

THE EVOLUTION OF THE SUSTAINABLE DEVELOPMENT CONCEPT IN POLAND AS EXEMPLIFIED BY CLIMATE POLICY

ZBIGNIEW M. KARACZUN

Department of Environmental Protection, Warsaw University of Life Sciences
Nowoursynowska 166, 02-787 Warszawa, Poland
e-mail: zbigniew_karaczun@sggw.pl

ABSTRACT: It is contended that, in essence, climate policy *is* sustainable development policy, given that it postulates the use of renewable resources, and an increase in the effectiveness of use of non-renewable ones. Furthermore, it serves the security of future generations more than present ones; for while unfavourable impacts of climate change are already making their presence felt, truly negative consequences of considerable significance are likely to be more of a matter for the second half of the present century. This is why, in analysing the evolution of the approach to climate policy through the late 20th century and into the 21st, it is also possible to appraise changes in the approach to the sustainable-development concept. This article has therefore sought to offer the author's analysis of how the approach to sustainable development has evolved, by reference to Poland's climate policy from 1988 through to 2016. As this is done, an attempt is also made to identify the conditioning that has decided upon and will go on determining the shape of national policy in this domain.

Climate policy in Poland has been developing since the early 1990s. At the outset, it was not a source of controversy, with the consequence that the country rather rapidly signed up to and then ratified the Kyoto Protocol to the UN Framework Convention on Climate Change. However, as early as in the late 1990s, reservations began to be expressed, to the effect that actions to protect the climate might pose a threat to Poland's economy. A key turning point as regards the approach came with the growing dispute over the EU 2020 Climate and Energy Package. It was also at this time that a thesis

began to take shape, holding that the goals of climate policy were at best unfavourable and at worst dangerous for Poland. This approach in fact held sway in successive years, leaving this country's cooperation with the EU over this matter severely hindered. The main reason for this change of approach to climate policy can be considered to lie in the politicisation thereof, and hence the increasing dominance of the short-term interests of the Polish political elite over either the public interest or the security of future generations.

KEY WORDS: climate policy, sustainable development, greenhouse gases, emission reductions.

INTRODUCTION

Climate policy grew up from the same trunk as the sustainable development concept, with its beginnings reaching back to the same period, during which the recognition was that decisions taken had to account for the interests of future generations. This was a source of much controversy from the outset, and sceptics go on refusing to acknowledge the result of scientific research pointing to human influence on the Earth's climate (Wang and Oppenheimer 2005, 4); or else claim that no action is needed as the climate system is self-regulating, such that natural mechanisms will ensure the restoration of balance. Indeed, the sceptics are not even convinced by revelations concerning the espousing of falsehoods and forgeries by opponents of climate policy (Costella 2010, 12). In parallel, the last few years have also seen fierce attacks launched against proposals for action in the name of sustainable development and the protection of the environment – Mastalerz (no publication year).

In the author's view, this coincidence in the sense of timing is no accident, given that climate policy is in essence a sustainable development policy, postulating the use of renewable resources, as well as enhanced efficiency of utilisation where the non-renewable resources are concerned. Furthermore, it does more to safeguard future generations than present ones, for – while unfavourable impacts of climate change are making themselves felt already – it will only be in the second half of this century that the really significant negative consequences are likely to arise. This truth requires that the level of pressure being imposed on the climate be adjusted to barriers that the stability of the climate system delineates, which may not be crossed.

This article thus has as its goal an auctorial analysis of the evolution of the approach to sustainable development as exemplified by Polish climate policy in the period from 1988 through to 2016, with an attempt also being made to identify the conditioning underpinning the shape that this policy has assumed.

