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BELARUS

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Synopsis



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Preface

This third Environmental Performance Review (EPR) of Belarus takes stock of progress made by Belarus in the management of its environment since it was peer reviewed for the second time in 2005 and assesses the implementation of the recommendations made in the second review. It covers issues of specific importance to the country related to legal and policy frameworks, the financing of environmental expenditures, greening the economy, air protection, water and waste management and biodiversity conservation. It also examines the efforts of Belarus to integrate environmental considerations in its policies in the energy, transport, forestry, tourism, human settlements and health sectors, and highlights the progress achieved in developing environmental education and education for sustainable development. The review further provides a substantive and policy analysis of the country's climate change adaptation and mitigation measures and its participation in international mechanisms.

The successes of Belarus in the achievement of most of the Millennium Development Goals are highlighted, as well as some remaining challenges. Governments are now discussing the implementation of the 2030 Agenda for Sustainable Development, as well as the follow-up and review of progress in the achievement of its Sustainable Development Goals. This third review, together with its recommendations, should assist all stakeholders in developing an aspirational national agenda for achieving these Goals.

The third EPR of Belarus began in January 2015 with a preparatory mission to agree on the structure of the report and the schedule for its completion. A team of international experts took part in the review mission from 17 to 25 March 2015. The draft report was submitted to Belarus for comment and to the ECE Expert Group on Environmental Performance Reviews for consideration in September 2015. During its meeting on 12 and 13 October 2015, the Expert Group discussed the draft report with expert representatives of the Government of Belarus, focusing on the conclusions and recommendations made by the international experts. The recommendations, with suggested amendments from the Expert Group, were then submitted for peer review to the Committee on Environmental Policy at its twenty-first session on 29 October 2015. A high-level delegation from Belarus participated in the peer review and the Committee adopted the recommendations in this report.

The Committee and the ECE secretariat are grateful to the Government of Belarus and its experts who worked with the international experts and contributed their knowledge and assistance. ECE would also like to express its appreciation to the German Federal Ministry for Environment, Nature Conservation, Building and Nuclear Safety and the German Federal Environment Agency for their support by providing funds through the Advisory Assistance Programme, and to Norway and Switzerland for their financial contribution. Sincere thanks also go to France and the United Nations Environment Programme for having provided their experts, and to the United Nations Development Programme for their support of this review.

ECE also takes the opportunity to thank Austria and the Netherlands for their general financial support to the EPR Programme and expresses its deep appreciation to Georgia, Estonia, Germany, Hungary, Sweden and Switzerland for having provided their experts for the ECE Expert Group on Environmental Performance Reviews, which undertook the expert review of this report.

Executive summary

The second Environmental Performance Review (EPR) of Belarus was carried out in 2005. This third review assesses the progress made by Belarus in managing its environment since the second EPR and in addressing new environmental challenges.

Environmental conditions and pressures

The economic system is characterized by central government planning and control of most of the domestic economic activity. Price controls exist for socially important goods and services. The economy is dominated by large, vertically integrated state owned enterprises, which currently account for about 75 to 80 per cent of the gross domestic product (GDP) output and provide a large share of the employment.

On average, GDP grew 5.6 per cent annually from 2005 to 2013. However, GDP growth was uneven over the review period. Until 2009, Belarus' economy had a strong 9.6 per cent annual average GDP growth. Since 2009, the annual average growth dropped to 3.2 per cent.

Sulphur dioxide (SO₂) emissions contracted over the review period, from 75,000 tons in 2005 to 51,000 tons in 2014 – a decrease of 32.0 per cent. The amount of SO₂ per capita in 2013 was 5.2 kg, which is less than half of the European Union (EU)'s 2010 average of 11.9 kg. Of the total SO₂ emissions in 2013, 7 per cent came from energy production and 88 per cent from industry.

Between 2005 and 2013 there was practically no change in the level of nitrogen oxide (NO_x) emissions. The three biggest sources of NO_x emissions in 2013 were road transport (14 per cent of the total), industry (42 per cent) and energy (38 per cent).

Ammonia (NH₃) emissions increased by 17.6 per cent, from 136,000 tons in 2005 to 160,000 tons in 2013. The agricultural sector was the source of 89 per cent of the NH₃ emissions in 2012.

All heavy metal emissions increased significantly from 2005 to 2012. Mercury emissions increased the most – by 50 per cent, whereas cadmium emissions increased by 38 per cent and lead emissions by 36 per cent.

From 2005 to 2013, the total greenhouse gas (GHG) emissions measured in CO₂ equivalent increased by 10.72 per cent, from 84,173.71 Gg to 93,200 Gg. The energy sector, which is the largest emitter, producing about 62.45 per cent of all GHGs, has not been able to reduce its emissions since 2005 – in 2013, they amounted to 58,200 Gg. However, the most significant percentage increase took place in the waste sector.

The total amount of abstracted water, which was 1,705.8 million m³ in 2005, diminished by 191.6 million m³ to 1,514.2 million m³ in 2014. This 11.48 per cent drop in water abstraction was mainly caused by the 36.90 per cent decrease in the amount of water provided for drinking and domestic purposes. The per capita water use dropped from 210 litres per day in 2005 to 143 litres per day in 2010 and 137 litres per day in 2014.

The volume of total wastewater discharges diminished by 18.07 per cent between 2005 and 2014. In 2014, the total volume of discharged wastewater was 1,011 million m³, of which 931 million m³ went to surface water bodies while 80 million m³ was disposed to the irrigated lands, infiltration fields and storage facilities. Of the wastewater discharged into surface waters, one third (31.47 per cent) required no treatment, about two thirds (68.21 per cent) was treated in compliance with appropriate regulations and norms, and a very small portion (0.32 per cent) was not adequately treated to the standards.

Surface water quality shows a steady, improving trend. In 2003, the Water Pollution Index showed that 41 per cent of surface waters were relatively clean, 58.4 per cent moderately polluted and 0.6 per cent extremely polluted. In 2013, the combined percentage of clean and relatively clean water had increased to 90.7 per cent, while the amount of moderately polluted water had decreased to 9.3 per cent and no surface water was classified as polluted or extremely polluted.

The forest area growth rate between 2006 and 2014 was 2.87 per cent. As of 1 January 2015, forest land covered 8.653 million ha, corresponding to 41.68 per cent of the country's territory.

The generation of municipal solid waste (MSW) increased by 38.23 per cent, from 2.8 million tons in 2005 to 3.9 million tons in 2013. The lack of accurate data and the change of calculation methods from cubic metres to tons might exaggerate the growth rate. Nonetheless, during the same period, per capita MSW grew even more, by 41.24 per cent, reaching 411 kg/capita in 2013.

Industrial waste generation increased by more than 51 per cent between 2005 and 2014. The generated amounts in 2005 and 2014 were 38,472 and 52,529 million tons, respectively.

The management of radioactive pollution from the 1986 Chernobyl NPP accident remains a specific issue. As of January 2012, as a result of natural radioactive decay, the area of contaminated lands with a Caesium-137 level of more than 1 Ci/km² (37 kBq/m²) had decreased to 31,100 km² or 14.5 per cent of the land area of the country (from 47,600 km² – 23 per cent – of the country's land area in 1986).

Legal, policy and institutional framework

Progress has been achieved in the integration of environmental requirements into sectoral legislation and strategic documents. However the level of such integration differs across sectors and there is scope for stronger integration of environmental requirements in sectoral legislation and planning.

The country has a developed system of strategic planning, going beyond environmental issues and covering all planning areas, with the National Strategy for Sustainable Socioeconomic Development being at the core of the system. In the environmental field, strategic planning has been weakened with the discontinuation of national environmental action plans and the approval in 2011 of the Environmental Protection Strategy for the period until 2025 at the level of the Board of the Ministry of Natural Resources and Environmental Protection.

Green economy principles have been integrated in the National Strategy for Sustainable Socioeconomic Development for the period until 2030. Use of economic policies and instruments, introduction of green technologies, education for green economy, and science and innovation are among key measures. Practical steps are taken through international projects to raise capacity for implementation of a green economy approach.

Strategic Environmental Assessment (SEA) is not applied. At the same time, the prerequisites for introduction of SEA exist and SEA principles and procedures could be effectively integrated into the existing planning process. The country is not a Party to the Protocol on Strategic Environmental Assessment to the Espoo Convention.

The Millennium Development Goals (MDGs) have a prominent place on Belarus's agenda. MDG implementation reports have been prepared in 2005 and 2010, and an MDG statistical book was released in 2012. Belarus has been actively involved in the discussions on the post-2015 sustainable development goals (SDGs).

Although some reorganizations have taken place in the structure of the Ministry of Natural Resources and Environmental Protection, this body operated on a relatively stable basis in recent decades. Such stability of the national environmental authority, in particular its functioning at the ministerial level, resulted in consistent development and implementation of environmental policies, as well as facilitated the integration of environmental considerations into sectoral policies and legislation.

Since 2005, the Government has made progress in improving the legal framework for public participation in environmental decision-making. Public participation in the development of strategic documents and legislation relating to the environment, however, is still not provided for in the legislation.

The number of legal cases concerning citizens' environmental rights has increased. However, there are still difficulties with access to justice on environmental matters. Such difficulties include the limited standing of environmental non-governmental organizations (NGOs); high costs of litigation; poor awareness and capacity

of judges and prosecutors to handle environmental cases with participation of citizens and environmental NGOs; and other issues.

Although the requirements for registration of environmental public associations have been eased, the difficulties in their registration remain. The requirement for a public association to have an official seat in non-residential premises, the high number of founders needed and the requirements for territorial representation of founders continue to be obstacles for registration.

The procedures for approval and registration of international funding represent another difficulty for the operation of environmental NGOs, even though these procedures have been relaxed in the past years. There are cases when, due to delays or the impossibility of receiving governmental approval, NGOs had to return funding to the donor.

The situation regarding access to and availability of environmental information and data has improved. Still a large amount of environmental information is not available on the websites of relevant public authorities. Due to the definition of types of environmental information in the Law on Environmental Protection, some environmental information remains outside the scope of access-to-information provisions of this Law.

The National Environmental Monitoring System (NEMS) ensures the availability of environmental information to all governmental levels. Since 2014, the National Statistical Committee publishes on its webpage environmental indicators according to the Shared Environmental Information System (SEIS) principles. Despite the progress achieved, some issues remain if the country is to be able to fully comply with the principles of SEIS, namely, data flow and protocols for data flow between NEMS' environmental data systems are lacking.

Regulatory and compliance assurance mechanisms

The compliance assurance system has been strengthened over the last decade. Reforms have been initiated both inside the environmental sector as concerns integrated permitting and outside it as concerns inspection. Still, there is lack of capacity at the lowest level of governance – in rayon and town inspection units.

The mandate for carrying out state ecological expertise (SEE) was concentrated at the central and oblast levels in order to increase the quality of assessment. The scope of SEE as concerns industrial and infrastructure projects was harmonized with the scope of environmental impact assessment (EIA).

There have been improvements in the legal framework for public participation in EIA. However, in practice, major decisions are still taken without due consideration of public opinion. Post-EIA access to relevant information remains limited. There have been difficulties in the application of EIA in the transboundary context.

The introduction of integrated environmental permitting has been an achievement. Nevertheless, its scope does not follow international benchmarks, and resources are not used efficiently leaving potentially dangerous installations not covered by integrated permitting. Public participation is not well embedded within the integrated permitting procedure.

Discovery of and response to non-compliance have improved, from a procedural perspective. Self-monitoring was further improved. Strategic goals for compliance assurance, however, have not been established. There are no performance management indicators for the compliance assurance system. Information on environmental inspection, even in aggregated form, is not available to the public.

Building the legal and institutional framework for the introduction of a national Pollutant Release and Transfer Register (PRTR) is underway. The list of facilities for inclusion in a PRTR was determined. Belarus is not a Party to the 2003 Protocol on Pollutant Release and Transfer Registers to the Aarhus Convention.

Economic instruments, environmental expenditure and investments for greening the economy

A number of reforms of the system of environmental taxes that are imposed on polluting activities were undertaken. It has also introduced new product charges for dealing with products that are having

environmentally harmful effects at the post-consumption stage. In contrast, the changes made to the system of environmental taxes on emissions of air pollutants, discharge of industrial wastewater and the disposal or storage of industrial waste, have been piecemeal and not directed by a coherent concept designed to strengthen their impact on the behaviour of polluters.

The provision of communal utility services is, with a few minor exceptions, fully operated by state-owned companies. The role of the private sector is marginal and limited mainly to a single public-private partnership organizing the waste management in the City of Minsk. This points to a potentially large role for private sector participation as a mechanism for improving the provision of communal utility services.

The tariffs (prices) for the provision of communal utility services have been marked by the distinction between the official full cost recovery tariffs and the much lower tariffs that residential customers actually have to pay. The counterpart to this has been a combination of cross-subsidies from other customer groups (notably industry) that were significantly above the cost recovery level and/or considerable government subsidies to the utility companies. The Government has started to introduce tariff reforms that aim at gradually raising residential tariffs to cost recovery levels. The challenge is to ensure adequate access of lower income groups to communal utility services.

In the government sector, nature protection funds played a major role in the financing of environmental expenditure, but they were abolished in 2011. The large bulk of government budget expenditure is now financed from general revenue, with the exception of some budget organizations, mainly in the forest sector, that can also employ own revenue sources. Overall general government environmental expenditure has, however, been on a marked declining trend, both in real terms (i.e. when adjusted for inflation) and relative to GDP, in recent years.

Air protection

Air quality standards are close to EU standards. Air quality standards for specially protected natural areas were also developed and are, in some cases, more stringent than the EU standards.

Continuous efforts have been taken to gradually reduce consumption and phase out production of ozone depleting substances (ODS) such as hydrochlorofluorocarbons (HCFC) by 2020, to improve import and export licensing systems of ODS and to ban import and export of substances listed in the Montreal Protocol by the non-Parties. By 2010, the total HCFC consumption in Belarus was required to decrease to 12.7 metric tons (MT) of Ozone Depleting Potential (ODP). In 2010, 2011 and 2012 Belarus was in compliance with a consumption of 10, 9 and 8 MT ODP, respectively.

The country is not yet a Party to the amended Protocol to Abate Acidification, Eutrophication and Ground-level Ozone to the Convention on Long-range Transboundary Air Pollution. The Protocol provides emission limit values (ELVs) for stationary and mobile sources and requires implementation of best available techniques, also for ammonia (NH₃) control measures in the agricultural sector. Belarus is only partially complying with the ELVs, mostly for NMVOC and NH₃ emissions. Current SO₂ emissions meet the target for the Protocol by 2020, for which Belarus has announced its voluntary commitment. NH₃ emissions have increased in the last 10 years due to the growth of livestock husbandry.

Belarus is considering accession to the amended protocols on Heavy Metals and on POPs to the Convention on Long-range Transboundary Air Pollution. However some issues remain, e.g. achievement of the ELVs for lead in the glass industry and for dust in the cement industry.

There are very few people who use bicycles, although Minsk City is not very hilly and distances are not too great. The construction of safe paths for bicycles, and other promotion measures, could encourage more people to use this green and healthy form of transport.

Water management

The overall water supply and wastewater service coverage is high, and has shown steady growth over the last several years. In 2014, the coverage of the urban population served by a centralized water supply system

reached almost 98 per cent, while centralized sewerage coverage in urban areas was 92 per cent. In rural areas, 29 per cent of the population lack access to centralized water supply systems and 62 per cent are not connected to centralized sewerage. Services are more developed in larger settlements, the so-called “agro-towns”, while in scattered villages and farms the population relies mostly on public or private shallow wells and individual sanitation facilities.

Pollution load from diffuse sources in residential and industrial areas and cultivated land is a major contributor to contamination of water bodies and shallow groundwater. Some measures have been taken to reduce diffuse pollution but so far not much progress has been made. Polluted runoff from cultivated land remains the main source of diffuse pollution of water bodies and groundwater with nitrogen and phosphorus. The methodology for assessing diffuse pollution has not been updated since 1999.

There is no regular monitoring of contaminated sediments, which are usually accumulated on the bottom of the river sections downstream of large cities and industrial complexes.

The 2014 Water Code places the river basin management approach at the core of water management policy. It provides for the preparation of river basin management plans (RBMPs) for the parts of the Dnieper, Pripyat, Neman, Western Dvina and Western Bug river basins located within the territory of Belarus. The draft of the Upper Dnieper RBMP has been prepared. The basin councils to be set up in compliance with the Code will provide an institutional framework for management of river basins with the participation of central, oblast and local authorities, water users and the public.

The State Water Cadastre (SWC) is an efficient and indispensable tool for managing the country's water resources. In 2015, its functions and scope were updated and expanded. Information about the ecological status of water bodies, inland waterways and hydrotechnical structures will be covered in SWC. However, with its current capacity, such as outdated information and communication technologies and limited human resources, SWC cannot face this challenge.

