

## THE BELARUSIAN AMENDMENT TO ANNEX B: A SERIOUS COMMITMENT OR JUST HOT AIR?

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Belarus has been at the margin of the Kyoto and Joint Implementation discussion so far. The presumption of investors may be that the same problems experienced with the Russian and Ukrainian governments and JI approval systems would be repeated with Belarus, just with the addition of the practical and political difficulties related to cooperation with an authoritarian regime. However, Belarus has recently initiated a novel process to join the Annex B of the Kyoto Protocol in order to become eligible to trade.

This paper focuses on:

- Why Belarus wants to join the Annex B of the Kyoto Protocol;
- The potential of the Belarusian amendment to the Annex B of the Kyoto Protocol to succeed;
- Belarusian preparedness and strategies on the Kyoto mechanisms; and
- Issues for and against the Belarusian participation in the Kyoto mechanisms during the first commitment period.

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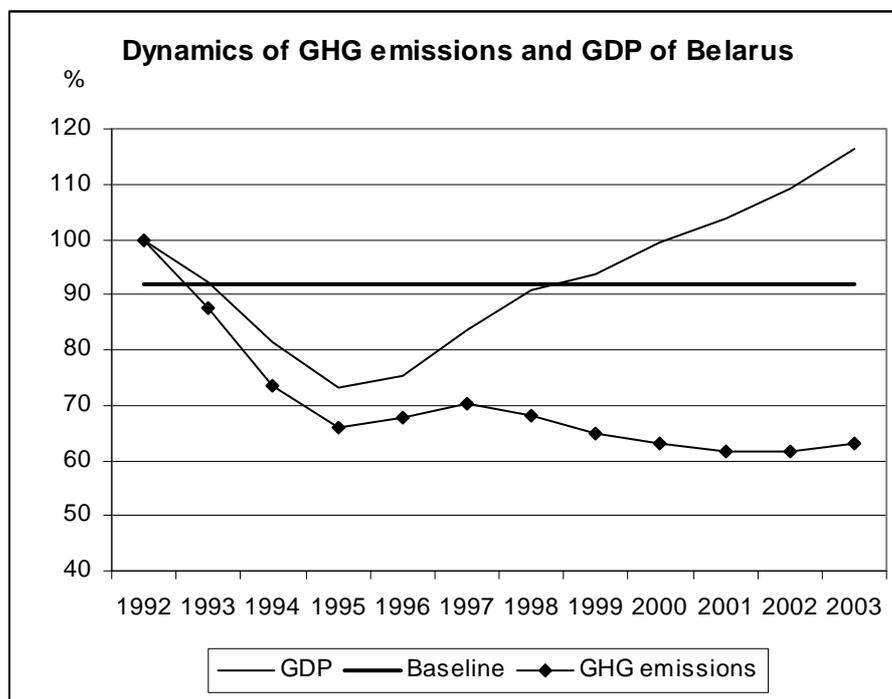
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## Belarus and the Kyoto Protocol

Like all the former Soviet Union countries, Belarus was a newcomer as an independent state during the Kyoto negotiations in the mid-1990s, and was not playing an active role in Kyoto in 1997. The country became a member of Annex I to the UN Framework Convention on Climate Change, but did not take on a quantitative commitment under the Kyoto Protocol, and therefore was not included in the Annex B of the Protocol like its neighbors Russia and Ukraine (The Kyoto Protocol; The UN Framework Convention on Climate Change).

Belarus ratified the Kyoto Protocol in August 2005 (N370). In 2006, the Belarusian government submitted an intention to keep emissions 5% below the 1990 level during the first commitment period to the UNFCCC (Decision 32/CMP.1). The Decision by the COP/MOP in Nairobi in 2006 approved the idea of Belarus being included in Annex B of the Kyoto Protocol, but with an 8% reduction of the 1990 level during the first commitment period (Decision 10/CMP.2). Belarus ratified the amendment in April 2007 (Grebekov & Tarasenko 2007).



