strategy in itself will not result in an increase in financial demands on the State Budget. The Strategy's goal is to establish a broad consensual framework for the drafting of other conceptual documents (sectoral policies or programmes of action) and should serve as the basis for strategic decision-making in individual sectors and for co-operation between sectors and with interest groupings, and thus it should be noted that the impacts referred to above will not be triggered until the implementation of individual sectoral strategies, policies or other programming instruments.

The Government will, subject to available resources, support those parts of sectoral policies which work towards balanced relations between the pillars of sustainability. The participation of public resources in the implementation of relevant measures will be managed in the framework of fiscal selectiveness of the development of public budgets as approved by the Government.

In respect of the financing of the costs of sustainable development, strategic management functions will be reinforced and the programming principle will be applied consistently. The success, effectiveness and meaningfulness of the introduction of medium-term expenditure frames are primarily conditional on political consensus and the resolve to comply with such frames. One of the fundamental principles will be to respect the approved medium-term frames while submitting draft bills, or new expenditure programmes.

VI. Monitoring and updating

The Government will continuously monitor progress in the accomplishment of the goals of the Czech Republic Strategy for Sustainable Development by using indicators compiled on the basis of official data and established methodologies. The partial goals of the Strategy will be assessed by means of indicators specified in the text of the Strategy under individual strategic goals. **Communication** between public administration on the one hand and the public and politicians at all levels on the other **will be facilitated by the selection of indicators** contained below in this chapter.

The selected indicators in the text below are arranged analogically with the draft Strategy (Economic pillar; Environmental pillar; Social pillar; Research and development, education; European and international context; Good governance), with several charts inserted for illustration. The classification of the indicators by individual pillar is intended for reference only, as most of them also reflect relations between the individual pillars.

Economic pillar

Name and designation of indicator: **GDP per capita (I/1)**

Short definition and unit: The ratio of GDP – in current prices per year or in constant prices – to the number of inhabitants (CZK, US$ in purchasing power parity).

GDP expresses the monetary value of market and non-market activities in the current year and is often considered as an indicator of the material living standard of the population. If the GDP grows, then, as a rule, more funds are available for environmental protection, reducing unemployment, combating crime, etc. On the other hand, higher economic performance is associated with higher consumption of raw materials and a higher overall load being placed on the environment in terms of discharges of pollutants, the production of waste, etc.

Name and designation of indicator: **Total amount of net investments (I/2)**

Short definition and unit: Proportion of total net investments in gross investments (%).

Gross investments include all investments, i.e. investments in new machinery and equipment and investments in the maintenance of existing production capacities. Net investments are gross investments less capital depreciation. In order to improve and expand means of production, it is necessary to ensure that the ratio of net investments to gross investments reaches as favourable a value as possible or a value approximating 1.

Name and designation of indicator: **Balance of incomes and expenditures of public budgets (I/3)**

Short definition and unit: The difference between incomes and expenditures of public budgets in relation to GDP (%).

The balance of incomes and expenditures of public budgets in relation to GDP expresses the balance of public budgets in relation to the gross domestic product. In the long run, expenditures of the public sector must not considerably exceed income – otherwise the public financial policy

would appear unsustainable, and indebtedness is incurred. In the short run, however, in particular at a time of recession, this may not be the case.

Name and designation of indicator: **Foreign trade balance (I/4)**

Short definition and unit: The difference between the total value of exported and imported services and commodities in relation to GDP. It is concurrently possible to monitor the difference between the physical amount of imported and exported commodities (CZK, US$ in purchasing power parity, tonnes).

This indicator illustrates the interrelation of the domestic economy with foreign economies. The components of the indicator (imports, exports) reflect changes in the behaviour of local business companies, changes in exchange rates, international competitiveness, etc. The foreign trade balance expressed in monetary units should not be in the red for extensive periods of time, as this type of debt tends to be repaid to the detriment of the country's foreign exchange reserves. A negative foreign trade balance in physical units indicates that the economy is materially dependent on foreign economies.
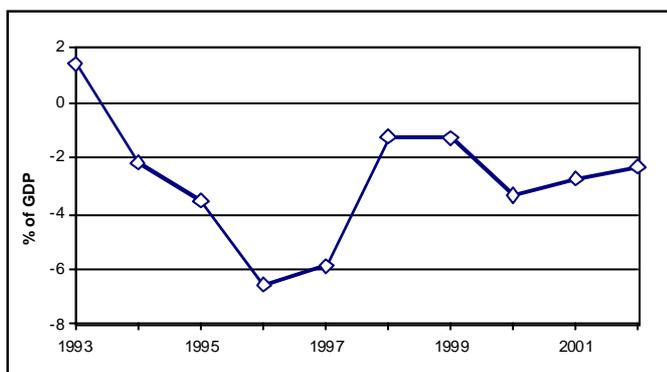
Chart 1: Foreign trade balance, Czech Republic, 1993 - 2002, constant prices in 1995
(Source of data: Czech Statistical Office)

