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Żmijewski, Krzysztof and Sokołowski, Maciej M.
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The Main Frameworks of the National Programme for the Reduction of Emissions: Towards the National Programme for Low-Emission Economic Development. The Public Board's Role

Krzysztof Żmijewski*, Maciej M. Sokołowski**

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Abstract

European climate and energy policy will have a great impact on the European and Polish energy markets. Moreover, it will have an influence on broad realms of social and economic activity. This raises the necessity of taking concrete strategic measures, especially on the governmental level. EU climate and energy policy also entails sizeable investment requirements and places important demands on the modernization programme for the energy sector. This spells the need to develop broad dialogue between the government and society.

The above gives the background behind the appointment of the biggest Polish think tank in 2009 – namely, the Public Board of the National Programme for the Reduction of Emissions. In the Polish context the authors herein analyze the European climate and energy package, European Union policy regarding the reduction of emissions, and the Polish efforts taken in this field. The authors also

* Prof. Dr. Krzysztof Żmijewski, Warsaw University of Technology; Secretary General of the Public Board of the National Programme for the Reduction of Emissions.

** Maciej M. Sokołowski, Executive Director of the Public Board of the National Programme for the Reduction of Emissions.

describe the role of the Public Board of the National Programme for the Reduction of Emissions and its tasks. In conclusion they present policy recommendations and results in the area of fulfilling European obligations and conducting an infrastructural modernization programme in Poland.

Résumé

Les politiques énergie-climat européennes auront un grand impact sur le marché de l'énergie européen et polonais. En plus, elles auront une influence sur les différentes sphères de l'activité sociale et économique. D'ici, la nécessité de réaliser des actions stratégiques spécifiques, surtout au niveau gouvernemental. Les politiques énergie-climat influencent aussi les besoins d'investissement et le périmètre du programme de modernisation dans le secteur de l'énergie. Il est alors nécessaire de promouvoir un vaste dialogue entre le gouvernement et la société.

Les résultats indiqués constituent un arrière-plan pour l'établissement du plus grand "think tank" polonais en 2009 – le Conseil Public du Programme National de Réduction des Émissions. Dans le contexte polonais, les auteurs analyseront le packet énergie-climat, les politiques de réduction des émissions de l'UE et les actions polonaises réalisées dans ce domaine. Les auteurs décriront aussi le rôle et les tâches du Conseil Public du Programme National de Réduction des Émissions. Dans la conclusion, ils présenteront les recommandations et les résultats dans le domaine de l'accomplissement des obligations européennes et de l'implantation du programme de modernisation d'infrastructure en Pologne.

Classifications and key words: Emission Trading System, energy, reduction of emissions, energy market, energy policy, climate and energy package.

I. Introduction

The National Programme for the Reduction of Emissions ("the National Programme") in its investment aspect is a legal remedy which will shape the structure of the Polish energy market in the field of energy sources. The National Programme will allow Poland to carry out the European "3x20" climate and energy package. The National Programme is to be submitted by the Polish government to the European Commission not later than by the end of September 2011, and is to show ways for achieving a reduction of CO₂ emissions by 21% by 2020 in the Emission Trading System area, and of limiting growth by 14% in the non-Emission Trading System area. This also means a 15% increase in the participation of Renewable Energy Sources in the final energy balance and a 20% reduction of energy use through the rise

of energy efficiency in the years leading up to 2020. According to assessments carried out by the Ministry of the Economy, the budget for these investment activities is 100 billion Euro by 2030, which fact required that the National Programme and related activities be initiated immediately.

It should be mentioned that although the name of the National Programme was altered from the National Programme for the Reduction of Emissions to the National Programme for Low-Emission Economic Development, the role of the Programme was not changed. It is still a document in which there will be set a primary rules for government activity in the area of meeting European Union climate obligations. Therefore in this article the authors will use “National Programme” both in the context of the National Programme for the Reduction of Emissions (NPRE) and the National Programme for Low-Emission Economic Development (NPLEED).

