



# Emission Trading System in the Post-Kyoto Period

In 1992, at the Earth Summit in Rio de Janeiro, the UN established United Nations Framework Convention on Climate Change, signed by over 150 countries. Signing the Convention meant an obligation to take action allowing to achieve stabilisation of greenhouse gases emission in the air at the level preventing permanent changes of the global climate, with the assumption of sustainable economic development of countries.

In 1997, in Kyoto, during the Third Conference of the Parties to the Convention, the international community signed the Protocol to Convention, undertaking to increase efforts aimed at limitation of greenhouse gases emission to air.

Poland ratified the Convention in 1994, and from 2002 it has acted as a party to the Kyoto Protocol.

European Emission Trading System functions on the basis of Directive 2003/87/EC. The Directive formulates objectives to be achieved on the basis of regulations adopted in national regulations. In Poland, the principles for the NAP functioning are regulated by the Act of 22 December 2004 on trading the rights to emit greenhouse gases and other substances to air. Within the Kyoto Protocol, Poland undertook to reduce greenhouse gases emission in the years 2008-2012 by 6% as compared to the level of 1988. In the case of CO<sub>2</sub>, CH<sub>4</sub> and N<sub>2</sub>O, the basis for Poland's undertaking is formed by the emission level of 1988, while in the case of PFCs, HFCs and SF<sub>6</sub> – these are emissions of 1995. In the years 2005-2007, emission targets of the Kyoto Protocol are not yet binding, although on the territory of the European Union a preliminary stage in emission trading scheme will be implemented in some economy sectors. In this early period, emission trading will only refer to carbon dioxide. In the years 2008-2012, i.e. in the period of application of the Kyoto Protocol, the emission trading scheme will also refer to other greenhouse gases (CH<sub>4</sub>, N<sub>2</sub>O, HFCs, PFCs and SF<sub>6</sub>).

Within the Kyoto Protocol, apart from emission trading system, two other mechanisms have been envisaged, namely Clean Development Mechanism (CDM) – investments made by authorised countries within the Emission Trading Sys-

tem on the territory of countries not covered by the Protocol – and Joint Implementation (JI) – investments made on the territory of countries covered by the Kyoto Protocol.

In the event where developing countries participate in the Emission Trading System, such countries will be entitled to greater emission of greenhouse gases, which will be compensated by its greater reductions in other regions. In such a situation, mechanisms indicated in the Kyoto Protocol become increasingly more important, particularly CDM and JI, which in the Post-Kyoto period (after 2012) may play an important role in aiding developing countries to use cleaner technologies or other solutions to reduce greenhouse gases emission. Potential investors should have ensured compatibility of credits gained from JI and CDM mechanisms with permits issued within emission trading, and should not be limited with any allowances as concerns changes of the reduction of the emission acquired into an IPPC permit.

In the National Allocation Plan (NAP), a total pool of allowances for each sector participating in the system was set, to be allocated among particular installations in the sector, based on specific principles set for each sector. Total pool of allowances to be allocated among the installations participating in the emission trading system has been set as 68% of average CO<sub>2</sub> emission level in the years 2005-2007, which allows for Poland's meeting the requirements of the Kyoto Protocol. The prognosis of emission demand of the sector has been set as an average value from three years in the period 1999-2002, after rejecting the lowest emission and correction with the adopted indices of emission demand incre-





ase in the sector. Also, a certain number of allocations has been reserved for new installations. In majority of sectors, allocation of the base pool among the installations has been performed on the basis of historical emissions (grandfathering), using individual allocation for particular installations. This allocation method assumes adoption of various production dynamics for particular installations. In case of power plants, coke plants, cement industry and sugar industry allocation methods have been applied based on the production volume, installation power capacity, or considering production capacity.

If the European Emission Trading System is adopted as the fundamental tool for reduction of CO<sub>2</sub> emission in the Post-Kyoto period, it should consider specific emission indices achieved in practice. Connecting of the emission trading with specific indices should allow for a more just approach to the problem and to prevent unfair practices.

### **Effectiveness**

European climate protection programme will support solutions that allow for joint production of heat and electric energy, greater use of renewable energy sources, improved efficiency at energy manufacturers' and more effective use of energy by energy recipients.

For construction materials industry, it will be important to prepare new products and to participate in preparation of new technologies in the construction industry, which will help to reduce heat losses from buildings. In the European Union, 40% CO<sub>2</sub> emissions are related to generation of energy for heating, thus potential improvement in this respect cannot be neglected. The Directive concerning the requirements

for buildings as concerns heat (2002/91/EC) is a step towards limitation of energy consumption for heating, and thus towards reduction of CO<sub>2</sub> emissions. The Directive so far only covers buildings with usable area in excess of 1000 m<sup>2</sup>. When thinking about the Post-Kyoto period, it seems that this Directive will require revision and extension of terms to be met by buildings of a smaller area, which have not so far been covered by the Directive.

### **Justice**

According to Directive 2003/87/EC, emission trading is a key tool for achieving emission reduction in the case of the sectors covered by the Directive. However, requirements of justice and solidarity adopted on formulation of emission targets indicate a necessity of covering other sectors with activities aimed at emission reduction, which have so far been excluded from the scheme. In order to reduce the CO<sub>2</sub> emissions from other sectors, such as transport, other mechanisms must be prepared, as simple extension of the system by sectors not covered by the Directive at the moment could lead to faults that could endanger operation of the entire system. It seems the transport should not be treated in the same way as energy-consuming industries because covering the transport sector with the Emission Trading System would not constitute an excessive burden for this sector. This could, however, lead to very unfavourable price relations at the emission trading market, which in the case of mineral industries, where CO<sub>2</sub> emission permit constitutes a significant share in the unit cost of production, would form a vast burden. Competitiveness of mineral industry in Europe would also be additionally impacted by increased prices of transport services in the event



of participation of the transport sector in the Emission Trading System.

The key issue is how to lead to globalisation of actions preventing climate change and to expand the activities worldwide. The issue is whether Europe will be followed by such countries in the international community which emit the largest volumes of greenhouse gases – the United States (over 20% of world emissions), China (about 15% of world emissions), India (over 5% of world emissions). If the EU is to convince other countries to undertake actions to reduce greenhouse gases emissions on the basis of the European model, it must be able to show that introduction of the provisions of the Kyoto protocol in Europe is just for all countries of the Union. This requirement of justice is the more necessary if the efforts aimed at limiting emissions are to be extended worldwide, where economic inequality is widespread. This must be done in a way joining three equivalent, fundamental factors: to be effective, just to all participants and not to limit competitiveness. Any deviations from the principle of equality of the three factors stated above will discourage other countries from following. Recent reports indicate (Tenth Session of the Conference, Convention on Climate Change in Buenos Aires) that the countries are not ready to make efforts towards limitation of their greenhouse gases emissions. The United States refused ratification, justifying their decision with infringing influence of the scheme on economic growth. China did not cooperate on the issue due to the position of the United States. India also places economic growth over the targets related to climate protection. During the Convention, there were also opinions on the part of the EU representatives

that continuation of the Emission Trading System after the year 2012 would be unjustified without participation in the scheme of the countries whose share in the global emission is significant, and which presently do not see opportunities to cooperate in this respect.

In the name of justice, renegotiation of the European agreement on emission reduction by particular countries may be necessary, so that it properly reflects the present emission volume per inhabitant.