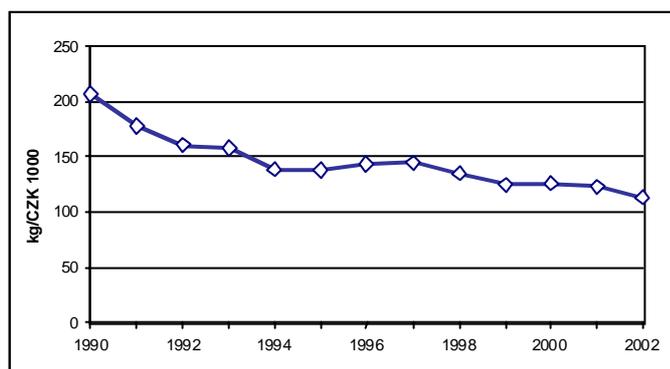Name and designation of indicator: **Labour productivity per employee (I/5)**

Short definition and unit: The proportion of GDP in relation to the number of employees in current prices per year or in constant prices for a longer time period (CZK, US$ in purchasing power parity per employee).

The substance of this indicator of productivity is the measurement of the performance of any of the production factors. In general, productivity is calculated as a proportion of output amounts and input amounts. Productivity growth is directly projected into the increase in the economy's competitiveness and indirectly into the growth of living standards. In the current global economy it is necessary for the Czech Republic to increase labour productivity to be able to assert itself in foreign markets.

Name and designation of indicator: **Material intensity of GDP (I/6)**

Short definition and unit: Domestic material consumption[5] in relation to GDP in current prices per year or in constant prices for a longer time period (kg per CZK 1000 of GDP, per US\$ 1000 of GDP in purchasing power parity).

If the consumption of materials gradually declines, the load on the environment will decline too (the extraction of raw materials from the environment and their processing is associated with numerous environmental problems). Of key importance in this context is the introduction of modern environmentally sounder technologies, which are less demanding in terms of raw material inputs and produce less waste. Along with this indicator, it is desirable also to monitor the overall consumption of materials.

Chart 2: Material intensity of GDP, Czech Republic, 1990 - 2002
(Source of data: Charles University in Prague (direct material consumption), Czech Statistical Office (GDP))

Name and designation of indicator: **Energy intensity of GDP (I/7)**

Short definition and unit: The overall consumption of energy in relation to GDP in current prices per year or in constant prices for a longer time period (toe per CZK 1000 of GDP, per US\$ 1000 of GDP in purchasing power parity).

Based on the intensity of energy consumption it is possible to assess whether the energy efficiency of the economy is increasing and less energy is consumed per production unit. Energy consumption is understood to be an indicator of the environmental burden and, as is the case with materials, of key importance in this context is the introduction of modern environmentally sounder technologies.

Environmental pillar

Name and designation of indicator: **Specific emissions of greenhouse gases (I/8)**

Short definition and unit: Anthropogenic emissions of CO_2, SO_2, CH_4, N_2O, HFCs, PFCs and SF_6 in relation to GDP in current prices per year or in constant prices for a longer time period (kg $(CO_2)_{equiv}$ per person, per CZK 1000 of GDP, per US\$ 1000 of GDP in purchasing power parity).

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[5] Domestic material consumption is the sum of raw materials extracted, biomass produced and imports, less exports.

Emissions of greenhouse gases are monitored due to their potential to contribute to global climate change. Many experts believe that global climate change is the most serious environmental, and by extension economic and social, problem that must be dealt with immediately. Emission levels are relative to the population and GDP.

Name and designation of indicator:	**Proportion of municipal waste usable as substitute raw material (I/9)**
Short definition and unit:	The amount of municipal waste that is reused as raw material, in relation to the overall amount of municipal waste (%).