The National Programme and its proper implementation and realization will require high-scale investments. Their extent and type is presented on the tables below:

Table 1. The Polish Investment Programme

billions €		sector
90	100	Electric energy
15	20	Gas
~80	100	Heating and buildings
~80	100	Transport
265	320	by 2030
13.5 per year	16 per year	Annually

This effort should be compared with the famous Marshall Plan, which was ever so crucial for the European economy, and which embraced many countries for a period of 3.5 years.

Table 2. A New Marshall Plan

Marshall Plan	
<i>13.5 billion \$1948</i>	<i>90 billion €2009 22.5 billion € per year</i>
Modernization and Emissions Reduction Plan	
265 ÷ 320 billion €	
13.5 ÷ 16 billion €	

The current and predicted situation of the Polish economy suggests that by 2030 Poland will have to face an enormous undertaking in respect of investments that – to a significant degree – will have to be financed from individual funds. This of course does not mean that there will be no scope for the involvement of foreign investors. However, it indicates that it is necessary to realize that these investors will expect a decent return on the capital they have put in (which is generally higher than the costs of instruments such as loans). In other words, as we demonstrate below, Poland needs a huge infrastructure modernization programme.

Meanwhile European Union obligations mean that this programme must simultaneously be a National Programme. As in any great undertaking, a proper diagnosis of the situation must precede any later activities. In this case, the priority is knowledge of the degree of technical depreciation of fixed assets, i.e., knowledge of the degree of the technical exploitation of Poland's infrastructure. This task can be carried out in four phases:

Firstly, it is necessary to define the primary value of each of the components of the infrastructure in question;

Secondly, we must define (and adopt) a maximum life-span for a given facility; for example, in the case of a coal-based condensation power plant this is 40 years, and these 40 years yield a rate of technical depreciation of

$$\frac{1}{40} \cdot 100\% , \text{ i.e. } 2.5\% \text{ p.a.};$$

Thirdly, 2.5% of the primary value must be added per year; the sum obtained after this is done reflects the actual value of technical depreciation;

Fourthly, all current redemptions should be identified and divided by the sum of the primary values of all of the elements of constant assets in a given company, sector, or the economy.

The end result arising out of these calculations illustrates the percentile rate of technical exploitation of infrastructure. If the result is equal to 0% then the infrastructure is new, if it is 100% then it is completely exploited – i.e., there is no guarantee that it will continue to work properly. The algorithm is very simple insofar as a set of assets is inventorized and technical depreciation is calculated and added on a regular basis¹.

The fundamental problem that Poland faces is that such inventorization has not been officially carried out. As a result, we are unable to precisely define the level of technical depreciation of the country's infrastructure. Thus, the need to elaborate and conduct an exacting National Inventorization Programme is exigent.

¹ See more M. Kleiber, J. Steinhoff, K. Żmijewski, *Manifest desperatów*, "Rzeczpospolita", 8.X.2010.

II. The Public Board of the National Programme for the Reduction of Emissions

The Public Board of the National Programme for the Reduction of Emissions (“the Board”) was announced by the Deputy Prime Minister, Minister of the Economy Waldemar Pawlak on April 23, 2009. It is to support the endeavours of the Polish government in relation to the creation and execution of the National Programme for the Reduction of Emissions.

The Public Board is chaired by the Presidium of the Board and has seventeen Task Forces. Each Task Force has a Chairman, Vice-chairman, and a Secretary. The members of the Task Forces are distinguished authorities in the area of science and technology. They are supported by independent experts: professional consultants and reputable people from the business world. The Presidium of the Board and the Presidents of the Task Forces were nominated on October 28, 2009:

- Prof. Jerzy Buzek – Chairman (President of European Parliament);
- Prof. Michał Kleiber – Vice-chairman (President of the Polish Academy of Science);
- Janusz Steinhoff PhD – Vice-Chairman (former Deputy Prime Minister);
- Prof. Krzysztof Źmijewski – Secretary General.

The legal basis for the Board’s operation is the Act of August 8, 1996 on the Council of Ministers² and Order No. 28 of the Minister of the Economy of October 21, 2009 (“Order No. 28”). According to these regulations the Board is an advisory body to the Minister of the Economy.