Waste management

MSW collection services are available to all citizens and organizations. While in 2005 only about 35 per cent of the urban population received regular waste collection services, 99 per cent of the urban population was serviced in 2014.

Separate collection of MSW, providing containers for dry (paper, plastics, glass) and for wet (biodegradable) waste, is available in the capital, oblast and rayon centres. The dry fraction is delivered for sorting and the wet fraction is sent for disposal. The number of containers for separate collection is not sufficient. The country has sufficient capacity to process recyclables separated from municipal waste, but it is reaching its capacity.

MSW is disposed to mini-dumpsites or to rayon dumpsites. Mini-dumpsites are used in remote countryside areas, but their number is decreasing: while in 2007 about 4,500 mini-dumpsites were registered, their number decreased to 2,351 in 2014. The rayon dumpsites, currently numbering to 170, are usually equipped with basic machinery, a weighbridge and bottom sealing. The transformation of disposal practice, from small disposal sites to oblast-controlled landfills, is a challenge.

The current legislation and practice of waste management assumes that the waste collector and operator of a disposal site is the same legal entity. One of the preconditions for successful modernization of waste management is the division of these two functions into different entities, which would create incentives to build modern landfills, install weighbridges, introduce gate fees and improve data on municipal waste.

Management of industrial waste is well organized at the level of generation and recovery, but disposal practice is behind international practice, especially for sites storing waste generated in large volumes in the past. The impact of these sites on the environment is known in the most outstanding cases, but methodology for comparable evaluation of risks is not in place. Rehabilitation of large industrial waste sites may be very costly.

The 2014 estimate shows that 10,632 tons of obsolete pesticides were identified in the country. The process started to transfer pesticides from underground sites to above-ground storage facilities and to the special facility

for storage, treatment and disposal of hazardous waste, including obsolete pesticide, in Chechersk. This is leading to the reduction of the volume of pesticides stored in unsafe conditions and the number of waste storage facilities. All identified storage facilities for obsolete pesticides are regularly monitored.

A roadmap towards ratification of the Minamata Convention on Mercury was drafted. No inventory of mercury and products containing mercury was carried out in the health and energy sectors.

Biodiversity and protected areas

The share of specially protected natural areas in total land area of the country increased from 7.7 per cent in 2009 to 8.7 per cent in 2015. There are four national parks, one nature reserve, 96 preserves of the national importance and 267 preserves of local significance. An integrated monitoring of ecosystems in specially protected natural areas is in place.

Since 2005, the country designated nine new Ramsar sites. National management plans were updated for three bird species (great spotted eagle, great snipe, and aquatic warbler) and developed for three new species (bittern, smew, and roller). Starting from 2015, the ban on spring hunting for waterfowl was introduced in 32 wetland areas.

Since 2009, the country participated in the programme to create the Emerald Network. In 2014, the nomination of 16 Belarusian specially protected natural areas for inclusion in the Emerald Network was approved. In 2015, Belarus submitted 64 additional territories for inclusion in the Emerald Network.

A national ecological network is not yet established. The draft scheme of the national ecological network was developed and the legal framework is in place. However some areas that are to become part of the national ecological network are not currently under the protected area system and do not yet have a special status of protection.

The draining of wetlands is among major anthropogenic factors affecting both the hydrology of water resources and biodiversity. As of 2014, the area of 2.9 million ha was drained for agricultural purposes.

One of the main pressures on biodiversity is climate change. A decrease in the number of areas for boreal species of wild plants has been registered in the northern and eastern regions of the country, while some new species typical of steppe and forest-stepped zones have appeared. The effects also include a decrease in population numbers of some species of wild plants and animals of inundated, riverside and wetland ecosystems.

In 2011, the country launched a system of monitoring alien and invasive plant species. As of early 2015, more than 70 permanent observation points have been set up; in addition, a specialized database on the location of the most harmful invasive species is maintained. Action plans to restrict the spreading of invasive Canadian goldenrod, wild cucumber (*Echinocystis lobate*), black locust (*Robinia pseudoacacia*) and American maple (*Acer negundo*) were approved.

Belarus became a Party to several biodiversity-related international agreements. In 2013, it acceded, with reservations, to the 1979 Bern Convention on the Conservation of European Wildlife and Natural Habitats. In 2014, it acceded to the 2010 Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization. In 2015, the country took a decision to accede to the 1995 Agreement on the Conservation of African-Eurasian Migratory Waterbirds (as of 29 October 2015, the instrument of accession is not yet deposited).

Energy and environment

Energy pricing remains inadequate to encourage efficient use of energy. Market mechanisms for setting energy tariffs are still absent. Electricity remains heavily subsidized for households. There is cross-subsidization between consumer groups (mainly between households and industry). Motivating households to save energy is an important issue to be addressed.

The first energy service company (ESCO) started operation in early 2005. However, there are barriers to ESCOs operations, in particular, the legislative basis for the development and operation of an ESCO is not sufficiently developed.

The 2,400 MW nuclear power plant (NPP) is under construction in Ostrovets, Grodno Oblast. The first reactor of 1,200 MW is planned to be in operation in 2019, and the second, of the same capacity, in late 2020. The NPP is expected to reduce gas imports by 5 billion m³ annually. The construction and operation of any NPP can potentially have environmental impacts. It is therefore important to ensure compliance with the international standards of NPP construction and operation in order to reduce environmental and health risks.

The share of renewable energy in total energy consumption in the period 2005–2012 increased, with average annual growth of around 4 per cent. However, currently, only a small proportion of energy comes from renewable resources, as the legislation in this area has been developed only recently and the institutional and technical capacity to develop renewable energy sources is still to be built.

There is no legislation that supports further development of the national energy system according to market rules. No law on energy covers all aspects of the energy sector, including production, transport, distribution and consumption, to transform the sector into a competitive market. Government plans to reform the electricity sector by creating a wholesale market have been delayed.

Transport and environment

The impact of the transport sector on air pollution has stabilized and, in recent years, even reversed. Compared with 2009, emissions of air pollutants from transport in 2013 have declined by some 20 per cent, from 1.14 million tons to 0.93 million tons. As a percentage, their share in total air polluting emissions has declined, from 72 per cent in 2005 to 68 per cent in 2014. These developments are significant because they are occurring against the backdrop of a sharp increase in the vehicle fleet.

The country has invested in electrifying public transport in major cities. At the same time, greening urban transport in this way has not yet resulted in equivalent increases in passenger turnover, with the notable exception of metro passengers in Minsk. There has been a steep rise in the use of metro in Minsk – by more than 31.1 per cent, from around 250 million passengers in 2009 to 328 million passengers in 2013.

The quality of fuel remarkably improved. As of January 2015, Euro 5 standard for diesel is applied (sulphur 10 ppm), a quality level to be attained for petrol as of 2016. Currently, the Euro 4 standard for petrol is used (sulphur 50 ppm).

The urban traffic performance of Minsk is improving through the application of intelligent transportation system (ITS) solutions. However, the application of ITS solutions to improve the traffic situation and mitigate the negative environmental, health, economic and social impacts of motorized transport is not widely practised.

The country participates in several transport agreements which are important from an environmental point of view. However Belarus does not yet participate in the 1993 Protocol to the European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR) and the 2000 European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (ADN).

Forestry and environment

Over recent decades, forest rehabilitation and restoration have been very successful in quantitative terms. But these practices created uneven age structure and species composition in re-established forests. As a result, Belarusian forests are relatively young and without the full genetic stock of old growth forest systems. Young, low diversity forests tend to be less resistant to pests and diseases as well as climate change.

The preparation of the second Forestry Development Strategic Plan (2015–2030) and the ongoing revision of the Forest Code were characterized by a wider consultation process than in the past. Still, the formulation of these key documents for the forestry sector mainly involved institutional actors, and professional forestry and academic communities, and lacked active participation of the private sector, local communities and civil society

organisations. Also, the consideration of cross-sectoral aspects such as biodiversity conservation and climate change was insufficient.

At present, the economic potential of forests is not fully exploited, and there is large scope for development in terms of increased harvesting on a sustainable basis and processing for export as well as for domestic consumption. Private sector engagement in timber and non-timber forest products harvesting and processing and other entrepreneurial activities related to reforestation and nurseries is still marginal.

The actual timber regulation system results in unequal access to forest resources and advantages forest enterprises over private sector wood processing companies. Such a form of subsidization may discourage the efficient utilization of forest resources, reduce the financial resources for forest management and cause the misallocation of investment funds.

Despite efforts in recent years, the enhancement of the forest road network remains a priority. Low forest road density can cause an overexploitation of forests close to existing roads, with associated negative environmental impacts. Current efforts to enhance the forest road networks are not based on multifunctional construction principles and do not give due consideration to soil erosion, habitat loss and natural landscape impacts.

Tourism and environment

Although the total number of collective accommodation facilities in Belarus increased by more than 60 per cent in the period 2005–2014, the number of organized Belarusian tourists travelling abroad still outstrips the number of visitors to Belarus. In 2014, five Belarusian citizens travelled abroad (six in 2005) for each visit of a foreign tourist to Belarus.

Agri-ecotourism has been actively developing in the country. The overall growth of agri-ecotourism entities has significantly escalated: from 34 entities in 2006 to 2,037 in 2014. The number of tourists who used agri-ecotourism services in 2014 was 318,842, 17.3 per cent more than in 2013. Residents of Belarus made up 86.9 per cent of total agri-ecotourists.

Since 2005, Belarus has become a destination for hunting enthusiasts from abroad. Hunting companies typically offer three days of hunting for around €1,000. Within the country, not all citizens are willing to pay these kinds of prices. Poaching remains a widespread activity, especially in rural areas.

Information is not available on the pressures that tourism puts on the environment. Neither data nor estimates are available of the pressures that tourism puts on water resources and air. Data on municipal waste generated by the tourism sector are hidden within the total data on municipal waste generated in the country.

Environmental education and education for sustainable development

Progress has been achieved in efforts to integrate environmental education (EE) and education for sustainable development (ESD) elements in formal, non-formal and informal education contexts. Belarus is also advancing in putting in place legal, policy and institutional frameworks that support EE and ESD. Research and methodological work on ESD is advanced in universities and education institutions, and educators are actively involved in discussions on improving teaching methodology. However, no evaluation of progress in development of EE and ESD, and no assessment of their effectiveness, has been undertaken.

Although an environmental component largely prevails, there is a noticeable move observed in shifting from environmental to sustainable development topics in the education system. This shift may be further strengthened to cover a broader spectrum of sustainable development topics (e.g., democracy and governance; peace and human security; sustainable consumption and production; and sustainable urbanization).

Current in-service training programmes on environmental and sustainable development issues are targeted at civil servants. There are no such training programmes tailored to private sector professionals.

The institutional framework that supports EE and ESD at the national level is weak. The Coordination Centre “Education for Sustainable Development” is not financed by the Government. The interministerial Coordination Council on ESD at the Ministry of Education, established in 2006, has met only two times.

Human settlements and environment

There is a strong tradition of territorial planning in the country and a comprehensive system of territorial plans for the national, oblast and local levels. The existing territorial planning approaches, however, do not sufficiently reflect modern, internationally accepted principles of urban planning as an integrative and strategic decision-making process.

The existing practice on energy saving in the housing sector has mainly focused on improving thermal resistance of walls and other structures. Extensive research conducted in the country over the last decade demonstrates the possibility of further reduction in thermal energy consumption through more comprehensive solutions. However, the practical implementation of such measures is constrained by a shortage of the technical norms and standards that would support optimization of integrated energy efficiency of dwellings.

The provision of green spaces in settlements is regulated by specific technical regulatory legal acts, yet, in practice, the availability of high quality green spaces differs significantly among the settlements. There are further possibilities for enhancing green spaces as part of settlements’ development programmes, including improving the existing parks and underused/abandoned land, converting the curtilages of residential buildings into recreational green spaces, and road planting.

In the past decade, the rural settlement system was optimized through establishment of new rural centres – 1,500 agro-towns with improved social services and public amenities. At the same time, many other rural settlements have not yet managed to achieve positive changes. Some rural settlements have recently been engaged in the development of their integrated local sustainability plans.

Health and environment

Monitoring programmes exist for several environmental health factors such as air quality, food, drinking water and recreational water quality, as well as for radiation. This monitoring is performed by different ministries and all data collected are published in statistical yearbooks. Statistical analysis of the results are not performed to extract significant tendencies and cross-links between environmental and health results.

Various ministries take the environment and health into account in their areas of competence. However, there is no agency or department specifically dedicated to the coordination of health and the environment and to strategy development in this field. There is no national environmental health action plan and no strategic targets on environment and health are defined.

Indoor air quality is controlled by state sanitary supervision authorities before opening of a new school and after repair works in existing schools. However no data are available on indoor air pollution in houses, while several factors, such as asbestos, radon, carbon monoxide emission and mould, can be presumed to be present in buildings and have an impact on public health.

Two enterprises produce asbestos-containing materials but no data on asbestos concentrations in the environment of the surrounding areas are available. Asbestos is still used in building construction and no data on asbestos in houses are available. Specific diseases related to asbestos are not registered. A comprehensive approach to the reduction of the use of asbestos in the country is lacking.

With regard to construction of the Belarusian NPP, there is an understanding of the necessity to enhance radiation monitoring and to strengthen a new radiation monitoring programme dedicated to the NPP. The authorities have to bear the associated costs of the installation such as radiation monitoring, development of safety programmes and emergency action plans, and ensuring the availability of medication (iodine pills).

Major industries include mechanical and chemical manufacturing; they use hazardous chemicals. There is insufficient attention to the protection from exposure to hazardous chemicals of workers and of the population

living in the vicinity of industrial facilities. Information on the population's exposure to hazardous chemicals in industrial areas is not available. Biomonitoring is performed for workers but only occasionally for the population living in industrial areas.

CONCLUSIONS AND RECOMMENDATIONS

Chapter 1: Legal, policy and institutional framework

Belarus has a developed system of strategic planning, going beyond environmental issues and covering all planning areas, with the National Strategy for Sustainable Socioeconomic Development being at the core of the system. Clear regulation exists with regard to types, reporting and financing of state, regional and sectoral programmes but is missing with regard to elaboration and adoption of concepts and strategies. In practice, strategies are approved at different levels (Council of Ministers, Deputy Prime Minister, Ministry's Board, etc.).

Implementation of strategies takes place through development and implementation of programmes; however, not every strategy is necessarily followed by a programme and therefore not every issue raised in a strategy finds its way into a programme. In general, implementation of and reporting on strategies are organized in a more systemic way for strategies approved at a higher level. In the environmental field, strategic planning has been weakened with the discontinuation of NEAPs and the approval of the 2011 Environmental Protection Strategy until 2025 at the Ministry's Board level.

Recommendation 1.1:

The Government should further improve the system of strategic planning on environment and sustainable development by:

- (a) *Adopting clear rules on the development, adoption and implementation of concepts and strategies, as well as reporting on their implementation;*
- (b) *Strengthening strategic planning in the environmental field by raising the level of the key strategic documents on environmental protection, in addition to covering environmental protection in the programmes of socioeconomic development.*

Strategic Environmental Assessment (SEA) is not applied in Belarus. At the same time, the prerequisites for introduction of SEA exist and SEA principles and procedures could be effectively integrated into the existing planning process. The country is not a Party to the Protocol on Strategic Environmental Assessment to the Espoo Convention.

Recommendation 1.2:

The Ministry of Natural Resources and Environmental Protection should:

- (a) *Introduce strategic environmental assessment into national legislation;*
- (b) *Initiate accession to the Protocol on Strategic Environmental Assessment to the Convention on Environmental Impact Assessment in a Transboundary Context.*

The MDGs have a prominent place on Belarus's agenda. MDG implementation reports have been prepared in 2005 and 2010, and an MDG statistical book was released in 2012. Belarus was actively involved in the discussions on the post-2015 sustainable development goals (SDGs).

Recommendation 1.3:

The Government should launch an inclusive process, with the participation of all relevant stakeholders, to identify lessons learned from the implementation of the Millennium Development Goals and set up an ambitious national agenda on the basis of the globally agreed Sustainable Development Goals.

Although some reorganizations have taken place in the structure of the Ministry of Natural Resources and Environmental Protection, this body operated on a relatively stable basis in recent decades. Such stability of the national environmental authority, in particular its functioning at the ministerial level and its operation on an equal footing with sectoral ministries, resulted in consistent and well-balanced development and implementation of environmental policies and legislation, as well as facilitated the integration of environmental considerations into sectoral policies and legislation.

Recommendation 1.4:

The Government should preserve the national environmental authority at the ministerial level to ensure its operation on an equal footing with sectoral ministries.

Although the requirements for registration of environmental public associations have been eased, the difficulties in their registration remain. The procedures for approval and registration of international funding represent another difficulty for the operation of environmental NGOs, despite that these procedures have been softened in the past years.