The re-use of municipal waste is one of the conditions of waste management sustainability: the higher the rate of re-utilisation of municipal waste, the lower the demands on the overall consumption of materials, the cost of storage, incineration and other forms of liquidation of waste, and the overall operating costs of waste management decrease.

Name and designation of indicator:	**Consumption of primary energy sources per inhabitant (I/10)**
Short definition and unit:	The amount of energy by fuel category (liquid, solid and gaseous fuel) consumed per person in the current year (toe per year).

This indicator illustrates the overall pressure on energy sources, the availability of which is the key factor for the economic and social development of the society. At present, fossil fuels in particular are in widespread use, the combustion of which is the principal source of emissions of greenhouse gases and other air pollutants. From the point of view of sustainable development, the diversity of energy sources in use and the focus on renewable sources are also important.

|	
Name and designation of indicator:	**Share of consumption of renewable sources of energy (I/11)**
Short definition and unit:	The consumption of renewable sources of energy in relation to the overall consumption of primary energy sources and to overall consumption of electricity (%).

Renewable sources of energy include the wind energy, hydro energy, geothermal energy, energy obtained from biomass and solar energy. Dependence on non-renewable sources of energy is unsustainable in the long run, mainly due to the fact that their use damages the environment (emissions of greenhouse gases from combustion of fossil fuels). In addition, quantities are limited, but the situation does not appear too critical in this respect. Renewable sources may, on the other hand, provide energy constantly and a much smaller environmental burden is associated with their use.

Name and designation of indicator:	**Transportation performance in freight transport (I/12)**
Short definition and unit:	Transportation performance in road, railway, air and water freight transport (t.km).

As the economy develops, demands for freight transportation increase; as the volume of freight transport increases, its structure develops over time, and it is this structure that determines the

extent of negative effects of freight transport on the environment. Water transport, in terms of the production of emissions and energy requirements, is more environmentally sound than railway transport, which, in its turn, is sounder than road or air transport. In addition, road transport significantly contributes to traffic congestion and bears an increasing risk of traffic accidents with harm to the environment.
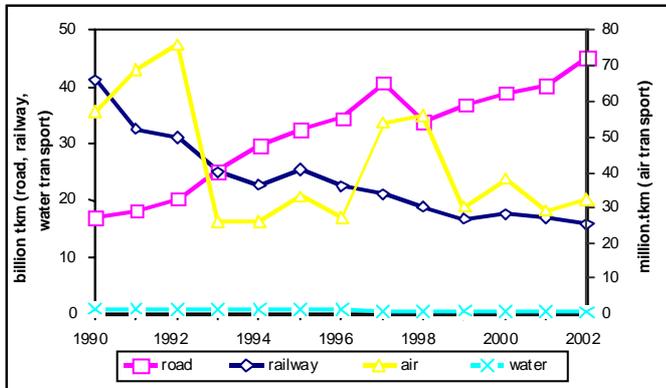
Chart 3: Transportation performance in freight transport, Czech Republic, 1990 - 2002
(Source of data: Ministry of Transport of the Czech Republic)

Name and designation of indicator: **Consumption of industrial fertilisers (I/13)**

Short definition and unit: The consumption of industrial fertilisers per unit of farmland (kg of pure nutrients in fertilisers per ha).

Soil is the product of the weathering of rocks and minerals and the activity of living organisms. The process is so slow that soil can be considered a non-renewable source. Agriculture often has a very adverse impact on soils. One of the factors diminishing the quality of soils is the excessive use of mineral fertilisers, associated mainly with soil acidification, soil erosion and consequently with a general deterioration in fertility. The use of mineral fertilisers also contributes significantly to the eutrophication of water and the contamination of drinking water.

Name and designation of indicator: **Development of populations of selected bird species (I/14)**

Short definition and unit: An aggregated indicator monitoring the development of populations of selected forest bird species and species typical in agricultural areas (index, 1990 = 100).

Common species of birds typically found in agricultural areas and woodland are a reliable, popular and relatively easily measurable indicator of biological diversity in the most frequent Czech biotopes. Biodiversity in itself is a key element of the ecological condition of landscape and of the quality of life of the people who live there or come for a visit. Populations of birds and other groups of organisms are influenced primarily by the farming methods used, and to a lesser extent by pollution, climate change and other factors.

Social pillar

Name and designation of indicator: **General rate of registered unemployment (I/15)**

Short definition and unit: The proportion of the number of unemployed (total, males, females, young persons) in the total work force (%).