The role of the Board’s work is indicated in the rationale for Order No. 28, according to which the Board’s objective is to materially support the Minister of the Economy in his or her activities connected with the development and implementation of the National Emission Reduction Programme. The Board’s activities are expected to lead to effective implementation in Poland of the European Union climate and energy package and of the Industrial Emissions Directive currently under preparation. The budget for investment activities under the programme (continuing until 2030) is estimated by the Ministry of the Economy at € 100 billion, which requires prompt commencement of the Board’s activities. The Board is composed of a voluntary team of outstanding specialists representing science and technology, supported by nongovernmental voluntary advisors (outstanding representatives of the business world), which means that it is the biggest think tank of any quasi-governmental organization. The issue of emission reduction has not only environmental, energy-related and economic dimensions, but also a significant social dimension.

² Journal of Laws 2003 No 4, item 199 with amendments.

III. The Board's tasks

The Board's tasks are regulated in § 2 of Order No. 28, and they are as follows: to develop proposals and concepts for systemic solutions aimed at reducing Poland's greenhouse gas emissions into the atmosphere, taking into account relevant international commitments of the Republic of Poland as well as European Union legislation, and to participate in the development and appraisal of relevant draft documents. This shall lead to an improvement of economic efficiency, development of low-emission industrial technologies, development of renewable energy sources, and the general directions of the energy sector's development. These tasks are underlined by the broad range of the Board's activity, which gives it the opportunity to influence numerous branches of the economy both directly and indirectly in terms of the reduction of emissions in Poland.

The basic tasks set before the Board include:

- a) elaboration of road-maps for specific programmes encompassed by the NPRE,
- b) elaboration or appraisal of *terms of reference* for projects prepared and carried out by the government and aimed at reducing emissions,
- c) appraisal of the compliance of the aforementioned projects with their *terms of reference* and appraisal of the execution of these projects,
- d) preparing opinions of the strategic intentions of the government in respect to reducing emissions,
- e) elaboration of strategic solutions for reducing of emissions.

The mission of the Board is to provide the Deputy Prime Minister responsible for development of the Polish economy with competent, independent, and comprehensive strategic knowledge permitting the constitutional principle of sustainable development to be upheld³. The main aim is optimization of the process to reduce emissions as a basic tool for climate protection. An additional aim is to convince society of the relevance of optimal measures aimed at climate protection. The vision of the Board is to lead to zero-energy development in Poland – pursuant to the guidelines of the Energy Policy.

As its name suggests, the Board is above all to be an advisory body. The fact that it gathers together people from outside the political divides, people who have the highest competences and moral authority, generates synergy and

³ Article 5 of the Constitution of the Republic of Poland: “The Republic of Poland shall safeguard the independence and integrity of its territory and ensure the freedoms and rights of persons and citizens, the security of the citizens, safeguard the national heritage and shall ensure the protection of the natural environment pursuant to the principles of sustainable development”.

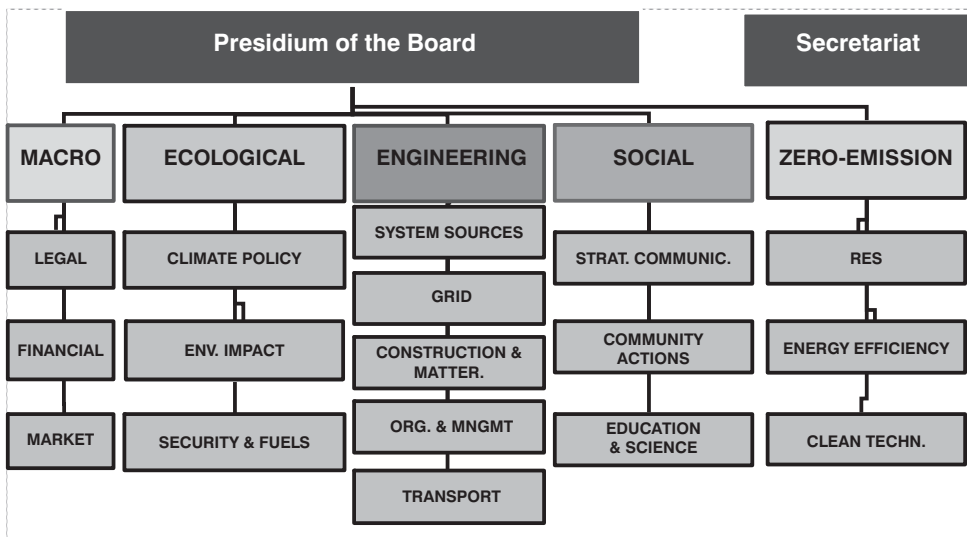
a collective authority with enormous potential in respect to influencing the public – and therefore the decisions made by the government, as well. The second vital function of the Board is to persuade society and politicians to carry out efforts aimed at reducing emissions and ensuring climate protection.