Public participation in the development of strategic documents and legislation relating to the environment is still not provided for in the legislation. The draft amendments to the Law on Environmental Protection and several other laws, currently in the parliamentary procedure, are expected to address this issue. It is important that, following the adoption of the amendments, respective procedures for public participation be adopted.

Although the number of cases on citizens' environmental rights has increased, there are still difficulties with access to justice on environmental matters. These are highlighted by the two studies conducted under the auspices of the Aarhus Convention's Task Force on Access to Justice in 2012 and 2014, and refer both to the need to make the legislation consistent with the Aarhus Convention and the need to raise the awareness and capacity of judges and prosecutors to handle environmental cases initiated by citizens and environmental public associations.

Recommendation 1.5:

In line with its obligations under the Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (Aarhus Convention), the Government should:

- (a) Further improve the conditions related to the establishment and operation of environmental non-governmental organizations;*
- (b) Introduce in the legislation procedures for public participation in the development of strategic documents (at least plans and programmes) and of legislation relating to the environment;*
- (c) Bring the legislation into line with the Convention regarding access to justice;*
- (d) As part of training programmes for judges and prosecutors, raise their awareness and capacity to deal with cases initiated by citizens and public associations on the basis of environmental legislation and the Convention.*

The Public Coordination Environmental Council of the Ministry of Natural Resources and Environmental Protection has provided the public and the Ministry with an important platform for dialogue but there is room for increased efficiency, including by amending the 2007 Resolution the Ministry of Natural Resources and Environmental Protection No. 2, in order to stipulate mechanisms for development of agenda and offer membership to organizations rather than individuals. The revitalization of public coordination environmental councils at oblast level represents an opportunity to improve the functioning of these bodies.

Recommendation 1.6:

The Ministry of Natural Resources and Environmental Protection should increase the efficiency of public coordination environmental councils at various levels.

Overall, the situation regarding access to and availability of environmental information and data has improved. Still, a greater amount of environmental information (draft and adopted legal and strategic documents, reports on implementation of strategic documents, information on issued permits, decisions of SEE, all cadastres and registers, etc.) could be made available on the websites of relevant public authorities. Relevant documents are often not displayed directly on public authorities' websites but provided through links to password-protected databases. A consolidated register of environmental information is not yet in place.

Due to the definition of types of environmental information in the Law on Environmental Protection, some environmental information remains outside the scope of access-to-information provisions of this Law. There are a number of denials of requests for access to environmental information; however, the public interest test which would prevent excessive use of the limitations to access to information is not applied.

Recommendation 1.7:

The Government should:

- (a) *Improve the online accessibility of environmental information and data;*
- (b) *Establish a “one stop shop” portal for environmental information in line with Shared Environmental Information System (SEIS) principles and using geographic information system technologies;*
- (c) *Align the scope of environmental information with the requirements of the Aarhus Convention and ensure access to all environmental information in accordance with the Convention’s provisions.*

Since 1993, the National Environmental Monitoring System (NEMS) ensures the availability of environmental information to all governmental levels. Information and analysis centres (IACs) keep the environmental monitoring data for their respective type of monitoring while the Main Information and Analysis Centre (MIAC) keeps all environmental monitoring data.

Since 2010, Belarus uses a system of core environmental indicators. Since 2014, the National Statistical Committee publishes on its webpage environmental indicators according to the Shared Environmental Information System (SEIS) principles. Despite the progress achieved, some issues remain if Belarus is to be able to fully comply with the principles of SEIS, namely, the lack of data flow and of protocols for data flow between NEMS’ environmental data systems.

Since 2005, the Ministry of Natural Resources and Environmental Protection, Ministry of Health and Ministry of Emergency Situations exchange, on a regular basis, environmental information between the NEMS, the system of socio-hygienic monitoring and the system of monitoring and forecasting of natural and man-made disasters. The exchange of information also functions at local level.

Recommendation 1.8:

The Ministry of Natural Resources and Environmental Protection should:

- (a) *Continue working towards the establishment of a shared environmental information system that provides relevant, comprehensive, accurate and publicly accessible data and information on the state of the environment, by:*
 - (i) *Strengthening the capacities of the Information and Analysis Centres and the Main Information and Analysis Centre with the means for enhancing environmental data systems, applying geographic information system technologies and developing forecasts of the environmental situation for decision makers;*
 - (ii) *Establishing protocols for data flows, including workflow definitions (precisely defining who reports what, when and to whom,) and protocols on higher levels of information subsystems to avoid segregation of the whole system;*
- (b) *Extend, in cooperation with the National Statistical Committee, the Ministry of Health, the Ministry of Emergency Situations and other relevant public authorities, the application of SEIS principles to environmental information and data pertaining to the system of socio-hygienic monitoring and the system of monitoring and forecasting of natural and man-made disasters.*

Chapter 2: Regulatory and compliance assurance mechanisms

Belarus strengthened its compliance assurance system over the last decade. Reforms have been initiated both from inside the environmental sector, for example, as concerns integrated permitting, and outside it, for example, as concerns inspection. Although the balance sheet of changes is positive, the changes require further fine-tuning with good international practice.

In order to improve the institutional framework for compliance assurance, the specialized inspectorates of the Ministry of Natural Resources and Environmental Protection were dissolved and mandates were redistributed. Many compliance assurance duties were transferred to the territorial bodies of the Ministry. Through this, policymaking was separated from environmental assessments, permitting and enforcement. This structural change also helped reduce fragmentation at the central level and bring regulatory activities closer to the ground.

However, it did not address the lack of capacity at the lowest level of governance – in rayon and town inspection units. Limited human resources at the rayon level are often dispersed on multiple tasks, sometimes

not directly related to environmental enforcement. One of the possible approaches to strengthening them is to merge several rayon inspection units into an inter-rayon inspection units. However, washing out of the system the proximity of inspection units to local executive authorities and stakeholders may jeopardize the existing close interaction with local actors.

Recommendation 2.1:

The Ministry of Natural Resources and Environmental Protection should further strengthen its institutional framework for environmental compliance assurance by making rayon and town inspection units more effective through:

- (a) Focusing their work on the core tasks of compliance monitoring and non-compliance response;*
- (b) Providing training;*
- (c) Enabling to form inter-rayon inspection units of natural resources and environmental protection;*
- (d) Further promoting the in-depth specialization of each inspector, taking into account areas in which specialist knowledge is required.*

The system of project-specific assessments has seen several changes. The mandate for carrying out SEE was concentrated at the central and oblast levels in order to increase the quality of assessment. The scope of SEE as concerns industrial and infrastructure projects was harmonized with the scope of EIA, thus ensuring coherence across different stages of project review. The complexity of assessed projects, coupled with limited personnel and rarely used external expert support, impose a burden on the staff experts. SEE/EIA is not yet well aligned with integrated permitting, especially as concerns the use of BAT during the siting, design and construction stages. Despite improvements in the legal framework for public participation in EIA, in practice, major decisions are still taken without due consideration of public opinion. Post-EIA access to relevant information remains limited.

There have been difficulties in the application of EIA in the transboundary context. The country is not yet a Party to the second amendment to the Espoo Convention.

Recommendation 2.2:

The Ministry of Natural Resources and Environmental Protection should:

- (a) Further strengthen the environmental impact assessment/state ecological expertise (EIA/SEE) procedures by introducing amendments to the legislation in order to:*
 - (i) Provide more flexibility in EIA/SEE procedure in response to the increased complexity of projects by involving external experts;*
 - (ii) Systematically use the best available techniques as criteria for the selection of adequate technical measures at early stages;*
 - (iii) Publish the SEE conclusions and the EIA reports online, except for information of a commercial nature;*
 - (iv) Ensure public participation in line with the Convention on Environmental Impact Assessment in a Transboundary Context (Espoo Convention) and the Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (Aarhus Convention);*
- (b) Initiate the process for the acceptance of the second amendment to the Espoo Convention.*

Environmental permitting has been a priority area of reform since 2005. Despite concrete achievements, such as the launch of an integrated permitting system, this area has room for improvement. The scope of integrated permitting is not following international benchmarks, which distracts resources from regulation of environmentally more risky facilities while leaving uncovered potentially dangerous installations. Enterprises are not yet convinced of the advantages of integrated permitting, and capacity to implement this regime still requires the substantial investment of expert knowledge and resources.

Public participation is not well embedded within the integrated permitting procedure, for instance, the public does not have access to permit applications. The electronic application system for integrated permitting is not in place. Information on single-media permitting is not readily available. Existing databases are used mostly for storing data rather than as modern tools of data processing and analysis.

Recommendation 2.3:

The Ministry of Natural Resources and Environmental Protection should further improve the design, implementation capacity and arrangements related to environmental permitting by:

- (a) *Updating the scope for integrated permitting by revising the types of installations subject to integrated permitting and their production capacity or output thresholds;*
- (b) *Providing training to industrial operators and competent authorities concerning the way applications for integrated permits should be made and considered;*
- (c) *Speeding up the adaptation of best available techniques reference documents (BREFs) to the national context and enabling effective use of BREFs by the regulated community;*
- (d) *Improving public participation in the integrated permitting procedure by making applications for integrated permits available to the public and by providing for public hearings;*
- (e) *Speeding up the development of the electronic application system for integrated permitting and an information system for single-media permits.*

Discovery of and response to non-compliance have improved, from a procedural perspective. Decree of the President No. 510 has played a decisive role in making inspection activities clear, risk based and backed by adequate powers. It also improved coordination and coherence among various inspection bodies.

To complement discovery of non-compliance by government inspectors with activities conducted by the enterprise sector, self-monitoring was further improved. When unveiled, non-compliance is addressed rigorously and sharply.

Capacity for inspection of installations that have an integrated permit is yet to be built. The current inspections are coordinated in terms of timing but not in terms of tasks followed by different controlling bodies. Suspension of installations and permit withdrawal are rarely used as enforcement tools.

Strategic goals for compliance assurance have not been established. This results in a system of performance management that focuses on counting activities rather than obtaining compliance results. There are no performance management indicators for the compliance assurance system.

Information on environmental inspection, even in aggregated form, is not available to the public.

Recommendation 2.4:

The Ministry of Natural Resources and Environmental Protection should strengthen the specific instruments of environmental compliance monitoring and non-compliance response and improve analysis of their use and impact by:

- (a) *Building capacity on and strengthening the practice of integrated inspections and joint inspections, especially for installations that have an integrated permit;*
- (b) *Improving the balance of enforcement tools, that is, more actively using permit withdrawal and suspension of installations as instruments for non-compliance response;*
- (c) *Defining a national set of performance management indicators that would enable an “input–output–outcome” analysis of the compliance assurance system;*
- (d) *Establishing strategic goals and priorities in terms of compliance and aligning the performance management system with them;*
- (e) *Ensuring regular publication of compliance and enforcement data.*

Belarus is not a Party to the 2003 Protocol on Pollutant Release and Transfer Registers (PRTR) to the Aarhus Convention, although it is active in the promotion of the Protocol. The country is progressing towards building the necessary legal and institutional framework that would enable the introduction and adequate functioning of a national PRTR. The list of facilities for inclusion in a PRTR was determined. A draft PRTR database was developed and is fed, on a pilot basis, with data on some enterprises from Grodno Oblast.

Recommendation 2.5:

The Government should:

- (a) *Continue taking appropriate legislative, institutional and technical measures in order to establish a national pollutant release and transfer register system in accordance with the requirements of the Protocol on Pollutant Release and Transfer Registers (Protocol on PRTRs) to the Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters;*
- (b) *As soon as appropriate capacities for implementation are in place, consider accession to the Protocol on PRTRs.*

Chapter 3: Economic instruments, environmental expenditure and investments for greening the economy

Compared with the situation prevailing in 2004, Belarus has undertaken a number of reforms of the system of environmental taxes that are imposed on polluting activities. It has also introduced new product charges for dealing with products that are having environmentally harmful effects at the post-consumption stage. More recently, a separate fee for the management of end-of-life vehicles has also been introduced. These new product charges are an important step towards more effective environmental management of these special waste streams. In contrast, the changes made to the system of environmental taxes on emissions of air pollutants, discharge of industrial wastewater and the disposal or storage of industrial waste have been piecemeal and not directed by a coherent concept designed to strengthen their impact on the environmental behaviour of polluters. These taxes continue to have the primary purpose to generate revenue for the government budget. Until the end of 2011, this revenue was used to fund environmental protection activities; since then, it is part of the general revenue collected by the Treasury. The motive of generating revenue has also been the major rationale for indexing the corresponding tax rates to the high inflation in Belarus.

In principle, the economic rationale behind such taxes should be that polluters should pay the costs of damage done to the environment as well as the administrative costs incurred by the Government in regulating polluters. There is no supportive evidence concerning this matter for Belarus. The methodology for establishing these tax rates has not been published and the incentive effects of these taxes on the behaviour of polluters have not been studied. Since June 2008, the number of substances subject to tax was reduced from 242 to 53. However since January 2014, again, 242 substances of hazard classes 2–4 are subject to the tax provided that they are mentioned in the air pollution permit. Therefore, the number of pollutants subject to tax remains very large and can only be explained by the goal to ensure a steady stream of government revenue. The size of the revenue relative to the control and reporting costs for enterprises and verification costs for the Government is not known. The rationale for the recent cancellation of the tax on those air pollutants in the highest hazard class is unclear.

The tax on the generation of enterprise waste distinguishes between non-hazardous and hazardous waste; the tax base for the latter also distinguishes among different classes of toxicity. It has not been established to what extent the various tax rates reflect the environmental and other social costs of waste generation and management. These costs, in turn, are also dependent on factors – besides the type of waste – such as available disposal and storage methods and geographic location.

Moreover, in Belarus, for a given waste category, tax rates on waste storage are significantly lower than the corresponding rates on waste disposal. The upshot is that enterprises have no incentive to look out for adequate waste use and waste disposal methods and facilities for waste that is currently being stored mainly on enterprise premises. In other words, what should be a temporary feature has, in general, become the long-term “solution”. As is the case with the taxes on emissions of air pollutants and the discharge of industrial wastewater, the Government has not examined the impact of the tax levied on the generation of hazardous and other wastes. In a way, there would be no environmental justification for the waste tax, if enterprises were charged the full cost recovery tariffs for all types of waste generated.

Recommendation 3.1:

The Government should:

- (a) *Ensure that the system of environmental taxes creates effective incentives for reducing or preventing pollution by adjusting tax rates accordingly, if necessary in a gradual manner within a specified time frame;*
- (b) *Apply the air pollution tax only to the priority pollutants;*

- (c) *Reform the tax on wastewater discharges by taking into account the pollution load by main pollution indicators of wastewater in addition to the volume;*
- (d) *Develop and implement financial incentives for enterprises in favour of waste use, and remove the financial incentives in favour of waste storage and disposal.*

The provision of communal utility services is, with a few minor exceptions, fully operated by state-owned companies. The role of the private sector is marginal and limited mainly to a single PPP organizing the waste management in the City of Minsk. This points to a potentially large role for private sector participation as a mechanism for improving the provision of communal utility services. The tariffs (prices) for the provision of communal utility services have been marked by the distinction between the official full cost recovery tariffs and the much lower tariffs that residential customers actually have to pay.

The counterpart to this has been a combination of cross-subsidies from other customer groups (notably industry) that were significantly above the cost recovery level and/or considerable government subsidies to the utility companies. There is evidence that this system of subsidized residential tariffs has mainly benefited the more well-off households. In the face of distorted incentives for rational use of water and energy, adverse consequences for enterprise price competitiveness and strained fiscal resources, the Government has started to introduce tariff reforms that aim at gradually raising residential tariffs to cost recovery levels. The challenge is to combine this with the reform of social assistance programmes that ensures adequate access of lower income groups to communal utility services.

Recommendation 3.2:

The Government should:

- (a) *Continue gradually raising tariffs for communal utility services to cost recovery levels, while at the same time phasing out cross-subsidies and budget subsidies;*
- (b) *Develop adequate social support policies to ensure the affordability of communal utility services for low-income households;*
- (c) *Explore the potentially large scope for public–private partnership as a mechanism for improving the provision of utility services.*

Total economy environmental expenditure was within a range that corresponded to 1.1 to 1.3 per cent of GDP over the past decade. Most of these expenditures were made by SOEs, though neither an official estimate nor a breakdown by major economic sector has been published. No information concerning possible government budget contributions to SOEs for the financing of environmental expenditures is published. In any case, the large bulk of expenditures were accounted for by current (operating) costs.

In the government sector, the nature protection funds played a major role in the financing of environmental expenditure, but they were abolished in 2011. The large bulk of government budget expenditure is now financed from general revenue, with the exception of some budget organizations, mainly in the forest sector, that can also employ own revenue sources. Overall general government environmental expenditure has, however, been on a marked declining trend, both in real terms (i.e. when adjusted for inflation) and relative to GDP, in recent years.