Unemployment is one of the principal causes of poverty and a burden on the country's welfare system (the payment of unemployment benefits). Besides the overall rate of unemployment, it is also desirable to monitor the unemployment of males, females and young persons between 15 and 24 years of age (at present, young people leaving school often find it difficult to find employment, which is manifested by increased unemployment in this age category).
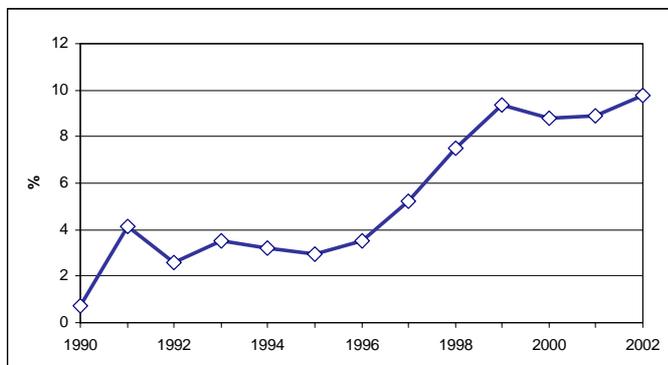
Chart 4: General unemployment rate, Czech Republic, 1990 - 2002
(Source of data: Czech Statistical Office)

Name and designation of indicator: **Rate of unemployment of elderly persons (I/16)**

Short definition and unit: The number of employed elderly persons above 55 years of age in relation to the total work force in this age category (%).

Thanks to more effective and advanced health care, people in developed countries live to an ever higher age, which, given the unfavourable demographic situation and the present pension system, is a considerable burden on national budgets. One of the solutions to this situation is to extend the limit for retirement. The proposed indicator would be a key indicator of whether the policy of extending the retirement age is really effective.

Name and designation of indicator: **Life expectancy at birth and at 65 years of age (I/17)**

Short definition and unit: The average number of years of lifetime remaining to a newborn or to a 65-years-old person assuming that the mortality rates of the given period remain constant (years).

This indicator reliably shows the health condition of the population as it comprises a number of negative as well as positive influences affecting human health. Mortality, together with natality and migration, substantially determines the size of the human population in a territory, its composition by sex and age, and its potential for further growth. The unprecedented prolongation of the average span of human life in developed countries is primarily due to the improving quality of health care.

Name and designation of indicator: **Population living below the poverty line before and after social transfers (I/18)**

Short definition and unit: The percentage of the population living below the poverty line (total, males, females). Typically, the poverty line is equal to 50% of median income.

From the perspective of striving towards sustainable development, poverty is a serious problem. When assessing poverty, a certain integrated point of view is necessary, taking account of both the material living standard and the social and cultural background, geographic conditions, or the condition of the environment. For this reason, poverty tends to be assessed in relation to average income, although the definition of poverty may differ even between equally rich countries.

Name and designation of indicator: **Accessibility of public cultural services (I/19)**

Short definition and unit: The proportion of expenditures on culture in total public budget expenditures.

The percentage of expenditures designated as expenditures on culture (according to the applicable budgeting structure) in relation to the total expenditures of public budgets is an important piece of information making it possible to assess the extent to which public administration is dedicated to creating conditions for the accessibility of public cultural services, care of tangible and intangible cultural heritage, and creating conditions for the formation of new cultural values. Culture is one of the vital preconditions for social stability, and is an integral part of the tourist industry; the social functions of culture help revitalise rural settlements.

Research and development, education

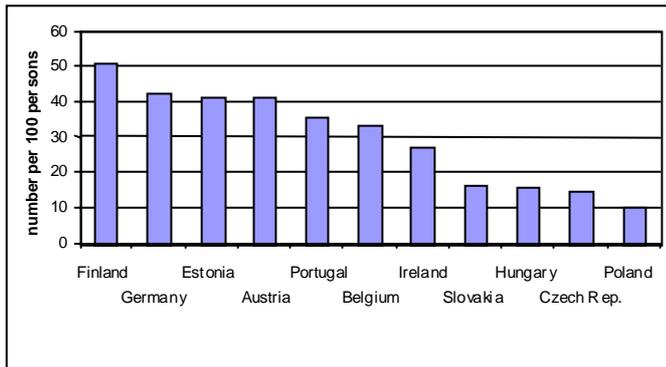Name and designation of indicator: **Highest education attained (I/20)**
Short definition and unit: The percentage of the population according to education attained – primary, secondary, tertiary (different classification possible) (%).