The main aim of the Board is to execute its action plan and thereby assist the government in executing the NPRE/NPLEED. A broader aim is to optimize actions undertaken as part of the NPRE/NPLEED.

IV. The Board’s structure

The issue of reducing emissions not only has an ecological, energy-related, and economical dimension, but also a clear social dimension. This is why the Board will also focus its work on non-technical matters, as reflected in the Board’s structure:

Chart 1. The Board’s structure⁴



The functioning of the Board is based on the tried-and-tested model of separation of the competences and activities for which the Presidium of the Board (the Chairman of the Board and Chairs of the Working Groups) is responsible from the competences and activities for which the Secretary

⁴ www.rada-npre.pl.

General, Secretaries of the Working Groups, and Secretariat of the Board are responsible. This model has been tested in the first phase of Board's operation and proved successfully.

The Board consists of the Presidium and the 17 listed Working Groups. They are supported by the Secretary of the Board and the Ministry of the Economy's Department of Energy and Department of Economy Development. The members of the Working Groups are independent experts and authorities from scientific and technical spheres⁵. As stated in § 3 of Order No. 28, the Board's members are appointed by the Minister of the Economy from among scientists, entrepreneurs, and representatives of opinion-making circles connected with the energy sector.

The Board is also supported by independent voluntary consultants who formally are not Board members, but are invited by the Chairman to cooperate with the Board when their knowledge and experience may be useful in the fulfillment of the Board's tasks. They may also participate in the proceedings of the Board. Such non-members shall include in particular: representatives of the public authorities, experts in the fields covered by the Board in its work, and representatives of scientific institutions.

The Board's activities are mainly carried out by Internet (via emailing) and it is supported by quarterly meetings of the Working Groups. Moreover, cooperation in the Board is complemented by members' meetings during conferences, debates, and joint discussions. Virtual cooperation with experts acting as consultants is very useful. This is the simplest, cheapest, and most efficient form of cooperation for preparing source materials – reports, policies, White and Green Papers, and above all relevant legislation (ideas and forms of reference).

As underlined in Order No. 28 the Board shall act as a collegial body. In connection with the above-described scope of the Board's tasks, the Board shall adopt resolutions regarding issues coming within its scope of work. The Board's resolutions shall be passed by consensus. The Chairman shall direct the proceedings of the Board and shall chair the Board's sessions. If unanimity cannot be reached, the Chairman may put the issue to a vote; in such a case, the Board resolution shall be taken by a majority of the votes cast by the present and voting members of the Board. In the case of a tie, the Chairman's vote shall be decisive.

The Board benefits from logistic support provided by the Ministry of the Economy. This support is provided by two departments: the Department of Economic Development and the Department of Energy. Moreover, the Board will try to extend its cooperation with the Polish government by strengthening

⁵ M.M. Sokołowski, 'Społeczne wsparcie Rządu, czyli głos ekspertów w kwestii redukcji emisji' (2010) 3 *Nowa energia.com.pl*.

cooperation with the Ministry of the Environment and other governmental agendas.

The Board is also supported by an interior body – the Secretariat of the Board, which provides logistics support for the Board's activity, without which the Board would not be able to operate and fulfill its tasks. The practical experience of the functioning of the Board in 2009–2010 indicates that the Secretariat ensures proper communication between the Board's members as well as enables consultation of documents. Together this leads to the achievement of goals. The Secretariat also ensures that the Board's members can present the results of their activity at conferences, meetings, and seminars. They assure promotion of the Board's activity.