Although this reflected, at least partly, the need for consolidation of overall government budgets, it also raises the issues of allocative efficiency and the cost effectiveness of public expenditure management when establishing priorities for competing claims for different social objectives. Once this has been done in a transparent and objective manner, it is up to the corresponding line ministries to ensure the effective management of allocated financial resources.

Recommendation 3.3:

The Government should:

- (a) *Ensure allocative efficiency in the sectoral distribution of scarce public resources based on the National Strategy for Sustainable Socioeconomic Development until 2030;*
- (b) *Monitor that the allocated budget funds for environmental protection are used in a cost-effective manner;*

- (c) *Recommend to the National Statistical Committee and concerned public authorities that they regularly conduct statistical analyses concerning environmental expenditures in the main economic sectors, notably industry.*

Chapter 4: Air protection

With regard to ELVs that are established in the amended Protocol to Abate Acidification, Eutrophication and Ground-level Ozone, and with regard to a few ELVs established in the amended protocols on Heavy Metals and on Persistent Organic Pollutants, Belarus is partially in line with the requirements on application of BAT to the specific stationary emission sources. ELVs are generally accepted and in existing international documents such as the EU BREFs. ELVs used in Belarus are not yet in line with the BREF ELVs that are set in the EU Industrial Emissions Directive. Heat and power plants, oil refineries, the chemical industry and manufacturing industries contribute to almost 90 per cent of the SO₂ emissions.

Current SO₂ emissions meet the target for the Gothenburg Protocol by 2020, for which Belarus has announced its voluntary commitment. Should natural gas (and eventually low sulphur residual oil) for energy production be available in sufficient quantities, this target can be met also with economic growth.

Recommendation 4.1:

The Government should develop a programme for emissions reduction based on the application of the best available techniques (BATs) and related reference documents, especially for the reduction of emissions of heavy metals, NO_x, NH₃, NMVOCs, PM and SO₂, in order to achieve the emission limit values established in the amended protocols to the Convention on Long-range Transboundary Air Pollution — i.e., the Protocol to Abate Acidification, Eutrophication and Ground-level Ozone (Gothenburg Protocol), the Protocol on Heavy Metals and the Protocol on Persistent Organic Pollutants.

In cities such as Minsk, the rapid growth in the number of private cars may cause problems with the air quality in certain places, in spite of the fact that individual new cars comply with more stringent standards and there is a good system of public transport. Very few people use bicycles although the terrain is appropriate (with no great elevations).

Recommendation 4.2:

The Ministry of Natural Resources and Environmental Protection, in cooperation with the local executive authorities, should investigate how the use of bicycles for shorter distances can be promoted, for example, by the construction of proper and safe infrastructure and a bicycle-sharing system.

NH₃ emissions have increased in the last 10 years due to the growth of livestock husbandry. Belarus has made assessments of the emission abatement potential against the targets for 2020. The baseline scenario approaches the emission target for 2020 but, as the research states, uncertainties in the emissions inventory lead to the limited accuracy of emissions modelling.

Recommendation 4.3:

The Ministry of Natural Resources and Environmental Protection should carry out an emissions data inventory of NH₃ and scenario projections for the NH₃ emission trends to reduce uncertainties, in order to prevent possible problems in reaching the necessary emission reductions in the framework of the Protocol to Abate Acidification, Eutrophication and Ground-level Ozone (Gothenburg Protocol).

Belarus is considering accession to the amended protocols on Heavy Metals and POPs and the amended Gothenburg Protocol to the Convention on Long-range Transboundary Air Pollution. It has now voluntarily included national emission reduction commitments in the amended Gothenburg Protocol for 2020 and beyond. ELVs for emissions of acidifying substances, heavy metals and POPs will be applied in permits.

Recommendation 4.4:

As soon as appropriate capacities for implementation are available, the Government should accede to the amended protocols to the Convention on Long-range Transboundary Air Pollution — i.e., the Protocol to Abate Acidification, Eutrophication and Ground-level Ozone (Gothenburg Protocol), the Protocol on Heavy Metals and the Protocol on Persistent Organic Pollutants.

Chapter 5: Water management

Pollution load from diffuse sources in residential and industrial areas and cultivated land is a major contributor to contamination of water bodies and shallow groundwater. However, the methodology for assessing diffuse pollution has not been updated since 1999. Some measures have been taken to reduce diffuse pollution. Stormwater drainage systems have been in operation in a few cities to intercept and treat polluted urban runoff. Water protection zones have been introduced along the banks of water bodies to restrict economic activities which could be sources of pollution there, but the delineation of water protection zones has not been complete.

However, so far, not much progress has been made in curbing diffuse pollution. Polluted runoff from cultivated land remains the main source of diffuse pollution of water bodies and groundwater with nitrogen and phosphorus due to ever-increasing use of fertilizers and manure in modern-day agricultural practices.

Recommendation 5.1:

The Ministry of Natural Resources and Environmental Protection, in cooperation with the Ministry of Agriculture and Food and other agencies and authorities concerned, should:

- (a) *Develop, based on internationally recognized approaches, methodologies and regulations for the assessment of polluted diffuse runoff from cultivated land, residential and industrial areas and its impact on water resources, and develop appropriate measures for reducing diffuse pollution, with an emphasis on agriculture-related activities;*
- (b) *Revise and complete the delineation of water protection zones in compliance with the requirements of the 2014 Water Code, and enforce the implementation of the existing legislation aimed at preventing pollution generated by activities in those zones.*

There is no regular monitoring of contaminated sediments, which are usually accumulated on the bottom of the river sections downstream of large cities and industrial complexes and which can be a long-lasting source of secondary pollution of surface waters. Their monitoring is required for quantifying their contribution to the pollution of surface water and for planning and performing remedial measures such as dredging for the sections with heavily polluted sediments.

Recommendation 5.2:

The Ministry of Natural Resources and Environmental Protection should:

- (a) *Assess the impact of contaminated bottom sediments on the quality of surface waters based on internationally agreed methodologies, and implement remedial measures to reduce the pollution generated by contaminated bottom sediments;*
- (b) *Consider the inclusion of the monitoring of bottom sediments in activities for the monitoring of surface waters.*

In compliance with the 2014 Water Code, basin councils will be created in the five main river basins to provide an institutional framework for management at the basin level, with the participation of central, oblast and local authorities, water users and the public. Their main task is to formulate recommendations about management decisions in the respective river basins for administrative and executive bodies at various managerial levels. The regulation on the authority and basic procedures for the basin councils was approved by the 2015 Resolution of the Council of Ministers No. 152 and subsequent Instruction on Establishment of Basin Councils, approved by the 2015 Resolution of the Ministry of Natural Resources and Environmental Protection No. 19.

However, establishing the river basin councils is a new concept in Belarus and many aspects of their functioning, such as detailed criteria for representation of various groups of stakeholders, methodological guidance and funding issues are not yet defined and tested and may require adjustment after a certain period of their work. With a view to benefiting from similar experience in other countries, Belarus may seek support from regional and international organizations with relevant expertise to launch a pilot basin council project.

Recommendation 5.3:

The Ministry of Natural Resources and Environmental Protection should:

- (a) *Continue efforts to create a river basin council as a pilot project for one of the major river basins, preferably for the Upper Dnieper River Basin for which a basin management plan is at the final drafting stage, in order to work out modalities for the effective and smooth set up and functioning of the new institution;*
- (b) *Apply, in due time and taking into consideration the lessons learned, the tested working arrangements for creating councils in the other river basins.*

The State Water Cadastre (SWC), in operation since 1990, is an efficient and indispensable tool for managing the country's water resources. The Central Research Institute for Complex Use of Water Resources hosts SWC. In 2015, its functions and coverage areas were updated and expanded. Information about, for instance, the ecological status of water bodies, inland waterways and hydrotechnical structures will be covered in SWC. However, with its current capacity, such as outdated information and communication technologies and limited human resources, SWC cannot face this challenge.

Recommendation 5.4:

The Ministry of Natural Resources and Environmental Protection should:

- (a) *Take appropriate measures to strengthen technical and human capacities to address the new scope of the State Water Cadastre;*
- (b) *Ensure that Shared Environmental Information System (SEIS) principles are applied to the State Water Cadastre;*
- (c) *Arrange for public access to a wider range of the information available in the State Water Cadastre and make the information easier to understand by presenting it in a more user-friendly manner.*

Chapter 6: Waste management

Waste management in Belarus relies on a strong legal framework, which is being updated and follows international practice, especially in collection of recyclables. However, past waste management practices and limited financing have a negative influence on the speed of modernization of waste management services.

The key challenge facing waste management in Belarus is the transformation of disposal practice, from small disposal sites to oblast-controlled landfills. The first step is already achieved, by formulating and adopting the Strategy for Integrated Municipal Solid Waste Management in Minsk Oblast for 2015–2029 that aims at optimization of waste collection and disposal by introducing a regional approach, and proposes the division of Minsk Oblast into seven collection areas. This is a new feature compared with documents developed in other oblasts and, when implemented, would result in operational cost savings and enable the development of modern landfills.

Recommendation 6.1:

The Ministry of Natural Resources and Environmental Protection and the Ministry of Housing and Public Utilities should support:

- (a) *Minsk Oblast authorities in the implementation of the Strategy for Integrated Municipal Solid Waste Management in Minsk Oblast for 2015–2029;*
- (b) *Preparation of waste management programmes for all oblasts.*

Although there is little information available on the use of mini-dumpsites, it can be assumed that these sites present risk to the environment and human health. The practice of using mini-dumpsites is outdated. Experience from other countries shows that abandoning such practice is a long process. It requires redirection of waste to new disposal sites, and evaluation of potential risks from mini-dumpsites and their rehabilitation.

Recommendation 6.2:

The Ministry of Natural Resources and Environmental Protection and the Ministry of Housing and Public Utilities, in cooperation with oblast authorities, should prepare a plan to gradually phase-out mini-dumpsites, develop a methodology for risk assessment of these sites and prioritize their rehabilitation, with the aim to reduce their impact on human health and the environment.

The current legislation and practice of waste management assumes that the waste collector and operator of a disposal site is the same legal entity. One of the preconditions for successful modernization of waste management is the division of these two functions into different entities, as is done in Minsk, for example. This change would enable greater involvement of private business in waste management and increase the effectiveness of waste management services through specialization. Currently, as waste legislation does not support specialization, there is little incentive to build modern landfills, install weighbridges, introduce gate fees and improve data on municipal waste.

Recommendation 6.3:

The Government should consider the introduction of legislative changes to allow waste companies to specialize in collection only or in operation of waste disposal/processing facilities.

Management of industrial waste is well organized at the level of generation and recovery, but disposal practice is behind international practice, especially for sites storing waste generated in large volumes in the past. The impact of these sites on the environment is known in the most outstanding cases, but methodology for comparable evaluation of risks is not in place. Rehabilitation of large industrial waste sites may be very costly, but this is an opportunity for involving international donors, who can provide the necessary financing and expertise.

Recommendation 6.4:

The Ministry of Natural Resources and Environmental Protection and the authorities responsible for industrial waste sites management should consider developing a hotspot list of industrial waste sites based on risk assessment as well as investigating opportunities for involving international donors in the rehabilitation of industrial waste disposal sites.

The definition of waste in Belarus encompasses a much wider range of materials than in international practice; it also includes by-products or materials which can be reused in on-site production. The approach to regulating municipal waste is based on cubic metres, which causes uncertainty in reporting data on municipal waste. Reported waste data cannot be directly compared with waste data from other countries. Monitoring of waste in Belarus is carried out at the point of generation, while international practice is to record waste data on the input to a treatment or disposal facility. As a result of this approach, the reported amount of industrial waste recovery is high, often exceeding the real amount of generated waste. Such an approach may also cause difficulties in communicating the achievements of Belarus in waste management in international reporting.

Recommendation 6.5:

The Ministry of Housing and Utilities should consider aligning the definition of waste with international practice and making appropriate legislative changes to fully introduce regulation of municipal waste management in tons.

The Minamata Convention on Mercury is designed to protect human health and the environment from anthropogenic emissions and releases of mercury and mercury compounds. It is expected that, over the next few decades, the Convention would enhance the reduction of mercury pollution from targeted activities responsible for the major release of mercury to the immediate environment. A roadmap towards ratification was drafted in Belarus. No inventory of mercury and products containing mercury was carried out in the health and energy sectors.

There are no accredited laboratories for dioxins control in Belarus.

Recommendation 6.6:

The Government should:

- (a) *Carry out an inventory of mercury and products containing mercury;*
- (b) *As soon as appropriate capacities for implementation are available, ratify the Minamata Convention on Mercury;*
- (c) *Establish a laboratory for dioxins control.*

Chapter 7: Biodiversity and protected areas

Since 2005, there have been intensive efforts to develop the national ecological network; however, this work is not yet completed. Some areas that are to become part of the national ecological network are not currently under the protected area system and do not yet have a special status of protection.

One of the main goals of the National Strategy for Development of the System of Specially Protected Natural Areas until 1 January 2030 is to finalize the development of the national ecological network and its integration into the Pan-European ecological network.

The establishment of an ecological network in every country might create conflicts between sectoral (agriculture, transport, etc.) interests and environmental considerations. Close collaboration between environmental, sectoral, land management and spatial planning stakeholders is of added value in designing an ecological network.

Recommendation 7.1:

The Government should design and establish a national ecological network, in particular by:

- (a) *Ensuring cooperation of environmental, sectoral (agriculture, transport, etc.), land management, spatial planning and other stakeholders, in the development of the network;*
- (b) *Allocating protection status to those areas that will be part of the ecological network but that are currently not under the system of specially protected natural areas and do not have a special protection status.*

Belarus has developed relevant strategic documents to ensure implementation of biodiversity-related agreements. It regularly submits national implementation reports. Since 2005, Belarus has acceded to the 2010 Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization and the 1979 Bern Convention on the Conservation of European Wildlife and Natural Habitats.

The country is active under but not yet a Party to the 1991 Agreement on the Conservation of Populations of European Bats, which provides a framework of cooperation for the conservation of bats throughout Europe, Northern Africa and the Middle East, through legislation, education, conservation measures and international cooperation measures. Also, the country is not a Party to the 2005 Almaty Amendment on GMOs to the 1998 Aarhus Convention, although participation in the Amendment would ensure opportunities for the Belarusian public to participate in decision-making on deliberate release of GMOs into the environment and their placement on the market, thereby widening the application of the Convention's public participation pillar and increasing the quality of decision-making on GMOs.

Recommendation 7.2:

The Ministry of Natural Resources and Environmental Protection should initiate accession to the:

- (a) *1991 Agreement on the Conservation of Populations of European Bats;*
- (b) *2005 Almaty Amendment on Genetically Modified Organisms to the Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (Aarhus Convention).*

Accession to the 1979 Bern Convention on the Conservation of European Wildlife and Natural Habitats has been an important step for Belarus, which will allow the country to be more fully engaged in the development and implementation of biodiversity conservation policies at international level. Upon accession to the Convention, Belarus made reservations regarding certain species and means or methods of killing, capture and other exploitation.

Recommendation 7.3:

The Government should work to progressively reduce the use of the methods of killing, capture and other forms of exploitation listed in appendix IV of the Convention on the Conservation of European Wildlife and Natural

Habitats (Bern Convention) with a view to ultimately withdrawing the respective reservation, or part(s) of it, made at the time of accession.

Chapter 8: Energy and environment

The absence of an independent energy regulatory authority, the prominent role of the state-controlled Belenergo in the tariff setting process for electricity, and the absence of a market structure in the energy sector are among the barriers to meeting energy efficiency targets. The electricity sector is still a state monopoly and measures to improve tariff setting policy are lacking.

Energy pricing remains inadequate to encourage efficient use of energy, and market mechanisms for setting energy tariffs are still absent. Government plans to reform the electricity sector by creating a wholesale market have been delayed, and electricity remains heavily subsidized for households. Cross-subsidization is a mechanism of energy pricing that does not fulfil its stabilizing function, which causes significant damage to the economy of the country.

Motivating households to save energy is an important question to be addressed and implies the need for reform of the household sector. Should an effective motivating system be created, the State could attract inward investment into energy-saving equipment and technologies.

Recommendation 8.1:

The Government should:

- (a) *Pursue a policy of restructuring electricity tariffs to eliminate cross-subsidies and achieve price levels that reflect the costs of production in the power sector, while taking adequate measures to protect socially vulnerable groups;*
- (b) *Guarantee that the financial resources saved through energy efficiency measures are accumulated in the budgets of the respective organizations undertaking such measures.*

There are barriers to ESCO operations, in particular, the legislative basis for the development and operation of an ESCO is not sufficiently developed. In the industry sector, as well as in state-funded organizations, current accounting rules and taxation systems do not take into consideration benefits from energy savings in the overall cash flow of the company, which rather discourages energy conservation. Most potential ESCO projects are long term, while commercial bank loans are only available for up to seven years and the interest rate is relatively high.