This indicator measures the quality of the human capital of the adult population at productive age. The data regarding the level of education attained should be presented based on age categories (typically 25–34, 35–44, 45–54, 55–64 and above 64 years of age). In the context of the transition to sustainable development, education should be of key importance. People with a higher level of education assert themselves better in the labour market, become more involved in all institutions of civil society and react more flexibly to the challenges of the present world related to globalisation and the use of modern information technologies.

Name and designation of indicator: **Internet access (I/21)**

Short definition and unit: The number of Internet users per 1000 persons, with access to the Internet at home and/or at work (number per 1000 persons). The number of public libraries providing access to the Internet.

Relevant and timely information is a necessary precondition for the performance of most human activities. The Internet offers prompt access to and the exchange of diverse information, helps to find employment, and plays an ever increasing role in learning, communication, entertainment, etc. Thus the Internet, among other things, helps people to understand how the present world is interconnected. A network of public libraries is available even in small municipalities; they are required to provide access to the Internet as one of their basic services under Act No 257/2001 Coll. on Public Library and Information Services.

Chart 5: Access to the Internet, international comparison, 2002
(Source of data: Czech Statistical Office)

European and international context

Name and designation of indicator: **Overall international development aid (I/22)**

Short definition and unit: The overall development aid provided, relative to the Czech Republic's GNP (%).

Poverty – caused by various social and economic factors – remains a problem mainly of the population in developing countries. Most developed countries feel solidarity with such countries. By EU standards, it is necessary to focus international development aid on the following areas: trade and economic development, regional policy, support for the macroeconomic policy, support for the fair access of people to social services, a supply of food, and the development of democratic institutions of those countries.

Good governance

Name and designation of indicator: **Efficiency of courts of justice (I/23)**

Short definition and unit: The percentage of court cases lasting longer than 1 year/3 years (%).

One of the conditions of well-functioning state administration is a well-functioning justice and court system. The Czech judiciary faces numerous problems, attributable in part to an increase in the crime rate in the 1990s. As a result of this increase and the unsatisfactory efficiency of court practices, Czech courts are over-burdened and court proceedings are excessively delayed, because of which the Czech Republic has been criticised on several occasions at international level. The proposed indicator serves as an assessment of whether the efficiency of the Czech judiciary is improving or not.

Name and designation of indicator: **Corruption Perceptions Index (I/24)**

Short definition and unit: A non-dimensional scale 0 - 10 (0 = high level of corruption, 10 = country with no corruption).

The Corruption Perceptions Index (CPI), issued by Transparency International, an international non-profit organisation, ranks countries according to perceptions of corruption among public officials and politicians. Corruption among public officials is the key problem, as it may lead to the influencing of legislative procedures by organised crime and to the activity of crime structures in

the economy. Generally speaking, corruption undermines the functioning of the EU common market and the quality of democratic institutions; therefore, it is desirable to reduce the rate of corruption as much as possible.
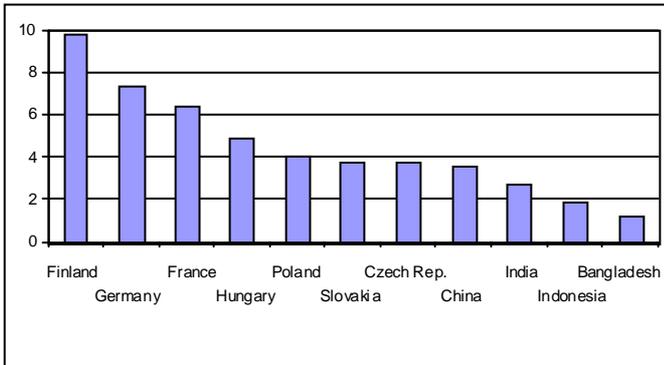
Chart 6: Corruption Perceptions Index, international comparison, 2002
(Source of data: Transparency International)

The Czech Republic Strategy for Sustainable Development will be updated on a regular basis. At the same time, individual indicators will be revised, while ensuring that the consistency of time sequences is retained. The first status report containing an evaluation of the set of indicators of sustainable development will be submitted to the Government for its information at the end of 2005. The proposed update to the Czech Republic Strategy for Sustainable Development will be presented by the end of 2007. The proposed draft documents for deliberations of the Government will be prepared by the Government Council for Sustainable Development in co-operation with the ministries involved and after consultation with the public.