The Board collaborates with numerous non-governmental organizations on an everyday basis. This cooperation and necessary communication occupies a considerable part of the Secretariat's work. In this way the Board develops its pro-public activity by encouraging these organizations to cooperate and publically express their opinions during debates and conferences organized with the Board's help or under the Board's patronage. The Board plans to develop this cooperation, especially in the context of elaborating the Polish Climate Change Act. Study visits in various countries with similar activities will be a great advantage for Polish concepts and ideas.

Finally, the Board is currently carrying out activities aimed at gaining the support of foreign members of the Board acting on a voluntary basis. We are open to every form of cooperation with foreign experts: secondments of experts, for example from the Task Force in Holland, would be a great advantage. In a similar way the support of foreign experts active in Poland would be of great advantage (as was the case with the Energy Restructuring Group in Poland in the 1990s). The Board also plans to develop its cooperation with European professional expert organizations.

V. Strategic documents

All of the Board's aims and tasks result in the preparation of a set of analytical documents which thereby assist the government in executing the National Programme. The effects of this activity should create a background suitable for optimizing efforts undertaken as part of the National Programme. These strategic documents includes Green Papers (problems and barriers), White Papers (concepts and solutions), Road Maps (terms and measures), and Principles and Terms of References of the National Programme.

Specific issues of the experts' analytical activity includes: the scale and means for financing the programme for modernization of the electric energy sector; the means for carrying through the required 15% share of energy from renewable energy sources in the final energy balance (taking into account the heating sub-sector); and the means for limiting growth in CO₂ emissions in the transport sector, in order to ensure that the limit of 14% growth in the non-ETS area is not exceeded. It also includes introduction of legislation allowing for timely execution of the National Programme – to wit, the Energy Efficiency Act, the Nuclear Law Act, and the Act on Execution of Strategic Infrastructure Investments of Particular Significance to the Development of the Country. In details it covers issues such as: acceleration of the development of renewable energy sources; liquidation of investment barriers; improvement of the renewable energy sources motivation system; preparation of Poland's comprehensive position in the face of the challenges posed by the European climate policy; elaboration of underlying guidelines for a national campaign aimed at increasing energy awareness, basic guidelines for a programme aimed at education and development of science (including in particular nuclear and energy efficiency issues), and guidelines for the Clean Coal Technologies Programme.

These issues are described in the above-mentioned catalogue of strategic documentation. The 230-page Green Paper of the National Programme for the Reduction of Emissions is the first example of the Board's analytical activity⁶. The Green Paper was elaborated in 2010 and was delivered to the Polish government and its agendas.

The main aims of the Green Paper are defined as identification of problems requiring resolution and tasks requiring execution, together with inventorization of issues for discussion. Additionally, the Green Paper also elaborates the means of achieving the aims in question. For example, it may involve controlling energy demand, changes in respect of sources of energy, and/or technological developments.

The basis for seeking solutions is that of the aim to achieve balance in respect to the basic triad of the following components: economic development (competitiveness), sustainable development (environment), and stable development (security). This context is a vital background for all of the Green Papers chapters, which are gathered in three main areas: “Problems requiring resolution – programmes”, “Tasks to be executed”, “Issues for discussion”. Their frameworks indicate such issues as: preparation of tools for law, finance, and regulation; tariffs and organization; procedures and structures; problems, development of technologies (renewable energy sources, clean coal sources,

⁶ ‘Green Paper for Reduction of Greenhouse Gas Emissions’, www.rada-npre.pl.

nuclear energy, power grid, gas networks, heating networks, sources – system-based and local – energy efficiency, low emissions transport, promotion of innovation); protection of the environment; emissions planning (emissions budget); reduction of emissions; control of emissions; creation of social awareness; ensuring security; diversification of supply (liquefied natural gas, Trans-European Energy Networks, Trans-European Gas Networks); and finally integration of the European markets of emissions, energy, efficiency, and others markets.