Recommendation 8.2:

The Government should improve the framework conditions to allow growth of the market for energy services, in particular by:

- (a) *Allowing banks to finance long-term projects;*
- (b) *Reconsidering the public sector procurement and tendering rules to facilitate the operation of energy service companies (ESCO);*
- (c) *Adopting a model ESCO contract.*

Belarus' main energy supply targets include a 1,000 MW coal-fired plant and an NPP. Construction and operation of a 2,400 MW NPP can potentially have significant environmental impacts, and it is important to ensure its compliance with the international standards on power plant construction and operation and make this compliance strategy known to all stakeholders. Strategic environmental assessment does not exist in the legislation of Belarus.

Recommendation 8.3:

The Government should:

- (a) *Apply recommendations of the International Atomic Energy Agency (IAEA) to provide necessary safeguards to reduce environmental and health risks associated with nuclear power plant construction and operation;*

- (b) *Carry out strategic environmental assessments on major energy sector plans and programmes under development, even though strategic environmental assessment is not yet provided for in the legislation.*

Limited energy resources complemented by a very energy-intensive economy are strong prerequisites for the continuing development of RES to improve energy interdependence and facilitate reduction of GHG emissions. Although notable progress has been achieved in development of RES since 2005, legislation on renewable energy, economic incentives, affordability of loans, and technical and institutional capacity require further development, and only a small proportion of energy comes from renewable resources. This is an important element of energy security in Belarus, as the vast majority of its domestic energy resources are renewable or non-conventional by nature.

The current national energy policy stipulates selling electricity at low prices, which, in turn, stimulates excessive consumption and does not provide sufficient incentives for energy conservation.

Recommendation 8.4:

The Government should:

- (a) *Improve the institutional framework in the renewable energy sector to facilitate implementation of the strategic goals set;*
- (b) *Maintain economic incentives by regularly reviewing and keeping adequate feed-in tariffs for energy generated from renewable energy sources;*
- (c) *Create an effective motivating system to attract inward investment into energy-saving equipment and technologies to modernize energy plants in the country;*
- (d) *Provide economic incentives for enterprises and households to pursue energy-saving policies and for the development of renewable energy sources;*
- (e) *Develop a national low carbon development strategy.*

At present, there is no legislation on an energy market in Belarus that supports further development of the national energy system according to market rules. No law on energy covers all aspects of the energy sector, including production, transport, distribution and consumption, to transform the sector into a competitive market. Government plans to reform the electricity sector by creating a wholesale market have been delayed.

Recommendation 8.5:

The Government should:

- (a) *Develop and implement a restructuring of the power system with the establishment of wholesale and retail markets;*
- (b) *Set up a procedure for relationships among business entities in the electricity sector to transform the sector into a well-functioning competitive market and to provide incentives for attracting investment to energy development;*
- (c) *Gradually introduce the transformation from purely administrative measures towards measures based on economic incentives and market mechanisms.*

Some differences were observed between energy-related data, in particular, on renewable energy sources, included in various sources (international databases which rely on the information provided by the country, national statistics, national strategic documents, etc.).

Recommendation 8.6

The Government should improve monitoring and verification of data from the energy sector in accordance with internationally agreed standards.

Chapter 9: Transport and environment

Belarus invests heavily in the promotion of sustainable transport, including through the promotion of electrified public transport. However, these investments are not yet based on a solid financial footing with adequate levels of cost recovery. Sustainable transport can be achieved through having a solid financial basis.

Recommendation 9.1:

The Government, together with local authorities, should ensure the financial sustainability of its transport policy by:

- (a) Improving the cost recovery of public transport;*
- (b) Prioritizing investments in types of transport where passenger loads justify them and taking measures aimed at increasing passenger demand.*

Because of the slow pace of vehicle renewal in Belarus, transport can still be identified as the number one cause of impacts on the quality of air in Minsk. The situation has improved in recent years, despite the constant increase in the number of vehicles, due to more stringent vehicle and fuel standards having been adopted nationwide.

Recommendation 9.2:

The Government should introduce economic incentives to facilitate the renewal of the country's aging fleet with a view to improving the situation regarding motor vehicles.

The urban traffic performance of Minsk is improving through the application of domestically developed intelligent transportation system (ITS) solutions. However, the application of these solutions to improve the traffic situation and mitigate the negative environmental, health, economic and social impacts of motorized transport is not widely practised.

Recommendation 9.3:

The Government should ensure that the local executive and administrative bodies continue to deploy intelligent transportation system (ITS) solutions in order to improve traffic demand management and mitigate the negative externalities caused by urban transport.

Belarus is a Party to the European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR), which is intended to ensure the safety, security and facilitation of transport operations. Carriers from one country can carry dangerous goods through and to any other country that is a Contracting Party without additional safety requirements imposed by transit or destination countries.

The ADR also allows mutual recognition of certificates, that is, packaging certificates, vehicle certificates, tank certificates and driver training certificates. The ADR is regularly updated and kept in line with the UN Recommendations on the Transport of Dangerous Goods, that is, with international regulations for the transport of dangerous goods by sea and air. The entry into force of the 1993 Protocol of amendment to the ADR would strengthen the ADR (accession by all ADR contracting parties is required).

Belarus is not yet a Party to the European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (ADN). The goals of the ADN are to increase the safety of the international carriage of dangerous goods by inland waterways; contribute effectively to the protection of the environment, by preventing any pollution resulting from accidents or incidents during such carriage; and facilitate transport operations and promote international trade. Given the impact of accidents involving such cargoes on the environment and human health, Belarus would benefit as a transit country through participation in such agreements.

Recommendation 9.4:

The Government should consider accession to the following United Nations transport agreements, in order to improve the environmental performance of the transport sector and its competitiveness as a transit country:

- (a) The 1993 Protocol amending article 1 (a), article 14 (1) and article 14 (3)(b) of the European Agreement of 30 September 1957 concerning the International Carriage of Dangerous Goods by Road (ADR);*
- (b) The 2000 European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (ADN).*

Chapter 10: Forestry and environment

Over recent decades, forest rehabilitation and restoration have been very successful in quantitative terms. But these practices created uneven age structure and species composition in re-established forests. As a result, Belarusian forests are relatively young and without the full genetic stock of old growth forest systems. Young, low diversity forests tend to be less resistant to pests and diseases as well as climate change. To maintain the long-term resilience and biodiversity of the forest ecosystem, the ecological benefits of forests are not adequately balanced against commercial and recreation interests to achieve conservation goals, especially those related to clear-cutting patterns and the age limit of harvested species.

Recommendation 10.1:

The Ministry of Forestry should ensure a proper, science-based balancing of the ecological, economic and recreation functions of forests to achieve conservation goals, especially those related to clear-cutting patterns, the age limit of harvested species and species composition of reforested and afforested areas.

The preparation of the second Forestry Development Strategic Plan (2015–2030) and the ongoing revision of the Forest Code were characterized by a wider consultation process than in the past. Still, the formulation of these key documents for the forestry sector mainly involved institutional actors, and professional forestry and academic communities, and lacked active participation of the private sector, local communities and civil society organizations. Also, the consideration of cross-sectoral aspects such as biodiversity conservation and climate change was insufficient and a monitoring system for the Forestry Development Strategic Plan's implementation is not yet defined.

Recommendation 10.2:

When formulating policy and legal documents for the forestry sector, the Government should:

- (a) *Undertake a wide consultation process based on a stakeholder analysis;*
- (b) *Take into account cross-sectoral issues, such as biodiversity conservation and climate change;*
- (c) *Set up an effective and transparent monitoring process to ensure implementation.*

At present, the economic potential of forests is not fully exploited, and there is large scope for development in terms of increased harvesting on a sustainable basis and processing for export as well as for domestic consumption. The status of the forestry industry has been at the centre of political debate in recent years, as it is considered rather underdeveloped given the vastness of the resources. Production facilities are outdated and limited investments have been undertaken to upgrade harvesting and production technology. At the same time, private sector engagement in timber and non-timber forest products harvesting and processing and other entrepreneurial activities related to reforestation and nurseries is still marginal.

Recommendation 10.3:

The Government should consider developing a road map to strengthen the economic potential of forests, enhance the role of the private sector in the management and use of forest resources, and improve framework conditions for investors.

The actual timber regulation system results in unequal access to forest resources and advantages FEs over private sector wood processing companies, as they are provided with a cheaper and guaranteed continuity of supply. According to experts, such a form of subsidization may discourage the efficient utilization of forest resources, reduce the financial resources for forest management and cause the misallocation of investment funds. An additional problem is the incorrect evaluation of the harvested timber and poor recording and monitoring of harvesting and removals.

Recommendation 10.4:

The Government should consider reforming the timber sale method in order to set up a fair, competitive and transparent system.

Low forest road density can have a negative impact on sustainable management of forests, as it can cause an overexploitation of forests close to existing roads, with associated negative environmental impacts, can reduce forest productivity in such areas, and can increase the costs of harvesting in the long term. Belarus has an

average forest road density which is low compared with the European average, and it is estimated that about 80 per cent of the forest roads managed by the Ministry of Forestry require repair works.

Despite efforts in recent years, mainly related to implementation of the Programme of Construction of Forest Roads in 2011–2015, the enhancement of the forest road network still remains a priority in the country. Current efforts to enhance the forest road networks are not based on multifunctional construction principles and do not give due consideration to soil erosion, habitat loss and natural landscape impacts.

Recommendation 10.5:

The Ministry of Forestry should enhance the country's forest road network based on multifunctional construction principles, paying due consideration to potential environmental impacts, including soil erosion, habitat loss and natural landscape impacts.

Chapter 11: Tourism and environment

Information is not available on the pressures that tourism puts on the environment in Belarus. Neither data nor estimates are available of the pressures that tourism puts on water resources and air in Belarus. Data on municipal waste generated by the tourism sector are hidden within the total data on municipal solid waste generated in the country. The impact of the tourism sector on the environment is not regularly assessed by the competent authorities.

Recommendation 11.1:

The Government should:

- (a) *Study international experience in assessing the impact of the tourism sector on the environment;*
- (b) *Consider whether it is possible to collect environment-related data on the tourism sector and to undertake an assessment of the impact of the tourism sector on the environment.*

Chapter 12: Environmental education and education for sustainable development

Belarus has progressed in its efforts to integrate environmental education (EE) and education for sustainable development (ESD) elements in formal, non-formal and informal education. Belarus is also putting in place legal and institutional frameworks that support EE and ESD. Significant efforts have been made to integrate ESD into formal education. Research and methodological work on ESD is also advanced in universities and education institutions, and educators are actively involved in discussions on improving teaching methodology.

To a certain extent, ESD has become an integral part of the curricula and teaching materials in the education system at all levels. Sustainable development issues are increasingly covered by mass media, and the activities of civil society and their involvement in raising public awareness have increased. However, no evaluation of progress in development of EE and ESD, and no assessment of their effectiveness, has been undertaken.

Recommendation 12.1:

The Ministry of Education should develop criteria and indicators to assess the progress of implementation of environmental education and education for sustainable development and their effectiveness.

Key sustainable development themes addressed in formal, non-formal and informal education include environmental protection, sustainable use and management of natural resources, environmental ethics, biological and landscape diversity, environmental security, and so on. Although an environmental component largely prevails, there is a noticeable move observed in shifting from environmental to sustainable development topics in the education system. This shift needs to be further strengthened to cover a broader spectrum of sustainable development topics.

Recommendation 12.2:

The Ministry of Education should consider including key sustainable development themes that are currently not prominently covered (e.g., democracy and governance; peace and human security; sustainable consumption

and production; and sustainable urbanization) in the curricula and teaching practices on education for sustainable development.

Current in-service training programmes on environmental and sustainable development issues are targeted at civil servants. However, there are no specific in-service training programmes that are tailored to private sector professionals.

Recommendation 12.3:

The Government should consider involving private sector professionals in training and in-service training programmes on sustainable consumption and production, sustainable investment, green procurement and sustainable forestry.

The institutional framework that supports EE and ESD at the national level is weak. The Coordination Centre “Education for Sustainable Development” is not financed by the Government and has to rely on project funding. The interministerial Coordination Council on ESD at the Ministry of Education, established in 2006, has met only two times. Its membership is name based so there have been frequent changes in the composition of the Council.

Recommendation 12.4:

The Government should:

- (a) *Consider institutionalizing the Coordination Centre “Education for Sustainable Development” under the Ministry of Education;*
- (b) *Review the activities and membership of the interministerial Coordination Council on Education for Sustainable Development so that membership is based on functional titles and regular meetings of the Council are ensured.*

Chapter 13: Human settlements and environment

There is a strong tradition of territorial planning in Belarus and a comprehensive system of territorial plans for the national, oblast and local levels. The existing territorial planning approaches, however, do not sufficiently reflect modern, internationally accepted principles of urban planning as an integrative and strategic decision-making process that addresses competing interests and is linked to a shared vision and an overall development strategy, elaborated in close coordination between governments at both national and local levels and involving all relevant stakeholders. Such principles have recently adopted in 2015 by UN-Habitat Governing Council.

Recommendation 13.1:

The Government should:

- (a) *Develop a pilot project jointly with international organizations such as ECE and UN-Habitat to test possible implementation of the 2015 International Guidelines on Urban and Territorial Planning adopted by the UN-Habitat Governing Council;*
- (b) *Based on the outcomes of such a pilot project, elaborate national guidelines for territorial planning.*

The current policy on the satellite towns of Minsk is largely concerned with large-scale housing developments outside Minsk and with relocation of some industrial enterprises from Minsk. However, there is not sufficient detail on how these towns will be developed to provide functional complementarity and accessibility to infrastructure, services, jobs and other advantages that can be found in Minsk. Also, the social, economic and environmental sustainability effects of this policy have not been well articulated.

While the processes of Minsk agglomeration will continue and a more comprehensive approach to manage these processes is needed, such policy should go hand-in-hand with the polycentric arrangement of Belarus’s territory. In this regard, the mobilization of the diverse potential of small and medium-sized cities and their surrounding territories is important, since small and medium-sized cities make up 94 per cent of the country’s urban settlements and are more evenly distributed throughout the country’s territory in contrast to the more peripheral location of oblast cities. They represent a backbone of the country’s urban settlement system. The development of small and medium-sized cities should consider the requirements of environmental

sustainability. The State Comprehensive Programme for the Development of Regions, Small and Medium-sized Settlements for 2007–2010 only allowed for addressing some of the multiple problems of these cities.

Recommendation 13.2:

The Government should:

- (a) *Further develop a polycentric approach to the development of the country's settlements that supports environmental sustainability;*
- (b) *Ensure that the satellite towns of Minsk are developed in a comprehensive, environmentally friendly way as interconnected, self-sufficient administrative–territorial units, and that this initiative is balanced with further actions on improving the country's small and medium-sized cities as sustainable, self-sufficient cities.*

The current statutory requirement for thermal energy use is 40 kWh/m² for dwellings of four or more storeys, and 90 kWh/m² for individual dwellings. However, not all possibilities for energy saving have been used in the country. The existing practice has mainly focused on improving thermal resistance of walls and other structures. Extensive research conducted in the country over the last decade demonstrates the possibility of further reduction in thermal energy consumption in Belarus's housing sector through more comprehensive solutions. However, the practical implementation of such measures is constrained by a shortage of the technical norms and standards that would support optimization of integrated energy efficiency of dwellings. Furthermore, the old housing stock that has undergone thermal modernization in the past decade has revealed various problems, especially as relates to air circulation and the microclimate of the buildings.

Recommendation 13.3:

The Government should:

- (a) *Advance the application of integrated solutions to further increase the energy efficiency of housing, including building envelopes, heat recovery ventilation, the use of renewable energy and other solutions, based on progressive international practices;*
- (b) *Support studies on experiences and problems regarding the thermal modernization of the old housing stock.*

The notion of green spaces is reflected in the legislation of Belarus through the terms “recreation zones” and “landscape-recreational territories”. The provision of green spaces in Belarus settlements is regulated by specific technical regulatory legal acts, yet, in practice, the availability of high quality green spaces differs significantly among the settlements. Further possibilities for enhancing green spaces should be considered as part of settlements' development programmes, including improving the existing parks and underused/abandoned land, converting the curtilages of residential buildings into recreational green spaces, and road planting.

The building up of green spaces, including, specifically, the curtilages of multifamily housing, should not be allowed without an assessment of how these activities would impact on the compliance with norms for green spaces of the relevant residential area/settlement.

Recommendation 13.4:

The Government should ensure that settlements' territorial development plans include actions to enhance and protect settlements' green spaces and landscape-recreational territories.

In the past decade, Belarus has optimized its rural settlement system by establishing new rural centres – 1,500 agro-towns with improved social services and public amenities. At the same time, many other rural settlements have not yet managed to achieve positive changes and have retained significant multifaceted problems.