THE EVOLUTION OF POLAND'S CLIMATE POLICY

BEGINNINGS AND THE DEVELOPMENT OF POLAND'S CLIMATE POLICY IN 1991–2003

Poland embarked upon its process of systemic transformation with a highly-degraded and polluted environment, as well as a strong environmental movement. For those reasons, an improvement in the state of the environment became one of the priorities the country's new authorities sought to pursue. While inevitably dominated by the need to tackle issues posing a direct threat to Poles' health and even life, Poland's first Environmental Policy – adopted in 1991 (*Polityka Ekologiczna...* 1991) – was already perceiving the need for climate protection to be engaged in, by way of limitation of emissions of greenhouse gases to the extent that international agreements required¹. In this context, Poland played its active part as the UNFCCC was negotiated, and was also rather quick to ratify that Convention (in 1994).

The rest of the 1990s was then the period of development of climate policy, with Poland going on to sign the Kyoto Protocol, and beginning work on the establishment of expert institutions. The country set up *Ośrodek Ochrony Klimatu* (the Climate Protection Centre, as later transformed into the Executive Office for the Climate Change Convention) as well as *Krajowe Centrum Inwentaryzacji Emisji* (the National Emission Centre, which was in fact an embryonic form of today's *KOBIZE* – the National Centre for Emissions Management). Instruments were also brought in to encourage abatement of emissions, with these *inter alia* directed at raising levels of energy efficiency. These actions brought the desired and anticipated effects, with emissions of GHGs in Poland declining by more than 50 Gg CO_{2eq} in the 1991–2003 period (*Krajowy...* 2016).

This was also a period in which considerable weight was attached to sustainable development, just one sign of this (albeit a very significant one) being the reference in Article 5 of the Constitution of the Republic of Poland adopted in 1997, which provides that *The Republic of Poland shall ... ensure the protection of the natural environment pursuant to the principles of sustainable development*.

A symbolic end was brought to this period with Poland's 2002 ratification of the Kyoto Protocol (to the UNFCCC), as well as the Council of Ministers' October 2003 adoption of a document entitled *Polityka Klimatyczna Polski. Strategie redukcji emisji gazów cieplarnianych w Polsce do roku 2020* ("Poland's Climate Policy. The Strategies for Greenhouse Gas Emission Reductions in Poland until 2020") – *Polityka Klimatyczna...*, 2003. Thanks to cooperation between environmental organisations and the Environment Ministry, the *Policy* is founded upon the sustainable development concept, with the goal of protecting the climate perceived as a source of opportunity. In the official translation of the Policy into English (at https://www.mos.gov.pl/g2/big/2009_04/cf234906b019de170218bf79f913990c.pdf), we read that the strategic goal of climate

¹ It is worth noting that the UN Framework Convention on Climate Change was only signed a year later.

policy is “for Poland to join the efforts of the international community for the protection of the global climate through the implementation of the principles of sustainable development, (...) in a manner ensuring the achievement of the maximum, long-term economic, social and political benefits” (original Polish version – *Polityka Klimatyczna...* 2003, 13).

As key further background, the translation of the *Policy* notes that: “As analyses and studies indicate (...) the 30% greenhouse gas emission reductions (with respect to the base year 1988) are achieved without the implementation of an additional climate policy until 2010. Therefore, the quantitative aim of the present climate policy is to enhance the extent of the greenhouse gas emission reductions to the level of 40% until 2020 (original Polish version – *Polityka Klimatyczna...* 2003, 14).

Inter alia for the above reason, it is possible to suggest that the first period in which Polish climate policy was shaped saw the objectives referred to above arouse no more major controversy. The paradigm of sustainable development was being taken seriously, while it was at the same time accepted that socioeconomic growth could not take place at the expense of the natural environment. This was especially clear in the first half of the 1990s when, notwithstanding rising unemployment, there was an acceptance that plants and factories imposing excessive pressure on the environment needed to be closed, or at least made subject to curbs on their output.