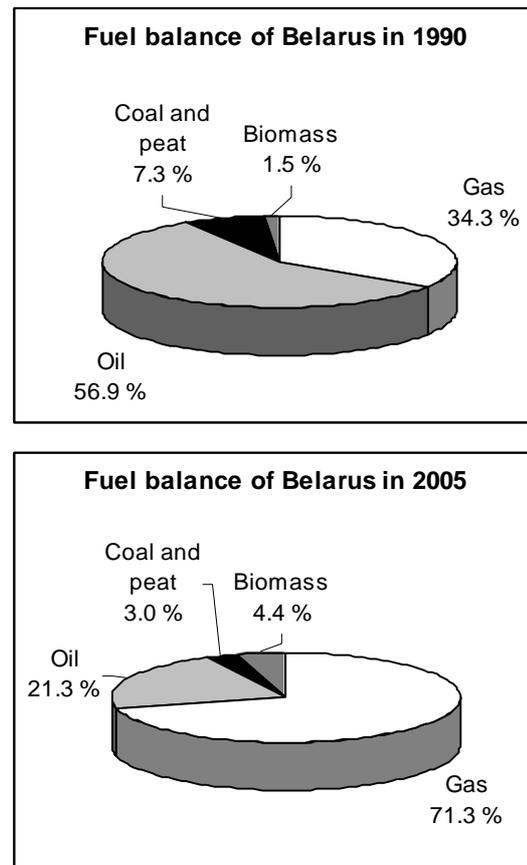
Graph 1 Development of GHG emissions and GDP in Belarus  
Source: IEA Database. Belarusian government (2006).

Graph 1 illustrates the development of Belarusian GHG emissions and GDP compared to the country's Kyoto baseline. Belarus has experienced the typical economic transition-related collapse of emissions in the early 1990s, and a growing trend since 1995. However, the trend has changed to a further reduction of emissions since 1997 while the GDP has continued to grow rapidly. As the decoupling of the GDP and the emissions is as dramatic as shown in Graph 1, some strong explanatory factors are clearly identifiable.

### Energy sector and GHG emissions

Belarusian fuel balance has changed dramatically since 1990, as a massive 'dash-for-gas' has taken place after the breakdown of the Soviet Union, as shown in Graph 2. The share of gas has increased from 34.3% in 1990 to 71.3% in 2005, while the share of oil has decreased dramatically together with coal. There are two main implications of this development. From the energy security point of view the country is very dependent on Russia which is increasing the prices of exported gas. Second, replacing oil and to some extent coal and peat by gas has reduced the Belarusian GHG emissions since 1990. However, this emission reduction may not be sustainable should the Russian

gas prices continue to rise, and if as a result Belarus switches back to coal<sup>3</sup>.



Graph 2 Dynamics of fuel balance in Belarus between 1990 and 2005.

Source: Grebenkov & Tarasenko 2007.

Energy security is a major issue in the Belarusian politics. Until 2006 Russia has been providing the country with significantly cheaper gas than the other former Soviet states due to the close alliance between the countries, at US\$ 47 compared to US\$95-160 to the neighboring countries (see Table 1). However, from the beginning of 2007 the price of gas was increased to US\$ 100 per 1,000 cubic meters. This cut of subsidies by Moscow is giving the

<sup>3</sup> Switching back to oil seems unlikely, as gas remains much cheaper than oil.

Belarusian government a serious reason to reconsider energy consumption in the country. The Deputy Prime Minister of Belarus, Andrei Kobyakov, told a press conference on 13 January 2007 that no lower gas prices were expected in the future, and therefore starting energy saving more quickly should be a priority (Belarus Council of Ministers 2007). However, the price hike was cushioned by Gazprom purchasing a 50% share of the Belarusian Beltransgaz, to be paid over the next four years, and the increased price Belarus charges for Russian gas transit through the country from US\$ 0.75 in 2006 to US\$ 1.45 for the following five years for 1,000 cubic meters per 100 kilometers. (Maksymiuk 2007).

Country	Price of gas before increase	Price of gas after increase
Belarus	US\$ 47	US\$ 100
Ukraine	US\$ 95	US\$ 130*
Georgia	US\$ 110	US\$ 235
Moldova	US\$ 160	US\$ 170
Europe	Approximately US\$ 230	

Table 1 Increases of FSU gas prices. Prices per 1,000 cubic meters.