Another subject of activity is the creation of social awareness in respect to the issue of demand for energy and means of satisfying the indicated needs, e.g., by means of changes in social behaviour and lifestyle. Such problems are described in the Green Paper in the chapters “Education”, “Information”, “Promotion”, “Dialogue (social consultations)”, “Cooperation” and “Co-responsibility”.

The Board also suggests conducting efforts in the field of concrete campaigns. These are means of executing tasks resulting from European Union energy policy and its obligatory aims. Among these campaigns shall be: re-electrification of rural areas; gasification of the country; sensitization and education of the network; intelligent networks; smart metering; cogeneration and heating; restitution of power; construction of new sources and modernization of existing sources; thermo-refurbishment and certification of buildings; passivization of buildings; decarbonization of transport; and reorganization of transport. These campaigns are correlated with issues for discussion – e.g., the level of Poland’s gasification; the future of coal; directions and areas of development of RES; types of technologies; cooperation with classical energy; road law; green heat – low-emissions heating; the future of nuclear energy; types of technology; management of fuels and waste; organization of the energy efficiency market; organization of the biomass market; certification of “colourful” energy; financing of energy-efficient and zero-emissions investments; and reorganization of passenger and freight transport.

This highlights the challenges and barriers in the area of elaborating and realizing the National Programme. Thus, another of the Board’s fields of interest should be strengthened. This refers to finding solutions and a general concept for the needs of the Programme. For instance, the efforts above include solutions and consequences of the EU-ETS directive, the effort sharing decision (non-Emission Trading System), the Integrated Pollution Prevention and Control directive (integrated permits), and the Energy Efficiency directive.

The material set out in the chapters was analyzed by reference to the barriers and problems that it breaks down into the area of law, finances, technology, education, institutions and organizations, and promotion. Proposals for specific solutions, programmes, tools, and decisions will be the subject of a subsequent

report – the White Paper, which is now in progress and will be elaborated in mid-2011.

VI. An era of sustainable development

The Board supports the Polish government in the realization of the European Presidency Action Plan. Hence, the Board elaborated a vital proposal in the area of energy for the Polish Presidency, extending over the second half of 2011. The document is called “Theses for the Polish Presidency”. The authors will present its most important provisions.

The main idea of the “Theses” is the possibility of making avail of the Presidency to change the dark vision of Poland to a green one, so as to ensure that the priority of energy security that has been adopted by Poland is received in a positive manner by the general public in the EU for the duration of the Presidency.

Nevertheless it should be emphasized that for less developed countries, optimization of the process of reducing emissions means minimizing the costs of such reduction. These were in fact the primary assumptions of the package – to protect the climate in the cheapest possible manner. For Poland, a country that has a high-emissions industrial sector, as well as for other countries in a similar position – both from within the European Union and from developing regions – the limitation of emissions costs is a critical issue. For this reason, it is vital that support be given for initiatives such as:

- *domestic offset* – controlled “transfer” (not necessarily 100%) of emission from the non-ETS sector (construction and transport) to the Emission Trading System sector (mainly energy). In European legislation, this solution is known as a *Community level project*⁷. Unfortunately, it has been blocked as executive legislation has been put in place, which defines the conditions under which such projects can be used. Poland could remove this barrier and therefore effectively lower the costs of carrying out the climate and energy package.
- *carbon label* – a carbon label based on the carbon footprint, to be used as a tool controlling the emissivity of products and services (including those imported from outside the European Union). There are tens of such projects in Europe and throughout the world. The Polish Presidency could undertake to coordinate these efforts. Countries such as Sweden could be valuable partners in this respect.

⁷ See Article 24a of the Directive 2009/29/EC of the European Parliament and the Council <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CONSLEG:2003L0087:20090625:PL:PDF>

- *smart grid* – intelligent networks are composed of three basic elements (*smart metering* – intelligent metering allowing for duplex communication, and in effect *active demand side management*, *smart sensing* – monitoring of the technical state of the network in *quasi real time*, which allows for the burden to be increased in the summer and the formation of ice layers to be combated in the winter, *virtual power plant* – management of dispersed energy sources connected “beyond the horizon” of the Transmission System Operator).