In this context, some rural settlements have recently been engaged in the development of their integrated local sustainability plans (including Local Agenda 21) and info-rooms have also been established in these settlements to provide advice on sustainable development and coordinate actions of different local stakeholders including, in particular, local residents. These initiatives should be supported on a wider scale to provide an instrument for mobilizing the diverse local knowledge and potential of rural settlements and to mediate uneven rural development.

Recommendation 13.5:

The Government should maintain the diversity and integrated development of all rural communities by building on already existing experiences of some rural settlements in the development and implementation of their local sustainability strategies and plans.

Chapter 14: Health and environment

Various ministries take the environment and health into account in their areas of competence. However, there is no agency or department specifically dedicated to the coordination of health and the environment and to strategy development in this field. There is no National Environmental Health Action Plan and no strategic targets on environment and health are defined.

The legislation defines the monitoring programmes for several environmental health factors such as air quality, food, drinking water and recreational water quality, and also for radiation. In cases of non-compliance, several technical and administrative measures are pronounced to manage the causes of non-compliance and to protect public health. This monitoring is performed by different ministries and all data are collected by the National Statistical Committee and published in statistical year books available on government websites. However, only raw data are presented, without any analysis. It would be more relevant to perform statistical analysis of the results to extract significant tendencies and cross-links between environmental and health results, in order to underline environmental impact on health. Such comparison and diagnostics would also help in the setting of targets and indicators to guide the planning of specific activities. Comparison between results and targets would help strengthen actions to improve conditions related to the environment and public health.

Recommendation 14.1:

The Ministry of Health, in cooperation with the Ministry of Natural Resources and Environmental Protection, should:

- (a) *Assess the impact of environmental factors on health based on internationally recognized methodologies and define strategic targets and actions to be performed in the area of environment and health;*
- (b) *Improve communication of the results and deliver user-friendly messages regarding prevention to the public.*

Indoor air quality is an important health determinant, as the time spent at home is not negligible and fragile persons (babies, children and the elderly) are the most exposed to health risks. No data are available on indoor air pollution in houses, while several factors (asbestos, radon, carbon monoxide emission, mould) can be presumed to be present in buildings and have an impact on public health.

Recommendation 14.2:

The Ministry of Health should carry out assessment of indoor air quality and its impact on health by conducting a survey on radon, lead and asbestos exposure, and more especially by:

- (a) *Taking action to diagnose and register cases of carbon monoxide intoxication and lead and asbestos-related diseases;*
- (b) *Collecting reliable information on the use and distribution of asbestos, lead and radon to prevent related diseases;*
- (c) *Raising awareness on asbestos-, lead- and carbon monoxide-related diseases and on preventive actions.*

Two enterprises that produce asbestos-containing materials are located in the country but no data on asbestos concentrations in the environment (air and soil) of the surrounding areas are available. Asbestos is still used in building construction and no data on asbestos in houses are available. Thus, specific diseases related to asbestos (asbestosis and mesothelioma) are not registered. Moreover there is a lack of comprehensive approach to the reduction of the use of asbestos in the country.

Recommendation 14.3

The Government should develop and implement measures to reduce the use of asbestos using WHO guidelines, such as a national asbestos programme.

A nuclear power plant is now under construction in Belarus. There is understanding of the necessity to enhance radiation monitoring and to strengthen a new radiation monitoring programme dedicated to the Belarusian NPP. The authorities have to bear the associated costs of the installation such as radiation monitoring, development of safety programmes and emergency action plans, and ensuring the availability of medication (iodine pills).

Recommendation 14.4:

The Government should ensure that the radiation monitoring at the Belarus NPP is carried out according to international standards and that safety programmes and emergency action plans are in place and adequately financed.

The major industrial sectors of Belarus include mechanical and chemical manufacturing, such as production of artificial fibres, plastics and mineral fertilizers. These industries use hazardous chemicals. Special attention has to be given to the protection from exposure to hazardous chemicals of workers and of the population living in the vicinity of industrial facilities. Information on the population's exposure to hazardous chemicals in industrial areas and in soil-contaminated areas, for example, in the vicinity of stockpiles of obsolete pesticides, is not available. Biomonitoring is performed for workers but only occasionally for the population living in industrial areas.

Recommendation 14.5:

The Ministry of Health, together with the Ministry of Natural Resources and Environmental Protection and the Ministry of Labour and Social Protection, should perform biomonitoring of human health in industrial areas in order to assess the impact of hazardous chemicals on health.

Belarus is a Party to only two of seven conventions of the International Labour Organization (ILO) dealing with occupational health and the environment.

Recommendation 14.6:

The Government should initiate accession to the following ILO conventions dedicated to prevention and control of occupational hazards caused by hazardous substances:

- (a) *1971 Convention concerning Protection against Hazards of Poisoning Arising from Benzene (ILO No. 136),*
- (b) *1974 Convention concerning Prevention and Control of Occupational Hazards caused by Carcinogenic Substances and Agents (ILO No. 139),*
- (c) *1977 Convention concerning the Protection of Workers against Occupational Hazards in the Working Environment Due to Air Pollution, Noise and Vibration (ILO No. 148),*
- (d) *1986 Convention concerning Safety in the Use of Asbestos (ILO No. 162);*
- (e) *1990 Convention concerning Safety in the use of Chemicals at Work (ILO No. 170).*

IMPLEMENTATION OF THE RECOMMENDATIONS IN THE SECOND ENVIRONMENTAL PERFORMANCE REVIEW¹

PART I: POLICY MAKING, PLANNING AND IMPLEMENTATION

Chapter 1: Legal and policymaking framework and sectoral integration mechanisms

Recommendation 1.1:

The Government should reconsider the competencies of governmental bodies responsible for natural resources use and environmental protection in forestry and protected areas, including fishing and hunting. The Ministry of Natural Resources and Environmental Protection should have overall responsibility for controlling the use of natural resources. The activities of the Affairs Management Department of the President related to the use of natural resources should be made transparent and subject to oversight by the Ministry of Natural Resources and Environmental Protection and to public scrutiny.

The recommendation has not been implemented. The 2009 Decree of the President No. 510 “On enhancement of control (surveillance) activities in the Republic of Belarus” did not eliminate the overlaps in the control functions on environmental protection of the Ministry of Forestry (“control over the state, use and protection of forest fund” and “over the hunting sector and hunting”), Ministry of Natural Resources and Environmental Protection (“control in the area of environmental protection and rational use of natural resources”), State Inspectorate on Fauna and Flora Protection under the President (“control over the protection and use of wild animals which may be hunted or fished, ..., forest fund”) and the Affairs Management Department of the President (which performs, in the territories under its jurisdiction, “control of hunting, fishing, use and protection of forest fund, and other control functions with regard to protection of wildlife and plant resources”). At the same time, in practice, these institutions have found ways to run their respective enforcement activities in a complementary manner. The activities of the Affairs Management Department of the President related to the use of natural resources are not transparent – no reports on these activities are publicly available. Such activities are not subject to oversight by the Ministry of Natural Resources and Environmental Protection and to public scrutiny.

Recommendation 1.2:

The Ministry of Natural Resources and Environmental Protection should adapt its structure to current needs taking account internationally accepted principles. In particular, policy development and decision-making on natural resources use should be separated from monitoring and control. The Ministry should consider establishing relevant departments and assigning the policy development and decision-making functions currently performed by specialized inspectorates to them. It should also consider separating the tasks of issuing permits and enforcement, currently performed by specialized inspectorates. See also Recommendation 2.2.

The recommendation has been implemented. Policy development and decision-making on natural resources use are separated from monitoring and control. Relevant departments in the Ministry of Natural Resources and Environmental Protection were established and assigned with the policy development and decision-making functions that were previously performed by specialized inspectorates. The tasks of issuing permits and enforcement are not separated.

Recommendation 1.3:

The Ministry of Natural Resources and Environmental Protection as well as other relevant ministries and institutions, when developing policy documents, such as strategies, plans and programmes, on environmental protection and natural resources use should always include a section on their funding. This section should clearly identify the necessary financing to achieve each objective and the sources of the financing.

¹ The second review of Belarus was carried out in 2005. During the third review, progress in the implementation of the recommendations in the second review was assessed by the EPR Team based on information provided by Belarus.

The recommendation has been implemented. The 2009 Resolution of the Council of Ministers No. 404 provides clear rules on financing of state, regional and sectoral programmes. Usually, programmes state only the overall estimated amount of financing per group of programme activities with details on the volumes and sources of financing for specific activities being settled in the process of budgetary planning for the upcoming year.

Strategies typically do not include provisions on financing. Implementation of strategies takes place through development and implementation of programmes.

Recommendation 1.4:

The Ministry of Natural Resources and Environmental Protection should initiate the introduction of modern and effective tools for environmental management and the protection of natural resources, such as integrated permits, taking into account the application of best available techniques (BAT); eco-labelling; and environmental management and audit scheme (EMAS) into environmental legislation.

The recommendation has been implemented. Belarus enabled the integrated permitting of large enterprises and started its practical use through the National Strategy for Implementation of Integrated Environmental Permitting for 2009–2020. The policy and legal framework for integrated permitting was created in the period 2009–2011. The competences of the state authorities were established and the national BAT Centre was created. Some preparatory work was done for competent authorities and those subject to regulation. A preliminary list of some 300 installations subject to integrated permitting was established. No listed installation would be allowed to operate without an integrated permit, as of 2016. As of early 2015, there were eight large installations that had already obtained their permits. Work remains to be done on building capacity on preparing applications and issuing permits, translating and adapting BATs, developing the control system and enhancing the public participation component. The integrated permits cover only air, water and waste issues. Other issues, such as energy efficiency, noise or soil protection, can be included in the permit but are not mandatory and are regulated by respective legal acts and technical regulations.

Voluntary approaches to environmental management are emerging, especially among enterprises that work in markets where environmental management systems are largely applied. There are 343 enterprises certified according to the national environmental management system of certification, as compared with 72 holders of ISO 14000 certificates. Tax abatement is foreseen for enterprises implementing the national STB ISO 14001 system.

The legal framework for eco-labelling is broadly based on international (ISO 14024) and EU requirements. A few standards have been established so far for non-food products. However, the practical implementation of product eco-labelling is lagging. No independent body for environmental certification of products is in place. There is no public pressure on producers and no incentives created by the Government (e.g. public procurement) to support eco-labelling. The established environmental criteria are perceived as unfeasible by many producers; consequently, many of them are not motivated or interested in receiving the eco-label.

Chapter 2: Compliance and enforcement mechanisms

Recommendation 2.1:

The Ministry of Natural Resources and Environmental Protection should optimize the human and other resources of the institutions responsible for permitting, supervision and enforcement by separating the authority to issue permits from that to enforce compliance. For this purpose, it may set up a department independent from the specialized inspectorates to deal with environmental permitting. MNREP should also reassess the role of the specialized inspectorates in order to strengthen their supervisory capacities and enforcement functions.

The recommendation has been implemented. The institutional set-up was modified. The separation of policy- and law-making from permitting and enforcement was put into practice, though not completely. Specialized inspectorates were abolished in 2010. The inspection and permitting functions were transferred to the territorial bodies. The Ministry kept some functions on issuing permits and carrying out environmental assessment.

At the subnational level, issuing permits is mostly concentrated in the oblast committees while enforcement of regulations and permit requirements is mainly performed by the rayon/town inspection units. However, overlap remains between the issuing of permits and inspection activities. Rayon/town inspectors are still entrusted to

issue permits for small installations (e.g. on industrial waste management or air emissions). On the other hand, oblast staff from permitting units often support the rayon inspection units with checking compliance with permit requirements. According to the 2007 Resolution of the Ministry of Natural Resources and Environmental Protection No. 17 as amended by the 2010 Resolution No. 25, the staff of the Ministry of Natural Resources and Environmental Protection at national and oblast levels still have full inspection powers. The Ministry is in an advanced stage of finalizing the complete separation of those functions.

Recommendation 2.2:

The Ministry of Natural Resources and Environmental Protection should consider introducing integrated environmental permits and draft appropriate legislation, including the necessary by-laws. The changes should ensure that permits contain requirements for a high level of protection of the environment as a whole and a reduction in emissions based on the comparison with the best available techniques.

This recommendation was implemented. See the implementation of Recommendation 1.4.

Recommendation 2.3:

- (a) *The Ministry of Natural Resources and Environmental Protection should develop the necessary legislation to regulate the rights and obligations of environmental inspectors and the enforcement of self-monitoring requirements;*
- (b) *The Ministry of Natural Resources and Environmental Protection should ensure that self-monitoring requirements are included in the permits, data obtained from self-monitoring are used as part of the general monitoring system, and uniform quality assurance requirements apply to both governmental monitoring and self-monitoring systems.*

This recommendation was implemented.

The system of inspection has seen improvements. The 2009 Decree of the President No. 510 created a unified legal framework for enforcement agencies' activities. Due to changes in the legal basis, inspections have become more coordinated across various competent authorities, within the environmental sector and outside it. Mandates of various inspection authorities are now better differentiated, and powers of inspectors clearer. Detailed mandatory checklists were introduced for preparing site visits, and also as a measure for strictly framing the inspection.

Self-monitoring requirements are included in the permits and are enforced by environmental inspectors. They are part of mandatory inspection checklists. The Code on Misdemeanours foresees sanctions for not providing information on environmental pollution in due terms.

Sampling and laboratory analysis within the enterprise self-monitoring system must be done by accredited laboratories. Quality assurance mechanisms are established. Methodological guidance for measurements is assigned to the Republican Centre for Analytical Control in the Field of Environmental Protection under the Ministry of Natural Resources and Environmental Protection.

Self-monitoring data reported by the largest polluters (through the system of local monitoring) are part of the National Environmental Monitoring System. The issue is now to achieve a level of data processing that would allow integrating pollutant emission data into environmental quality forecasts.

Chapter 3: Information, public participation and education

Recommendation 3.1:

The Ministry of Natural Resources and Environmental Protection should:

- (a) *Transform its local monitoring programme, step by step, into a full-fledged national PRTR which, among other things, should cover releases and transfers of the main pollutants from major point sources, accommodate available data on releases from diffuse sources (e.g. transport and agriculture), present standardized, timely data on a structured, computerized database, and be publicly accessible through the Internet, free of charge;*

- (b) *In cooperation with the Committee on Land, Geodesy and Cartography under the Council of Ministers and within the framework of the National System of Environmental Monitoring, take the necessary measures to establish and develop land monitoring; and*
 - (c) *Speed up the accession of Belarus to the PRTR Protocol to the Aarhus Convention.*
- (a) This part of the recommendation is not yet implemented. In 2013, a pilot project on a national PRTR was carried out. The draft PRTR database comprises data on seven enterprises from Grodno Oblast. The enterprises voluntarily provided data on releases and transfers of the main pollutants from major point sources and on releases from diffuse sources. So far, enterprises have not agreed to make data publicly available. PRTR is technically feasible in the country but the appropriate national legislation and regulations to support it are not yet in place. It is also necessary to convince enterprises to submit the data directly to an entity responsible for management of the national PRTR. At present, work is continuing on the further development and improvement of the technical and legal basis for the national PRTR.
- (b) This part of the recommendation has been implemented. In 2007, as part of environmental monitoring, land monitoring was established based on the 2007 Resolution of the Council of Ministers No. 386, which approved the Regulations on the procedure for conducting land monitoring as part of the National Environmental Monitoring System in the Republic of Belarus and using its data. Land monitoring is also regulated by the 2009 Resolution of the State Property Committee No. 68, which approved the Instruction on the organization of land monitoring, and TCP 17.13-02-2008 “Environmental protection and use of nature. Environmental monitoring. Procedure of carrying out observations on chemical pollution of lands”. Land monitoring is carried out through a system of ongoing observations of the state and changes in composition, structure and state of land resources, and distribution of lands according to the categories of land uses and types, e.g. agricultural lands, and urban areas and road networks.
- (c) This part of the recommendation is not yet implemented. Belarus is working on accession to the PRTR Protocol but is not yet a Party.

Recommendation 3.2:

The Ministry of Health, jointly with the Ministry of Natural Resources and Environmental Protection, should review the national ambient environmental quality standards to:

- (a) *Make the standards consistent, to the maximum extent possible, with international air- and water-quality standards and monitoring guidelines, and set time schedules to phase in monitoring of the standards that are currently not measured, as well as the revised or new standards that cannot be introduced immediately;*
- (b) *Upgrade monitoring stations, equipment and devices, and analytical laboratories, and retrain staff to measure environmental quality against the revised list of standards.*

This recommendation is implemented.