\*Gas to Ukraine after the price increase comes from Turkmenistan.

Sources: BBC 27 December 2006; Whitmore 2006.

Probably mostly due to the energy security issue, Belarus introduced policies to reduce the energy intensity of the economy in the mid-1990s. These policies consist of energy efficiency legislation; establishment of energy

efficiency targets for sectors and regions including sanctions; establishment of a Committee of Energy Efficiency which monitors the compliance of sectors and regions on energy efficiency targets; increase of energy tariffs and cash collection of payments; allocation of budget funds for energy efficiency investments; fiscal and staff incentives for companies; and an awareness campaign (World Bank 2006, pp. 13-14). The targets established in 2002 include 4.5% annual reduction in total energy consumption in the state sector per unit of GDP, and 7% annual reduction of fuel and energy resources consumption in the state-owned productive sectors of the economy (UNDP website). The policies have brought tangible results, as energy intensity has been reduced by 25% in the period 2001-2006 (Pospelova & Kouzmitch 2001, pp. 560-562; World Bank 2006, pp. 13-14). These policies contribute to the sustainability of the GHG emission reduction, as structural changes are less likely to be reversed on short term than the choice of fuel.

Table 2 shows that Belarus has a low Total Primary Energy Consumption per GDP ratio compared to the other CIS countries, Russia and especially Ukraine, and that the country has reduced its carbon intensity significantly since 1992. However, the Belarusian economy remains dramatically more energy intensive than the European Union.

	1992	1994	1996	1998	2000	2002	2004
<b>Belarus</b>	3.03	2.53	2.63	2.13	1.93	1.80	1.61
<b>Russia</b>	2.47	2.61	2.67	2.62	2.36	2.16	1.95
<b>Ukraine</b>	3.53	4.03	4.75	4.48	4.16	3.67	3.19
<b>EU-25</b>	0.23	0.22	0.22	0.21	0.20	0.20	0.20

Table 2 Development of TPES / GDP ratio (tons of oil equivalent per thousand 2000 US\$) in Belarus, other CIS countries and the EU

Source: IEA Beyond 2020 database

	1992	1994	1996	1998	2000	2002	2004
<b>Belarus</b>	8.63	7.77	7.76	6.46	5.48	4.86	4.47
<b>Russia</b>	8.61	9.03	9.28	8.89	7.70	7.18	6.55
<b>Ukraine</b>	11.97	14.62	15.21	13.86	12.64	11.15	9.39
<b>EU-25</b>	0.62	0.59	0.56	0.54	0.49	0.49	0.47

Table 3 Development of greenhouse gas emissions / GDP ratio (Mt/Mln 2000 US\$) in Belarus, other CIS countries and the EU

Source: IEA Beyond 2020 database, UNFCCC database

Belarusian carbon intensity has been decreasing, as also shown in Table 3. Belarus has decreased the carbon intensity of its economy by almost half during 1992-2004, and it is performing much better than Russia and Ukraine. As a result of the energy efficiency policies and measures, part of the Belarusian GHG emission reduction since 1997 may be sustainable, and survive switching back to oil and coal should the price of gas further increase.

### **The Belarusian amendment to Annex B**

After suggesting an amendment to Annex B of the Kyoto Protocol, the next step in the procedure of becoming a member of Annex B - and being able to participate in the Kyoto mechanisms

- is to get 75% of the Kyoto Parties to ratify the amendment. The representative of Belarus was speaking strongly about the practical difficulties to facilitate this during the workshop on the Russian proposal on voluntary targets in Bonn in May 2007. In any case it seems unlikely that this would happen by the beginning of the first commitment period next year, and the whole issue might be politically difficult, as after all together with Belarus some 34.6 Mt CO<sub>2</sub> of potential hot air would enter the Kyoto system.