The Board’s experts believe that the development of this technology requires establishing a certain standard, mainly in respect of the definition of data exchanges – the so-called open protocol allowing for cooperation between the equipment of various producers. Poland can take the initiative in this respect.

- *efficiency drivers* – tools supporting efficiency (*white certificates* – supporting investments relating to energy efficiency; *voluntary agreements* – in which factories or sectors make obligations in respect of energy savings and reduction of emissions; *tax credit* – a system for providing tax-based support for energy-saving investments made by small end-users (households and small companies); *performance contracts* relating to the achievement of energy efficiency (known as: Energy Saving Company, Third Party Financing, Public–Private Partnership), in which the investor is a third party and investment costs are paid off from savings (energy efficiency leasing; *efficiency funds* – support funds aiding the financing of energy-saving investments such as the Thermorenovation Fund, National Fund for Environmental Protection and Water Management, etc.

Without enlisting these tools, neither Poland nor Europe would be able to execute the aims of the climate and energy package. Contrary to common European opinion, Poland has already put in place several interesting solutions in the above area. Potential partners include Italy (*white certificates*), Holland, and Ireland (*voluntary agreements*), Italy and the UK (*tax credit*), the UK (*performance contracts*), Bulgaria, Portugal, Spain, and Austria (*efficiency funds*).

These initiatives are beneficial for Poland and other highly carbonized countries. In some of these countries, interesting solutions have been elaborated that now require dissemination, whilst in others preliminary concepts that require development and implementation have been prepared. Poland also has its own solutions and concepts which we Poles could develop, thereby joining the leaders of efficient reduction of emissions in Europe.

VII. 2011 objectives

In 2011 the Board will focus its activity on these fields:

- continuing support for the government in elaboration of the National Programme for Low-Emission Economic Development;
- elaborating and publishing the White Paper;
- supporting the Ministry of the Economy in the field of passing the Energy Efficiency Act through the Parliament (done);
- elaborating the draft of the Terms of References for the Polish Climate Change Act;
- creating solutions for its low-emission development in cooperation with the Ministry of the Economy and Ministry of the Environment;
- pro-consumer legislation package.

The Board will be engaged in the process of elaborating the National Programme for Low-emission Economic Development. The role of the Board as an expert advisory body in preparation of the National Programme for the Reduction of Emissions has been underlined in the new version of the *Terms of References*. Moreover, the Board will provide Deputy Prime Minister Pawlak, the Minister of the Economy, with competent, independent, and comprehensive strategic knowledge allowing Poland to meet the constitutional principle of sustainable development. The Board will also support the Polish government by elaborating Terms of References of the Polish Climate Change Act (draft version).

Thanks to the legal basis of the Board its operation is stable and it guarantees the Board's development and proper functioning. Furthermore, it indicates the broad scope of the Board's activity and underlines the importance of the Board's role in Poland. It also enables the Board to establish its plans for 2011, which shall highlight:

- developing cooperation with the Ministry of the Environment, which should enable the Board's participation in a governmental panel strictly responsible for the National Programme for Low-Emission Economic Development;
- preparing opinions for the government in respect to strategic plans of the government regarding the reduction of emissions;
- developing or establishing cooperation with foreign advisory bodies responsible for climate change and reduction of emissions, the aim of which is the creation of a European Climate Change Convent.

It is necessary to stress that the Board is engaged in strategic issues and is not involved in day-to-day support of the government. As a result, the Board is in contact with the Ministry of the Economy and the Ministry of the

Environment and participates in the dialogue concerning the enlargement of the National Programme for the Reduction of Emissions into the National Programme for Low-emission Economic Development. Both Ministers have stated that the Board will be engaged in this Programme (which was also stated at the Presidium meeting on October 1, 2010).

VIII. Policy recommendations and results

The Board has suggested the following policy steps:

- altering the renewable energy sources support system;
- intensifying the renewable energy sources connection to the grid⁸;
- grid stabilization;
- promoting energy efficiency;
- developing energy efficiency drivers;
- effective reduction of emissions;
- altering the tariff system⁹;
- promoting a low-emission economy;
- pro-consumer legislation package.
- educating society about reducing emissions.