- (a) Belarus has made progress in revising and updating its extensive set of ambient environmental standards to make them compatible with international air and water quality standards. This relates, above all, to a trend of making the Belarusian environmental regulatory framework on air and water quality consistent with international standards. The air and water quality regulations are based on limiting the maximum acceptable concentration (MAC) of a hazardous substance into air or water. As of 1 January 2015, there were 654 MACs for air pollutants and 1,324 MACs for pollutants in the water bodies designated for water supply of the population and bathing waters, which were set up by the Ministry of Health. In general, these norms are consistent with relevant norms recommended by the WHO and stipulated in the EU directives. In addition, many technical regulations, rules and procedures for monitoring air and water quality have been formulated or revised. The harmonization of national environmental standards with international standards intensified recently. Over the last few years, seven national standards on the procedures for water quality sampling and testing and a standard on monitoring small particles in air, which are identical to ISO standards, were approved.

- (b) Monitoring stations for observations of air and water quality, which have been operating under the National Environmental Monitoring System, were upgraded. Up-to-date equipment, including 16 automated gauges, has been used for air quality monitoring; the level of groundwater tables is measured in 126 observation wells with automated gauges, also. Laboratory equipment for testing of air and water samples has been upgraded in order to measure concentrations of a wider range of substances. The requirements for analytical laboratories carrying out water sampling and testing for hydrochemical monitoring of surface water have been specified in the recently approved technical regulation TCP 17.13-12-2013.

Recommendation 3.3:

- (a) *The Council of Ministers should streamline the natural resource cadastres to oblige the responsible ministries and institutions that have not done so yet to establish databases that:*
- *Present standardized, timely and computerized data;*
 - *Are searchable according to key parameters;*
 - *Are user-friendly in their structure and provide links to other relevant databases;*
 - *Are publicly accessible through the Internet, free of charge; and*
 - *Have only limited confidentiality provisions.*
- (b) *The Ministry of Natural Resources and Environmental Protection, jointly with the Ministry of Statistics and Analysis, should update the national system of environmental indicators to make it consistent with indicators used in Europe and worldwide, and to facilitate international comparisons.*

Implementation of the recommendation is ongoing.

- (a) State cadastres are standardized. As of March 2015, while cadastres for air, flora, fauna and waste are not yet publicly accessible, but available upon request, the others are already publicly accessible and free of charge, and do not have limited confidentiality provisions. They are not connected to other relevant databases. This feature will be implemented through a web portal with GIS features, which is currently under development within the Ministry of Natural Resources and Environmental Protection. More detailed information can be found in the register of information resources (<http://infores.mpt.gov.by/>).
- (b) In 2010, the National Statistical Committee (Belstat), together with the Ministry of Natural Resources and Environmental Protection, Ministry of Housing and Utilities, and State Committee on Property, developed the “System of core environmental indicators of the Republic of Belarus” based on Guidelines for the Application of Environmental Indicators in Eastern Europe, Caucasus and Central Asia (now referred to as Online Guidelines for the Application of Environmental Indicators, ECE). The system is currently available on Belstat’s website (<http://belstat.gov.by>). In 2014, Belstat started implementing on its website a set of core indicators based on the Shared Environmental Indicators System (SEIS). Indicators are comparable at the international level and available in Russian and English. As of 2015, they cover statistics of air protection, ozone layer depletion, climate change, water, biodiversity, waste, application of fertilizers, passenger turnover and energy. Since 2015, Belstat, in cooperation with relevant bodies, is expanding access to other environmental indicators.

Recommendation 3.4:

- (a) *The Ministry of Natural Resources and Environmental Protection should initiate the revision of:*
- *The Law on Environmental Protection to include detailed procedures ensuring public participation in decision-making regarding environmental permitting, standard-setting, environmental fund expenditures and development of laws, regulations, strategies, plans and programmes affecting the environment; and*
 - *The Law on State Ecological Expertise and relevant regulations to include such important issues as: how to inform the public about the possibilities for receiving and commenting on EIA documentation, deadlines for submitting comments, modalities of public hearings, how the proponent should handle the public’s comments and inform both the public and the State ecological*

expertise authorities how comments have been taken into account, and how to inform the public about the final decision taken by the State ecological expertise authorities.

- (b) *The Ministry of Justice, in consultation with the Ministry of Natural Resources and Environmental Protection, should draft proposals to make the legislation consistent with the Aarhus Convention regarding public access to justice, in particular the right to challenge acts and omissions by private persons and public authorities that contravene national environmental legislation.*
- (a) The recommendation has been partially implemented.
- The draft amendments to the Law on Environmental Protection and several other laws, which are in the parliamentary procedure as of April 2015, aim to provide for public participation in decision-making regarding development of legislation and strategic documents affecting the environment. As the standard-setting process takes place through the approval of standards by regulatory legal acts, standard-setting will be covered by public participation requirements when public participation in decision-making regarding regulatory legal acts is ensured. No procedures for public participation in decision-making regarding single-media permits exist. There are procedures for public participation in decision-making regarding integrated permits.
 - The 2009 Law on State Ecological Expertise, adopted in place of the 1993 Law, was followed by the 2010 Resolution No. 755 of the Council of Ministers which approved the Regulations on state ecological expertise and the Regulations on environmental impact assessment. The majority of issues mentioned in the recommendation were taken into account in the Regulations on environmental impact assessment. However, the Regulations do not provide for the obligation of the proponent to inform the public on how the public's comments have been taken into account.
- (b) The recommendation has been partially implemented. Some changes to the legislation were introduced but inconsistencies regarding access to justice remain. These have been analysed in two studies conducted under the auspices of the Aarhus Convention's Task Force on Access to Justice in 2012 and 2014. They include: limited standing of environmental NGOs (public associations, institutions and other organizations); high costs of litigation (including court fees, payments to experts and lawyers, and the requirement that the losing party recovers the costs of the winning party); lack of opportunities to receive qualified legal aid; restricted opportunities of citizens and environmental public associations with regard to the right to challenge acts and omissions by private persons and public authorities that contravene national environmental legislation (Article 9, paragraph 3, of the Aarhus Convention); refusals of courts to accept environmental cases on the basis of lack of jurisdiction; and poor awareness and capacity of judges and prosecutors to handle environmental cases initiated by citizens and environmental public associations.

Recommendation 3.5:

The Council of Ministers should review the current legislation and regulations regarding the registration and operation of public associations and initiate the adoption of amendments that would create a supportive framework for such associations, including environmental NGOs, and enable Belarus to comply with its obligations under the Aarhus Convention. It should include NGO representatives on the National Commission on Sustainable Development.

The recommendation has been partially implemented. However, the framework for the activities of environmental NGOs is not yet supportive. The number of environmental NGOs registered in the country remains very low.

The 2013 amendments to the 1994 Law on Public Associations eased the requirements for territorial representation of founders of republican and local public associations. At least 50 founders coming from the majority of oblasts and Minsk City are now required for the registration of a republican public association, contrary to the pre-amendments requirement for 10 founders from each of the majority of oblasts and Minsk City. At least 10 founders coming from two or more administrative and territorial units of the territory to be covered by the activities of the local public association are now required for the registration of a local public association, contrary to the pre-amendments requirement of having at least 10 founders from the majority of

administrative territorial units of the territory to be covered by the activities of the local public association. The 2013 amendments also lifted the requirement to present in graphics the organizational structure of a public association.

However, the requirement for a public association to have an official seat in non-residential premises, the high number of founders needed, together with remaining requirements for the territorial representation of founders, continue to be obstacles for registration of environmental public associations. Although the legal requirements for registration of environmental public associations are the same as for other associations, environmental NGOs report that registering a public association on environmental protection is more difficult than in some other areas (e.g. education). Under these conditions, some environmental groups operate unregistered or register in the form of “institutions” or in other forms, as this is easier than registration in the form of public associations.

Difficulties in access to financing represent another obstacle for the activities of environmental NGOs. The opportunities to receive national funding are limited. Assistance arriving from abroad (not only for NGOs but also for projects implemented by international organizations and governmental bodies) needs to go through procedures of governmental approval and registration.

The National Commission on Sustainable Development was dissolved in 2009.

Recommendation 3.6:

The Ministry of Education should speed up the establishment, in close cooperation with the Ministry of Natural Resources and Environmental Protection, of the inter-agency coordinating council on education for sustainable development with the participation of all stakeholders, including NGOs and the mass media. The council should support and monitor the implementation of the national multilevel integrated programme for environmental education and awareness raising for 2005-2010, once adopted by the Council of Ministers, and initiate other actions to promote and facilitate the implementation of the ECE Strategy for Education for Sustainable Development.

The recommendation has been partly implemented. The interministerial Coordination Council on ESD was established by the 2006 Order of Ministry of Education No. 807. The Council is composed of representatives from the Ministries of Education, Natural Resources and Environmental Protection, and Culture; universities, schools and national educational institutions; civil society and the mass media. It is chaired by the Deputy Minister of Education and should convene twice a year. However, since its establishment, the Council has convened only two times. No meeting reports or action plan of the Council were available at the time of writing the current review.

Chapter 4: International agreements and commitments

Recommendation 4.1:

The Ministry of Natural Resources and Environmental Protection should continue to introduce proposals to develop new and revise existing legislation according to Belarus's obligations under international agreements. The recommendations, contained in the National Sustainable Socio-Economic Development Strategy for the period to 2020, to harmonize national environmental legislation with the principles and norms of international environmental legislation should serve as guidelines. Speedy adoption and development of mechanisms for implementation of the law on environmental information in accordance with the Aarhus Convention should be a priority.

The implementation of the recommendation is ongoing. The Ministry of Natural Resources and Environmental Protection continues to introduce proposals to update existing legislation according to the country's international obligations. Most of the legal provisions stemming from the international environmental agreements were transposed into the country's legislation. In 2007, provisions on access to environmental information were introduced in the Law on Environmental Protection but a part of environmental information remains outside the scope of this Law.

Recommendation 4.2:

The Council of Ministers should take measures to change the rules and procedures for the approval of international technical assistance for environmental protection so as to significantly simplify and expedite the process.

The recommendation was partially implemented, though as of early 2015 the procedures for the approval of international technical assistance for environmental protection remained still far from being simple and expeditious.

There are two main procedures for approval of international funding: the procedure for “international technical assistance” and the procedure for “foreign grant aid”. NGOs report the lack of clear criteria for differentiation between the two procedures. There are cases when, due to delays or the impossibility of receiving governmental approval, NGOs had to return funding to the donor.

The first procedure, for “international technical assistance”, is through the Ministry of Economy and applies to assistance arriving from international organizations, foreign governments and their administrative and territorial units. This procedure culminates in the approval given through a resolution of the Council of Ministers or, in some cases, by the Commission on International Technical Assistance under the Council of Ministers. In 2010, this procedure was eased as the possibility of approval by the Commission on International Technical Assistance (instead of a resolution of the Council of Ministers) was introduced for two categories of projects: (i) national implementation projects where all funding is received by one national recipient; and (ii) mini-projects with overall funding of no more than 3,000 basic units and an implementation period not exceeding one year. Moreover, projects developed on the basis of the 2012 National Programme of International Technical Cooperation for 2012–2016 do not require the approval, but only registration. Despite these efforts to ease the procedure for “international technical assistance”, environmental NGOs characterize it as difficult and lengthy, whereas governmental authorities stress the need to raise the quality of documentation submitted for approval. The average time to get approval differs in the estimates given by NGOs and by the governmental authorities.

In July 2015, the Resolution of the Council of Ministers No. 590 (enters into force in October 2015) introduced changes in the procedure for international technical assistance. In particular, the number of documents to be submitted for approval and registration of assistance was reduced. The Resolution provides for establishment of a Coordination Council on international technical cooperation with participation of governmental authorities, donors and NGOs under the Commission on International Technical Assistance.

The second procedure, for “foreign grant aid”, is through the Department of Humanitarian Activity under the Affairs Management Department of the President. In this procedure, until 2015, NGOs were requested to present a letter of support from a governmental body as part of the procedure, contrary to the absence of such a requirement in the legislation. The Edict of the President No. 5 “On foreign grant aid” was adopted in August 2015 and comes into force in March 2016. The Edict widens the list of goals for which foreign grant aid can be used, including the goals of “development of specially protected natural areas, environmental protection and rational use of natural resources”. For the first time ever, the Edict introduces the minimal amount of foreign grant aid that does not require registration; however this threshold applies only to goods (property) and does not apply to monetary contributions. The Edict introduces an obligation of recipients to report about use of foreign grant aid to the Department of Humanitarian Activity and in general tightens the control over use of foreign grant aid.

Recommendation 4.3:

The Ministry of Natural Resources and Environmental Protection should:

- (a) *Finalize the necessary documents for the ratification of the Espoo Convention and the Copenhagen, Montreal and Beijing Amendments to the Montreal Protocol;*
- (b) *Prepare necessary documentation to proceed with ratification of the Protocol on SEA to the Espoo Convention, the Protocol on Volatile Organic Compounds to the LRTAP Convention, and the Protocol on PRTRs to the Aarhus Convention; and*
- (c) *Continue preparing national strategies and action plans for the implementation of conventions where such documents are lacking. MNREP may wish to continue applying for external funding to build up its capacity.*

- (a) This part of the recommendation was implemented. Belarus became a Party to the Espoo Convention in 2005 and to the Copenhagen, Montreal and Beijing Amendments to the Montreal Protocol in 2007.
- (b) This part of the recommendation is not yet implemented. The Ministry of Natural Resources and Environmental Protection is working first to harmonize the legislation with the legal requirements of the SEA Protocol of the Espoo Convention and build capacity for implementation. In particular, the following activities were implemented:
- Projects on establishment and development of administrative and institutional capacity with a view to effective application of SEA and its integration into planning process;
 - Analysis of the current legislation and law-enforcement practice;
 - Development of methodological recommendations and an information guide on SEA;
 - Pilot SEAs of the National Tourism Development Programme for 2011–2015, Programme for Development of Inland Water and Maritime Transport in the Republic of Belarus for 2011–2015, and Scheme of the Complex Territorial Organization of the Myadelsky Rayon;
 - Two training trips to the Czech Republic for exchange of experience of SEA application, several training sessions on SEA at national and local levels, and a subregional conference on exchange of experience and appropriate practice of application of the Espoo Convention and its Protocol.

The country has started preparatory work to join the Gothenburg Protocol to Abate Acidification, Eutrophication and Ground-level Ozone, which contains provisions of the VOC Protocol.

For the PRTR Protocol, see implementation of the recommendation 3.1(c).

- (c) The implementation of this part of the recommendation is an ongoing process. The Ministry of Natural Resources and Environmental Protection is responsible for 21 multilateral environmental agreements and develops related national strategies and action plans. Examples include the 2011 National Plan of Implementation of the Republic of Belarus under the Stockholm Convention on Persistent Organic Pollutants in 2011–2015, approved by the 2011 Decree of the President No. 271; 2015 Strategy on Implementation of the United Nations Convention to Combat Desertification in Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa, approved by the 2015 Resolution of the Council of Ministers No. 361; and 2009 Strategy on Implementation of the Convention on Wetlands of International Importance, especially as Waterfowl Habitat, approved by the 2009 Resolution of the Council of Ministers No. 177. In 2015, a strategy on preservation of bogs and rational use of peat fields is under development. The strategy for the conservation and sustainable use of biological diversity was updated.

Recommendation 4.4:

- (a) *The Ministry of Natural Resources and Environmental Protection should analyse the results of implementation of bilateral and multilateral agreements and other forms of bilateral cooperation. Based on this analysis, it should identify the priorities for cooperation and concentrate its resources on them. It should integrate this analysis in its annual reports to the Ministry of Foreign Affairs;*
- (b) *The Ministry of Natural Resources and Environmental Protection should finalize preparations for signing intergovernmental agreements with neighbouring countries on the use and protection of water resources of the Daugava/Zapadnaya Dvina, Neman/Nyamunas, Dnepr and Zapadnyi Bug river basins and other bilateral agreements currently being negotiated. Once the agreements come into force, it should, as a matter of priority, develop practical steps to make them fully operational.*
- (a) This part of the recommendation is implemented. The Ministry of Natural Resources and Environmental Protection has to report on the implementation of bilateral and multilateral environmental agreements and memoranda of understanding. These reports have to be accompanied by analysis of the implementation and results of implementation. Priorities for cooperation are drawn from these reports.

- (b) The recommendation is in the process of implementation for bilateral transboundary water agreements but has not been implemented for basin agreements. Bilateral transboundary water agreements of Belarus with the Russian Federation and Ukraine continue to function. In late 2014, Belarus submitted to Poland a proposal for a draft agreement on transboundary waters. As of early 2015, Belarus and Lithuania are working on a draft interministerial technical protocol on cooperation in the protection and use of water resources of the transboundary Neman river basin. There has been no progress on finalization and signing of basin agreements for the Daugava/Zapadnaya Dvina, Neman/Nyamunas, Dnepr and Zapadni Bug river basins.