The Belarusian amendment to Annex B of the Kyoto Protocol is unprecedented. Only Turkey has the same position, i.e. is a member to Annex I of the Convention but not to Annex B of the Protocol, and is unlikely to suggest its

addition to Annex B, as the country could not foresee surplus AAUs becoming available for sale. The case of Kazakhstan includes some similar elements. However, Kazakhstan is regarded as a Non-Annex I country.

The problems with persuading an adequate number of Parties to ratify the amendment include the surplus allowances involved as well as bureaucratic delays. Even though it seems first of all unlikely that there would be much demand for the Belarusian 'hot air', allowing Belarus into Annex B certainly leaves a door open to this option. Secondly, it would be possible to bank the hot air, and therefore it could reappear during the subsequent commitment periods.

Belarus has addressed this problem by reducing the amount of surplus allowances to 34.6 Mt. As Belarus is not included in Annex B, it did not originally have a Kyoto commitment. In 2007, the country agreed on a commitment to keep its emissions 8% below the 1990 level. The country is also required to keep a commitment period reserve, in the case of Belarus equivalent to the 2004 emissions.<sup>4</sup> Keeping an additional 7% reserve has been voluntarily announced by the government (Ministry

of Natural Resources and Environmental Protection of the Republic of Belarus, 2006, p. 24). Belarus has also committed to not using sinks during the first commitment period, which could have contributed a further 11 Mt CO<sub>2</sub> to the allowance. However, the remaining surplus may still be too much for the other Parties. Graph 2 illustrates this emission budget.

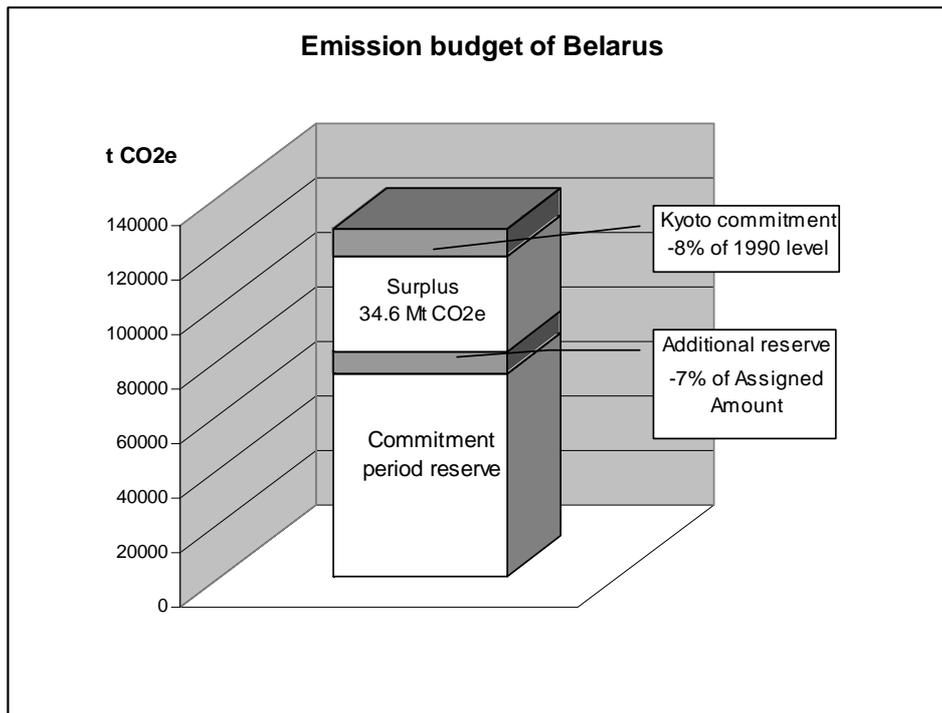
The Belarusian government has attempted to address this problem in various ways. First, the country has announced that all revenues from emissions trading will be reinvested in further emission reductions subject to the approval of the relevant Belarusian authorities (FCCC/KP/CMP/2006/10/Add.1).

According to a Belarusian expert, preparation of a Green Investment Scheme arrangement is under way.