The main aim of the Board is to execute the Action Plan and thereby assist the government in executing the National Programme for Low-emission Economic Development. A broader aim is to optimize the efforts undertaken as a part of the National Programme for Low-emission Economic Development. The following results should be achievable through the Board's efforts:

- elaboration of documentation (Summary of a White Paper, Executive Summary, Popular Version, Popular Short Version), White Paper for Reduction of Greenhouse Gas Emissions / the part of the White Paper of the National Programme of the Low-emission Economy Development (final version) – concepts and solutions for the National Programme in Poland, Terms of References of the Polish Climate Change Act (draft version), Road Maps for Transport, Power Grid, Innovative Energy Technologies accompanied by Atlases in respect of programmes encompassed by the National Programme, along with other materials in

⁸ K. Żmijewski, M.M. Sokołowski, 'Identyfikacja barier i problemów związanych z polską energetyką odnawialną jako wybór relewantnej informacji dla rządu, społeczeństwa i gospodarki' [in:] B. Sitek, R. Trzaskalik (ed.), *Zarządzanie informacją i energią w systemie bezpieczeństwa Unii Europejskiej*, Józefów 2010.

⁹ See more K.Żmijewski, M.M. Sokołowski 'Analiza zapisów Mapy Drogowej Efektywności. Efektywnie o gospodarce (cz. 2)' (2010) 9 *Energia i budynek*.

accordance with the needs of the Ministry of the Economy and other government bodies;

- supporting government in the realization of: the European Presidency Action Plan and Energy Efficiency Action Plan 2011,
- public debates and conferences with the participation of Board members, independent experts, decision makers, politicians, representatives of science, the media, and the public.

Indirect results:

Specific indirect results include:

- elaboration of reports relating to issues discussed by Working Groups, the Presidium, and other bodies functioning within the Board;
- elaboration of publications, opinions, reports and analyses by members of the Board and bodies functioning within the Board, or commissioning of elaboration of such documents in accordance with the Board's needs;
- reports relating to media activities (strategic communication) carried out by the Board or with the participation of its members;
- reports concerning study visits and international cooperation.

“Soft” results:

- an increase in public awareness;
- an increase of the participation of government representatives in the aforementioned;
- wider presence of climate package topics in the media. Higher public acceptance for the necessary infrastructure investments aimed at increasing efficiency and reducing emissions;
- introducing energy efficiency as a priority for the Polish Presidency in the European Union, July 1 to December 31, 2011.

Potential threats and barriers:

- Economic – lack of sufficient funds for full-scale financing of the Board's activity;
- Political – lack of strong influence on actions undertaken by the government could be de-motivating for members of the Board (thus far, this threat has not been very likely due to the high level of involvement of the Deputy Prime Minister and Minister of the Economy, moreover the Minister of the Environment also strongly supports the Board);

- Cultural – initial problems with application of modern tools for working in a virtual environment;
- Institutional – weak cooperation between different Ministries, lack of proper understanding of the priorities of the Polish economy on all levels of ministerial staff, lack of coherent message from the government to the public, and last but not least – lack of a strategic programme centre with proper tools for necessary analysis.

Opportunities

- The Board is the only institution except the government formally and materially responsible for preparation of the National Programme for Low-emission Economic Development in Poland;
- The Board is the largest and hence a well-recognized Polish think-tank;
- The Board gathers experts from various spheres and business milieux, which means that it is a full-scale platform for dialogue in the area of sustainable development and a low-carbon economy;
- The Board develops international cooperation with similar advisory bodies, the Board arranges multinational collaboration and establishes a European coalition for climate – this ensures international understanding of the problems faced by countries with highly carbonized economies;
- The actions of the Board are focused on innovative tasks realized with the use of new technologies;
- The Board creates structural documents, which support the Polish government in the key decision making process;
- An extensive contact database as well as knowledge database necessary to educate the public guarantees full use of the results of the project;
- The high level of competences and authority of the members of the Board, combined with its non-political nature, guarantees that the Board has an influence on public opinion. On the other hand, the style of functioning of the Board guarantees its pro-democracy and pro-market nature.

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