Recommendation 4.5:

- (a) *The National Commission on Sustainable Development should prepare, by 2010, an analysis of the achievement of the medium-term goals and progress in the long-term goals of NSSD-2020. Based on this analysis, the Commission should consider revising the Strategy;*
- (b) *The Ministry of Natural Resources and Environmental Protection should be involved in all stages of the preparation of the national progress report on the millennium development goals, particularly with regard to goal 7. Based on the conclusions of the report, the Government should consider, where appropriate, setting higher targets than those in the millennium development goals to be achieved by 2015 to maintain the spirit of the Millennium Declaration.*
- (a) This recommendation was not implemented. The National Commission on Sustainable Development was dissolved in 2009. No implementation report for NSSD-2020 was prepared, though some assessment of implementation is found in NSSD-2030. NSSD-2030 was approved by the presidium of the Council of Ministers in February 2015.
- (b) This recommendation has been implemented. Official reports on MDGs implementation were prepared in 2005 and 2010. In 2012, a statistical book was issued with MDG-related data. The Ministry of Natural Resources and Environmental Protection was fully involved in the preparation of official reports. No higher targets were set. A new MDG implementation report is expected to be released by the Government in late 2015.

PART II: MOBILIZING FINANCIAL RESOURCES FOR ENVIRONMENTAL PROTECTION

Chapter 5: Financing for environmental protection

Recommendation 5.1:

The Council of Ministers should aim to improve the data collection system on environmental expenditures. It should coordinate efforts to improve the quality of these data. Particular focus should be placed on improving the definition and scope of environmental expenditure in line with international standards. Transfers between the public sector and enterprises should be rigorously reported and a distinction between enterprise and public resources made to avoid double-counting.

This recommendation has been implemented. Belstat publishes detailed statistics on annual environmental protection expenditures for the aggregate of the total economy. Data distinguish between (i) current and capital expenditures, and (ii) expenditures by main environmental domain. These expenditure data are not itemized for the main economic sectors, and they do not distinguish between the real sector and the government sector. Information on aggregate environmental expenditures financed from the government budget (central government, local government, general government) is published separately.

Recommendation 5.2:

The Council of Ministers should improve the mechanism for the use of resources of the environment protection funds. The improved mechanism should include:

- (a) *Identifying priorities where resources can make a significant difference;*
- (b) *Developing clear procedures for selection of the projects for financing. The cost-effectiveness of the projects should become an important appraisal and performance evaluation criterion;*

- (c) *Establishing specialized unit responsible for funds management within the framework of the Ministry of Natural Resources and Environmental Protection, in accordance with accepted standards of good governance for such institutions; and*
- (d) *Improving the reporting of the results achieved with the support from environment protection funds.*

This recommendation is not relevant. Effective 1 January 2012, the environmental funds (nature protection funds) were abolished together with the earmarking of revenues from various taxes and fees (environmental tax, fines and compensation for environmental damage) for financing environmental protection measures. Government environmental expenditures are now financed out of total revenue of the budgets of central government and local governments.

Recommendation 5.3:

The Ministry of Natural Resources and Environmental Protection, in coordination with the Ministry of Finance, Ministry of the Economy, Ministry of Taxes and Duties and other relevant governmental bodies should:

- (a) *Revise the number of pollution charges in order to make the system more efficient and cost-effective. The focus should be on those pollution charges that correspond to the environmental priorities, can be monitored at a reasonable cost and generate significant revenue;*
- (b) *Consider introducing charges on environmentally damaging products or transactions (e.g. on used batteries and tyres), which can ensure a more stable and predictable revenue stream for environmental purposes; and*
- (c) *Establish a transparent procedure that involves stakeholders for regularly revising and adjusting the rates. The primary objective of the system of charges should be pollution reduction rather than revenue raising.*

This recommendation has been implemented.

- (a) The number of environmental taxes was significantly reduced and now comprises only the air pollution tax, tax on wastewater discharge, tax on disposal and storage of enterprise waste, and tax on import of ozone-depleting substances. A problem remains the large number (more than 50) of air pollutants that are subject to payment of emission taxes.
- (b) A system for dealing with special waste streams became operational in 2013.
- (c) Since 2011, rates for environmental taxes are established in the Tax Code. Tax rates have been adjusted annually, mainly to prevent the erosion of revenues and incentive effects due to high inflation.

Recommendation 5.4:

The Ministry of Natural Resources and Environmental Protection, in cooperation with the Ministry of Economy and relevant sectoral ministries, should aim to identify priority environmental investment projects, which could be included in donor cooperation programmes. Cooperation programmes should evolve into more long-term multi-year strategic partnerships rather than individual ad hoc activities.

This recommendation is implemented. The 2012 National Programme of International Technical Cooperation for 2012–2016 includes a cluster with priority environmental projects. However, foreign financial assistance (loans, grants, etc.) in Belarus remains rather small, not only in the field of environmental protection.

PART III: INTEGRATION OF ENVIRONMENTAL CONCERNS INTO ECONOMIC SECTORS AND PROMOTION OF SUSTAINABLE DEVELOPMENT

Chapter 6: Environmental management in industry, energy and transport

Recommendation 6.1:

The Council of Ministers should develop a law on energy covering all aspects of the energy sector, including production, transport, distribution and consumption. The Law on Energy Saving and other energy-related legislation should become part of the law on energy with the necessary amendments.

This recommendation has not been implemented. A law on energy covering all aspects of the energy sector, including production, transport, distribution and consumption to transform the sector into a well-functioning competitive market has not been developed.

Recommendation 6.2:

The Council of Ministers should consider reforming the current energy tariff-setting policy and improve the entire energy chain with a purpose of creating a competitive energy market to make it more attractive to investments.

The recommendation has been partially implemented. Since 2015, active measures have been taken to address the problem of cross-subsidies. The 2010 Strategy for Development of the Energy Potential of the Republic of Belarus sets out the gradual 100 per cent elimination of cross-subsidies in tariffs for energy resources. The plan is to phase out preferential tariffs for natural gas and energy for certain legal entities and individual entrepreneurs and provide for household energy tariffs, which would cover at least 60 per cent of costs by 2015. There is no competitive energy market to make the energy sector more attractive to investments.

Recommendation 6.3:

(a) *The Ministry of Transport and Infrastructure, the Ministry of Natural Resources and Environmental Protection and other relevant governmental bodies, when finalizing the national programme to mitigate the environmental impact of transport, should give particular attention to:*

- *Updating the standards on exhaust emissions from mobile sources in line with those in force in the European Union;*
- *Setting specific targets for public transport, including targets for emission reductions and energy consumption for each transport mode.*
- *Setting regulations for the environmental impact assessment of new transport infrastructure and traffic restrictions for freight transit in environmentally sensitive areas.*

(b) *In connection with the implementation of this programme, the Government should establish a national coordinating centre to promote policies for sustainable development of the transport sector*

The recommendation has been partially implemented. Since 2005, air pollutant emissions from vehicles have declined as a share of total air pollution, despite the fact that the number of vehicles has increased dramatically. The transport sector remains a major source of air pollution, with the bulk of emissions of nitrogen oxides, carbon monoxide and VOCs. The number of motor vehicles has doubled in 10 years. Many of the vehicles are old and not equipped with catalytic converters.

Regular technical inspections of all motor vehicles at properly licensed diagnostic stations are mandatory. Half of the diagnostic stations are equipped with modern control equipment, while the other half need re-equipping. However, GOST standards on exhaust emissions (such as carbon monoxide, hydrocarbons and smoke) are outdated and have not been revised.

The 2013 Strategy for Reduction of Adverse Impacts of Transport on Atmospheric Air for the Period until 2020 was developed through joint efforts of the environment and transport sectors and approved by the Deputy Prime Minister. The Strategy covers all types of transport. The Strategy is accompanied by an action plan. One of the goals of the Strategy is to increase by 2020 the share of public transport with improved environmental performance and electric transport in settlements with a population over 100,000 inhabitants to 50 per cent. EIA of new transport infrastructure is covered by TCP 17.02-08-2012 and TCP 480-2013 (specifically for roads).

A national coordination centre to promote policies for sustainable development of the transport sector has not been established. However intersectoral cooperation between the national transport and environmental authorities takes place.

Chapter 7: Environmental management in agriculture and forestry

Recommendation 7.1:

(a) *The Council of Ministers should initiate the drawing-up of a comprehensive strategy document for the development of agriculture, which would integrate environmental aspects.*

- (b) *The Ministry of Agriculture and Food, in cooperation with the Ministry of Natural Resources and Environmental Protection, should analyse the environmental and agricultural aspects of the European Union's Nitrate Directive and Water Framework Directive and use their provisions as guidelines when improving national legislation and practice where applicable.*

The recommendation is implemented.

- (a) The State Programme on Sustainable Rural Development for 2011–2015, approved by the 2011 Decree of the President No. 342, makes an attempt to integrate environmental measures. It covers prevention of land degradation, conservation and restoration of reclaimed land, and reducing wastewater coming from the cattle-breeding complexes and farms. The Ministry of Natural Resources and Environmental Protection was involved in the preparation of the programme with regard to environmental issues.
- (b) The use of nitrates is regulated by the 2014 Water Code and reflected in the technical regulation TCP 17.06-08-2012 “Environmental protection and nature use. Hydrosphere. Procedure for setting emission limit values for chemicals and other substances in wastewater”.

Recommendation 7.2:

The Ministry of Agriculture and Food should initiate the creation of extension (advisory) services in agricultural committees in oblasts and rayons. Advisory services of other organizations and private consultants should also be encouraged in order to improve the level of agriculture in general and to be instrumental in integrating environmental aspects and good agricultural practices in production.

The recommendation is implemented. Coordination and advisory services at the regional level are carried out by regional associations (unions) of farms, committees on agriculture and food of the oblast executive committees, the Ministry of Agriculture and Food, and other agencies and organizations. The Ministry of Agriculture and Food's Council supports development of entrepreneurship in agriculture, discusses the draft regulations and supports farmers. The Council consists of two representatives from each regional association of farmers. Environmental issues are coordinated with the Ministry of Natural Resources and Environmental Protection and its territorial bodies.

Recommendation 7.3:

The Ministry of Agriculture and Food should promote organic production by creating a regulatory framework, a certification system and through extension (advisory) services. Among the first steps that it might consider are the development of a strategy, awareness raising seminars, education and training.

The implementation of the recommendation is ongoing. Belarus is at an early stage of development of organic farming. Currently, the Ministry of Agriculture and Food, in accordance with the 2015 Decree of the President No. 55, is developing the concept of the draft law on organic production. As of March 2015, organic production involves about 400 ha of agricultural land. The Ministry is promoting the development of technologies for the production of organic products based on the experience of other countries. To promote the products to the markets of western countries, accredited certification bodies in the EU are invited to certify domestic products.

Recommendation 7.4:

The Ministry of Agriculture and Food, the Ministry of Natural Resources and Environmental Protection, the Committee on Land Resources, Geodesy and Cartography, Ministry of Forestry, and other relevant bodies should give high priority to saving and restoring valuable wetlands when developing plans to rehabilitate ameliorated areas.

The implementation of the recommendation is ongoing. The Ministry of Natural Resources and Environmental Protection is responsible for implementing this recommendation. Preservation and restoration of valuable wetlands are considered as priorities when developing plans on rehabilitation of the reclaimed territories. Technical regulation TCP 17.12-02-2008 “Environmental protection and nature use. Territories. Procedure and rules for rehabilitation of developed peat lands and other disturbed wetlands and prevention of disturbance of hydrological regime of natural ecosystems during land reclamation” aims to ensure that environmental considerations are taken into account during rehabilitation of developed peat lands and other disturbed

wetlands. Repeated bogging has been carried out on an area of about 50,000 ha of the developed peat fields and other disturbed wetlands.

The 2012 UNDP project “Landscape approach to management of peat lands aiming at multiple ecological benefits” launched activities to convert degraded peat lands, formerly managed for intensive agriculture, to meadows that will be further used for mowing and pasture in the Bereza rayon of Brest Oblast. During the first stage of the project’s activities, around 200 ha of former arable lands were restored to grassland at two pilot sites.

The Yelnya Bog is 232 km². The Yelnya Bog is a home to 98 bird species and 11 plant species, all listed in the National Red Data Book. However, the bog was drying up for years. The problem arose from the construction of irrigation canals early in the 20th century, which caused a significant drop in Yelnya’s groundwater table, leading to annual fires. During the period 2007–2010, 40 cascade dams were constructed and the three main canals were blocked. Four dams were entirely funded from staff contributions. As a result, since 2008, there has been a 1 m increase in Yelnya’s groundwater level. The increase in the bird populations and original vegetation levels showed that the efforts provide sustainable progress. Since the project began, Yelnya Bog has faced no fire attacks.

Chapter 8: Ecotourism and biodiversity

Recommendation 8.1:

The Ministry of Sport and Tourism, in cooperation with the Ministry of Natural Resources and Environmental Protection, the Affairs Management Department of the President, tour operators and non-governmental organizations, should:

- *Develop an action plan for the new national programme for tourism development, to set clear priorities, identify sources of financing, and specify actions for the development of infrastructure and conditions in rural areas for the promotion of ecotourism.*
- *Adopt a set of tourism standards for certification based on international standards;*
- *Develop indicators based on international standards to monitor and review the development of tourism; and*
- *Develop and apply a certification scheme for ecotourism.*

The implementation of the recommendation is ongoing. Since 2005, two programmes have been implemented: National Tourism Development Programme for 2006–2010, revised in 2007 as the National Tourism Development Programme for 2008–2010, and the National Tourism Development Programme for 2011–2015.

As a result of the EU/UNDP project “Support to the development of a comprehensive framework for international environmental cooperation in the Republic of Belarus”, Belarus prepared proposals to harmonize its ecological certification with the EU legislation on ecological certification. A draft technical code of practice was developed (but is not yet adopted) within the project, to be used during voluntary ecological certification of services for guests/visitors.

Belarus applies international indicators to monitor and review the development of tourism. Tourism statistics consist of two main components: (i) statistics relating to capacity and occupancy (supply-side tourism statistics), and (ii) statistics relating to tourism demand. The former are collected via surveys filled in by accommodation establishments. Statistics on tourism demand refers to visits incorporating at least one overnight stay.

Recommendation 8.2:

The Ministry of Natural Resources and Environmental Protection should:

- *Draw up specific programmes and projects for those parts of the National Strategy and Action Plan on Biodiversity that have not been implemented and identify sources of financing for them; and*
- *Integrate those important bird areas and important plant areas, which are not yet part of the network of the specially protected natural areas, into this network.*

The implementation of this recommendation is ongoing. The Strategy for the Conservation and Sustainable Use of Biological Diversity for 2011–2020, approved by the 2010 Resolution of the Council of Ministers No. 1707 (revised by 2015 Resolution of the Council of Ministers No. 743), includes activities from the previous Strategy that were not implemented due to lack of funding. Funding for biodiversity conservation comes through the following plans and programmes:

- State Programme on the Development of Hunting for 2006–2015 (2005 Decree of the President No. 580);
- Republican Programme for Development of Fisheries for 2006–2010 (2006 Resolution of the Council of Ministers No. 535);
- State Programme on Development of Fisheries for 2011–2015 (2010 Resolution of the Council of Ministers, No. 1453);
- State Programme for Development of the System of Specially Protected Natural Areas for 2008–2014 (2008 Decree of the President No. 146);
- State Programme for Development of the System of Specially Protected Natural Areas for 2015–2019 (2014 Decree of the President No. 367);
- Action Plan on Conservation and Rational Use of European Bison for 2010-2014, approved by the Deputy Prime Minister on 28 November 2009;
- Action Plan on Conservation and Rational Use of European Bison for 2015-2019, approved by the Deputy Prime Minister on 12 June 2014.

Important Bird Areas and Important Plant Areas which meet the criteria of specially protected natural areas, are either already proclaimed as specially protected natural areas or will be proclaimed as specially protected natural areas in accordance with the 2007 Resolution of the Council of Ministers No. 1919 “On the scheme of rational siting of specially protected natural areas of national significance until 1 January 2015” and in accordance with the regional schemes of rational siting of specially protected natural areas of local significance which are approved by the oblast councils of deputies.

Recommendation 8.3:

The Affairs Management Department of the President, the Ministry of Natural Resources and Environmental Protection, and the State Committee on Border Guards should promote the creation of corridors for migratory species, particularly mammals, in specially protected natural territories, especially in the Belovezhskaya Pushcha National Park.

The implementation of the recommendation is ongoing. Corridors are provided for migratory species, especially mammals in protected areas: channels for bison migration through melioration channels (National Park “Bialowieza Forest”); passages for amphibians at the intersection of migration corridors and roads (Berezinsky Biosphere Reserve, National Park “Bialowieza Forest”); and corresponding road signs at the intersection of migratory corridors of wild animals with highways. Some projects are developed with Poland to create migratory channels for big mammals, between the two countries in Bialowieza Forest. Creating conditions for the safe crossing of wild animals of roads in protected areas is carried out in the framework of the establishment of the national ecological network.