Second, the country has decoupled the development of its emissions from the growth of GDP partly by the energy efficiency programme. Even though this is not an emission reduction policy alone but rather an economic policy, these activities are making available allowances which are backed by real emission reductions. Third, Belarus has a JI system in place that could channel investments into real emission reductions.

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<sup>4</sup> According to decision FCCC/CP/2001/13/Add.2, Parties should maintain either 90% of its allowance or 100% of five times its most recently reviewed inventory whichever is lower. In the case of Belarus, the latter applies as it is lower.



Graph 2 Emission budget of Belarus  
 Source: Based on Grebenkov & Tarasenko (2007).

Given all this, it is still likely to be difficult to convince the other Kyoto Parties to allow Belarus into Annex B, as after the country has become a Party there are no means to control the further implementation of the flagged domestic policies. As most governments have little experience in cooperating with Belarus, and may not agree with the domestic policies of the Belarusian regime (especially the US has a policy to promote democratic development in the country against the current regime, see for instance BBC 21 April 2005), it will be a challenge to provide enough evidence that Belarus will continue on the described track of policies.

### **Belarusian administration, foreign investment and Kyoto**

Belarus has been seen as a close ally to Moscow, and maintaining the authoritarian regime has discouraged foreign investors from getting involved in activities related to Belarus. Even the European Bank for Reconstruction and Development state that the Bank's activities have been limited in the country due to its slow progress in democratic and market transition (EBRD 2006, p.1). Also the World Bank has financed only very few projects in Belarus.

The main reason for Belarus to enter Annex B is to gain easier access to foreign investments, which the country's economy badly needs (Grebenkov & Tarasenko 2007). However, it could also be argued that the Belarusian government is reluctant to let foreign investors into the country. After a prompt start in 1993, privatization soon stalled and by 2006 only 30% of the medium and large companies had changed ownership. As little as 30% of the Belarusian stock capital was solely privately owned in 2006, while for 48% of the stock half or more of the shares remain state property (Kovalevski 2006). In addition, the 'golden share' law passed by a presidential decree in 1997 provides the state with the possibility for a *veto* over companies' boards on many key decisions such as reorganization or liquidation of the company and distribution of profits. The 'golden share' law was significantly expanded in 2003 to also allow government officials to intervene in business operations of companies for various reasons. The 'golden share' practices have also been applied to privately owned companies, since the expansion of the law.<sup>5</sup> Without a doubt, such interference by the state discourages investors, both foreign and

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<sup>5</sup> In 2005, the Gomel Regional Executive Committee (oblispolkom) introduced a golden share at the private company "MNPZ Plus," which owns 12.25% of the shares in the Mozyr Oil Refinery (the largest oil refinery and exporter in Belarus). As a result, the state, which already owned 42.76% of Mozyr Oil Refinery, became the majority shareholder with 55% of the shares. (Rakova 2006, p.17)

domestic, and further deteriorates the investment climate.

At the same time, the Belarusian effort to comply with Kyoto and to establish a domestic system for hosting JI projects is fairly impressive, especially compared to the other CIS countries. Within 18 months the country has ratified the Kyoto Protocol (February 2005); set up the domestic compliance institutions (April – May 2006); submitted GHG inventory; a National Communication, Initial Report and Progress Report (2006); established the legal and practical framework for JI project approval including an Interagency Commission (September 2006); and adopted a national emission reduction target (April 2007).

The speedy actions can be explained by the 'executive discipline', as the implementation power of the regime is called in Belarus. The country is still governed by a command-and-control type system, and therefore, if an issue is a high priority for the top leaders, the system may facilitate a speedy implementation, which is less likely to happen in the transition countries that have introduced more pluralistic elements and space for power struggles in their systems.

## **Belarus as a JI host**

There are no JI projects in Belarus to date. However, the government adopted JI project approval procedures in 2006 (N1144), and there is a potential for hosting JI projects, as many Belarusian opportunities would provide much cheaper emission reductions than those in the OECD. Belarusian experts expect the country to achieve full compliance under Kyoto, as domestic compliance instruments, namely GHG inventory, registry and national reporting, are in place as well as a domestic focal point (Grebenkov & Tarasenko 2007). The Ministry of Natural Resources and Environment has been the responsible ministry ever since the country joined the Framework Convention (N177) and is the national focal point for JI. The Scientific Research Centre 'Ecologia' has been named as the agency responsible for GHG inventories.