However, in the decade’s second half a weariness with the processes of transition and transformation began to take hold, with objectives as regards sustainable development then starting to be set against the needs of the present. In turn, at the beginning of the 21st century the protracted nature of the transformation process came to be associated with a tendency to limit time horizons associated with political decisions, not least because political rivalries were intensifying, and – where sustainable development was concerned – there was now a polarising of standpoints regarding the need for it in Poland, and the very possibilities of it (ever) being achieved here. It was in this way that features of the still-fresh democratic system less favourable to eco-development began to make their presence felt. In this brave new world, short-term political interests might prevail over long-term benefits to society and the environment (Kozłowski 2000, 77). Inevitably, this kind of thinking exerted its influence on climate policy as such.

THE EUROPEANISATION OF POLAND’S CLIMATE POLICY IN 2004–2014

Soon after the *Climate Policy* was adopted, it emerged that the political will to pursue its goals was lacking. This reflected a growing scepticism towards sustainable development, as well as a desire to maintain the economic *status quo*, *inter alia* in the sense of seeking to defend Poland’s enterprises from unfettered competition with other EU Member States. In this way, climate policy became a hostage to ever-more-brutal political rivalry.

Poland’s adjustment to meet EU requirements set for the environment represented a massive (legislative, organisational and financial) effort in any event. It is estimated that the costs of this ranged between 80 and 160 bn zł (Indra 2000, 38). And in reality,

the costs were yet-higher, as the requirements of Council Directive 91/271/EEC (the Urban Wastewater Treatment Directive) alone required more than 56 bn zł of expenditure (Brodziński 2015, 4). Such figures provided a reason for the need to act (or indeed the sense of acting) in the interests of the environment to be questioned, or in fact even negated. And as 2003 brought the adoption of Directive 2003/87/EC establishing a scheme for greenhouse gas emission allowance trading within the Community (the EU ETS), the above kind of criticism was also able to home in on climate policy.

In fact, the first conflict surrounding climate policy broke out at the end of 2004, when the Ministry of the Environment gave its approval to the draft First National Plan for the Distribution of Emission Entitlements (*I KPRU*), which assigned to the entities present domestically and encompassed by the ETS in excess of 286 million in annual entitlements, while the mean annual emission in the years 1999–2002 amounted to 219.8M Mg CO₂ (*Krajowy Plan...* 2004, 27). The European Commission saw this as public aid from the Polish state that the latter had no right to extend, in consequence taking the decision to reduce the entitlement assigned to Poland by almost 50M Mg (to 239M Mg CO₂/year). Delay with the adoption of *I KPRU* in turn ensured that Polish enterprises were not in a position to trade in their surplus entitlements when the prices payable for these were at their peak (Karaczun 2010, 114).

The process by which *I KPRU* was developed gave rise to a major change of approach to the twin ideas of sustainable development and climate protection. While the point of departure for the *Climate Policy* had been a desire to build up environmental security for future generations, *I KPRU* recognised that the need to protect the climate might work to put limits on economic growth. The Environment Ministry did not even bother to try and bring in regulations that would have forced a transformation to low emissions on Poland's energy industry. Instead, there was a redefining of the concept of sustainable development, with this now merely being recognised as some kind of balancing between social, economic and natural needs. What is lost from this approach is the need to maintain stability in the natural system, understood as matching exploitation of the environment to its capacity. Furthermore, the needs or interests of future generations no longer apparently count for anything, with the matter of primary significance being current interests and economic growth. What that *inter alia* made possible was avoidance of any change in the emphasis on power generation from coal.

Conflict broke out again with a new intensity when the European Commission proposed a method by which post-2012 emission entitlements were to be distributed – by way of the so-called first EU Climate and Energy Package. In March 2007, President Lech Kaczyński signed up to the Package on behalf of Poland, but this aroused no interest, with no debate engaged in and a lack of reaction from business. The Environment Ministry played down the negotiations over instrumentation for the Package run from March 2007 onwards. It was also for this reason that Poland exerted no influence on the shape of the regulations actually put in place, with it only being appreciated in 2008 – when the so-called *Raport 2030* (2008) was published – that a major impact on the economy was likely to arise.

The document in question, as commissioned by the Polish Electrical Energy Committee, forecast that implementation work to meet the aims of the Package would give rise to a doubling in energy prices, raise levels of unemployment, and cause a major breakdown in economic growth and a decline in GDP.