The Belarusian JI approval procedure introduces regional and central government-level actors as project applicants. Project Idea Notes will be first evaluated by the Ministry of Natural

Resources, which issues Letters of Endorsement. Project Design Documents are submitted to the Government Commission on Climate Change, which orders the Ministry of Natural Resources to issue Letters of Approval. Belarus does not require Memoranda of Understanding but is willing to sign one with the investor countries which do. It remains unclear whether any payments will be required for maintaining the domestic compliance system. However, no fee for project approval is foreseen.

Efficiency in the use of fuel and energy resources as well as increasing the share of the non-traditional renewable energy sources in the fuel mix are flagged as the national focus areas for JI projects (N1144). The types of JI projects available listed by the Belarusian government focus on energy, industry, municipalities and agriculture, as shown in Table 4. The majority of the projects fall into the first two categories: energy and industry.

Sector	Projects
Energy sector	Cogeneration schemes, Combine cycle, Hydro power, Fossil-to-biomass fuel switch
Industry, Construction, Transport	Energy saving, Wood/organic waste utilization, Heat pumps, N <sub>2</sub> O control, New cement production technologies
Municipal Sector Agriculture	Landfill gas utilization, Waste water treatment, District heating Agricultural waste treatment (biogas)

Table 4 The suggested JI project sectors

Source: Grebenkov & Tarasenko 2007.

Should the amendment of Annex B not be ratified by the required 75% of the Parties to the Kyoto Protocol in time, it has been suggested that Belarus could transfer the emission reductions achieved during the first commitment period to the second commitment period. There are problems with this approach however. First, there is no firm international commitment to a second commitment period of the Kyoto Protocol, and the negotiations on the post-2012 climate regimes are not very far as yet. Second, should a second commitment period be established, what would the national emission caps be based on? Under the next allocation of emitting allowances Belarus might not receive surplus allowances to cover the emissions reduced during the first commitment period, and as a result, might not have surplus allowances to transfer. Third, what would happen to such emission allowances should the Belarus regime fall before the allowances are transferred?

### **Conclusion: for and against Belarus joining Annex B**

It seems unlikely that the Belarusian amendment would be ratified by the required amount of Parties to the Kyoto Protocol in time for the country to participate in the Kyoto mechanisms during the first commitment period. First, it seems unlikely that Belarus would manage to gain a credible position of trust with 75% of the Kyoto Parties soon enough. Second, ratification of a document will take some time for most governments. However, should the Russian proposal on voluntary targets introduced in Nairobi in December 2006 be taken forward in COP-13 in Bali, it may contribute to the tempo of this process.

In order to convince other Parties, Belarus should probably further reduce the amount of surplus allowances by accepting a more demanding target. Investments can be attracted through JI even when a country has no surplus

emitting rights, as the projects reduce emissions by the same amount that is transferred from the Assigned Amount.

Belarus has implemented successful energy efficiency policies and measures, and established promptly the domestic institutional infrastructure required for compliance under the Kyoto Protocol as well as for hosting JI projects. Energy saving has a different urgency in Belarus compared to many other CIS countries, as the country is so dependent on the Russian gas which may become much more expensive in the future. Based on this, it looks like there was a genuine interest in improving energy efficiency as demonstrated by the policies implemented and results achieved. The state control over most economic activities in Belarus could support implementing JI projects in the country as bureaucratic delays may be avoided should the projects gain a position of government priority.

On the other hand, private sector actors including foreign investors have experienced severe complications in the country, the worst of which is probably the 'golden share' arrangement that allows the government to control any company which is not completely privately owned, and in some cases also private companies have been targeted. Such uncertainty is likely to discourage foreign investors especially from getting involved in project investments in

Belarus. Using Belarusian ERUs without a further involvement in the project itself to hedge risk in the carbon market may be a more acceptable option for investors. However, this may be a less desirable outcome for the Belarusian government.

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