While it contains inaccuracies and simplifications (*Ewaluacja...* 2008), and does not in reality confirm the above catastrophic forecasts, *Raport 2030* did much to influence approaches to climate policy in Poland. It merely reinforced the convictions of a large number of politicians that EU goals are too restrictive, and fail to take account of the Polish specifics and its dependence on coal. This in turn allowed for the advancement of a thesis that climate protection is not in fact sustainable development policy at all, but has become a kind of “climate religion” (*Nowa religia klimatyczna...* 2011). From that standpoint, it became possible and even permissible to criticise Pope Francis for his progressive approach to matters of the climate in his *Laudato Si'* Encyclical (*Zielone...* 2015).

The result was Poland's isolation in the European Union. Unable to define the country's interests in terms of anything but the defence of energy generation from coal, and unable to make alternative proposals whose implementation would not infringe activity on the Single Market – as well as the EU's climate ambitions, the country's negotiators were forced to veto Commission plans for the development of Climate Policy no fewer than three times. There was a lack of understanding here for the fact that climate protection had become an element integral to EU development policy as a whole, with the relevant regulations of necessity being broad and homogeneous in nature. They needed to be wide-ranging because emission reductions are essential in every sector of the economy and most spheres of human existence; while they required uniformity because the influence on the competitiveness of businesses required that legal standards be part of the same level playing field for all Member States.

The Polish stance also lacked the moral and ethical reflection that would point to domestic policy's responsibility towards societies most threatened by the consequences of climate change, as well as towards future generations.

Attempts at blocking the development of European climate policy proved ineffective. The European Commission proposed other ways by which the vetoed solutions might be brought in, as well as working on new objectives. On January 22nd 2014, it presented the assumptions that would underpin the 2030 Climate and Energy Package, i.e. a 40% reduction in emissions of greenhouse gases and an increase in the share of final energy accounted for by renewables to 27%. In presenting these targets, the Commission President hinted at the ecocodevelopment-related roots of Climate Policy, saying: “Climate change is a defining challenge of our time, while a truly European energy policy is key for our competitiveness” (Barroso 2014, 3).

While in Poland there was no shortage of very critical assessments of this proposal and its influence on the economy (*Pakiet Klimatyczny...* 2015), the Government on this occasion decided upon a constructive approach. An analysis of the influence of these more demanding climate and energy targets on the state of the Polish economy, and

the possibilities for applying mechanisms to compensate for the high cost of achieving reduction emissions, was embarked upon. A Climate Analyses Centre was also called into being – as a forum for cooperation between the Ministries of the Economy, Environment and Finance with the World Bank. At the level of the Deputy Ministers for the Economy, the Environment, Foreign Affairs, Finance, the Treasury, Infrastructure and Development, Agriculture and Rural Development, an informal team was created whose task was to ensure full coordination of the stances of the different Ministries to the EU proposals (Tomczykiewicz 2014). This work allowed the scope for compromise to be determined, making it possible for Poland to swing belatedly behind the targets and goals associated with the 2030 Package.

POST-2015 CLIMATE POLICY

Poland's acceptance of the objectives of the 2030 Package raised the hope that domestic climate policy might once again base itself on the sustainable development concept. This would be rational, and thanks to it there might be a stimulus for the development in Poland of innovative sectors of the economy and a knowledge-based society, with consequent reduced pressure on the environment. Furthermore, EU Funds ensured the possibility of a modernisation of the power-supply sector and economy as a whole that would be predicated upon low emissions. Indeed, given its extremely well-developed market for ICT, Poland could even have been in a position to become a key provider of low-emission solutions. Hope for change was strengthened by Poland's support for the EU's negotiating stance at the Conference of the Parties to the UNFCCC convened in Paris in December 2015 (COP21), as well as the signing of the Paris Agreement negotiated during that Conference.

However, it is as yet by no means certain that the opportunities referred to will be made use of. For what the Polish delegation at COP21 in fact regarded as a success was not the achievement of an agreement, but the change in its wording away from the term “decarbonisation” in favour of “climate neutrality” (*Szydło...* 2015). Since that time, the Ministry of the Environment has been consistent in contrasting European climate policy with obligations and commitments arising from international law. A communiqué it issued in 2017 claimed *inter alia* that the “Climate and Energy Package adopted in 2008 and orientated solely at decarbonisation of the atmosphere through reductions in emissions of CO₂ in selected spheres of output (...) did not accord with the idea of the Climate Convention and the Kyoto Protocol. It blocked Polish energy resources in the form of coal (...) and made Poland dependent on foreign sources of energy and foreign technologies” (*Przegląd...* 2017).

Such strong contradistinction of EU policy predicated on reducing greenhouse gas emissions and a move away from fossil fuels with international activity that the Environment Ministry claims does not require any such thing may attest to a return to the treating of sustainable development in a narrowed-down or restrictive way. For this reason, disturbing signals seemingly confirming the thesis that the weight of the

sustainable development concept in political and economic decisionmaking is in decline can be seen in the present government's withdrawal from developing prosumer solutions in power generation, as well as its blocking of wind-energy development and its suspension of work on a National Programme for the Development of a Low-Emission Economy (*Narodowy... 2015*).

SUMMARY

Poland is a climate success story. Since 1989, emissions of greenhouse gases have declined by about 30%, while national income has more than doubled. And if we accept that climate policy is actually in practice sustainable development policy, then our country can be said to have developed sustainably. Nevertheless, and as this article makes clear, this is an oversimplification. In fact, the approach to sustainable development in Poland has evolved markedly through the last quarter-century; and sadly that evolution has not taken a good direction.

In the first years of Poland's economic transformation, action in the name of protecting the environment was treated as an essential part of modernising the economy, and as an element in a long-term strategic vision for the country. Sustainable development took the role of fundament of Poland's environmental policy, even enshrined as a principle in the Constitution.

However, that approach had already begun to modify by the end of the 1990s, with environmental subject matter increasingly put on the back burner following Poland's accession to the European Union (in 2004). Political and economic decisions were increasingly taken to bring short-term benefit, rather than to ensure the security of future generations. Indeed, protection of the environment was coming to be seen as a barrier to, rather than the basis of, socioeconomic development. Clear examples of this might be provided by the disputes surrounding the 2020 Energy and Climate Package of the EU, as well as the tensions (again felt at the level of the EU as a whole) between the construction of the Augustów Bypass on the one hand, and the upholding of the Rospuda Valley's protected status on the other.

The evolution of the sustainable development concept is all the more surprising given that the early-1990s situation was one of (political and economic) transformation, in which short-term decisionmaking really might have been anticipated. In fact, it would seem that a progressive approach to sustainability back then was made possible by the only-limited degree to which public life had become politicised. Thanks to that, those who ruled at the outset could seek to shape permanent foundations for development, concentrating on the steady implementation of a long-term vision, and only being much less concerned with the furthering of short-term political interests. But the politicians who managed those changes paid a high price for working in this way, with most losing out at the ballot box and tending to disappear from political life. Their place was taken by members of new parties paying far greater attention to chances of re-election; and less

and less interested in the achievement of long(er)-term objectives. The perspective for the taking of decisions came to be cut to 4 years, and the interests of future generations entirely lost out to the (attempted) satisfying of the electorate's short-term needs.

Climate policy as such fell victim to this change. When the party-political struggle intensified, the need to safeguard the climate for future generations lost out to the need to win the support of a well-organised mining lobby, trades unions, and energy-sector employees. An interest of a social nature (the retention of jobs in mining) and another of an economic nature (non-modernisation of the power-generation sector) prevailed over the needs of environmental protection. This has happened to the extent that it can now be hypothesised that Poland's climate policy is no longer identifiable with sustainable development.

Following the EU accession, NGOs remained the only circles in Poland pushing consistently for a climate policy in line with sustainable development principles. Alas, notwithstanding their efforts, public debate on matters of climate protection has become pretty much non-existent. The same is true of the very idea of "sustainable development". This situation has ensured that short-term economic and political interests hold sway over the requirement that stability of the ecological system be retained. This is dangerous, not just because the holding back of climate change requires a rejection of the paradigm that economic growth takes priority over environmental objectives and the basing of development around low-emission solutions; and not just because ongoing development predicated on fossil fuels may leave Poland sidelined vis-à-vis the global economy's main currents. Rather, the main threat posed here is to the quality of life enjoyed in our country, which can worsen. Even today, air pollution is resulting in the premature deaths of some 50 000 inhabitants of Poland each year (*Air...* 2016, 60). That problem can only intensify in the face of a rejection of the need to act to protect the climate in the interests of future as well as present generations; as well as the stubborn maintenance of an unreformed Polish energy policy.

REFERENCES

- Air Quality in Europe – 2016 report*, EEA Report No 28, 2016, European Environment Agency, Luxembourg: Publications Office of the European Union.
- Barroso J., 2014, *Statement by President Barroso on the 2030 Energy and Climate Framework, Press Conference with Commissioners Oettinger and Hedegaard, Brussels, 22 January 2014*, Accessed 18.01.2017 at http://europa.eu/rapid/press-release_SPEECH-14-50_en.htm.
- Szydło: *Polska odniosła sukces w Paryżu (Szydło: Poland was successful in Paris)*, 2015, BiznesAlert.pl, Accessed 13.12.2017 at <http://biznesalert.pl/szydlo-polska-odniosla-sukces-w-paryzu/>.
- Brodziński S., 2015, *Odpowiedź na interpelację nr 32833 w sprawie wdrożenia przepisów dyrektywy dotyczącej oczyszczania ścieków komunalnych (Reply to interpellation No. 32833 on the implementation of regulations of the Wastewater Treatment Directive)*, Odpowiadający: podsekretarz stanu w Ministerstwie Środowiska Sławomir Marek Brodziński na interpelację

- pana Piotra Macieja Orzechowskiego, Posła na Sejm RP, z dnia 28 maja 2015 r., znak: K7INT32833, Warszawa 19 06 2015, Sejm Rzeczypospolitej, VII kadencja, Archiwum, <http://www.sejm.gov.pl/sejm7.nsf/InterpelacjaTresc.xsp?key=60E5AD4F>.
- Costella J. (ed.), 2010, *The Climategate Emails*, The Lavoisier Group, Melbourne.
- Evaluacja RAPORTU 2030. "Wpływ proponowanych regulacji unijnych w zakresie wprowadzania europejskich strategii rozwoju energetyki wolnej od emisji CO₂ na bezpieczeństwo energetyczne Polski, a w szczególności możliwości odbudowy mocy wytwórczych wykorzystujących paliwa kopalne oraz poziom cen energii elektrycznej"*, (*Evaluation of REPORT 2030. "The impact of the proposed EU regulations on the implementation of European strategies for the development of CO₂ free energy for Poland's energy security, in particular the possibility of rebuilding production capacity using fossil fuels and the level of electricity prices*), 2008, Instytut Badań nad Gospodarką Rynkową, Warsaw.
- Indra S., 2000, *Negocjacje akcesyjne w obszarze "środowisko naturalne"* (*Accession negotiations in the field of the Natural Environment*), [in]: *Materiały sympozjum Warsztaty 2000 nt. "Zagrożenia naturalne w górnictwie"*: sesja okolicznościowa nt. Eksploatacja podziemna a ochrona środowiska w świetle prawa Unii Europejskiej, Ustroń Śl., 29–31maja 2000, Elżbieta Pilecka (ed.), PAN Instytut Gospodarki Surowcami Mineralnymi i Energią, Wyższy Urząd Górniczy, Kraków, 37–43.
- Karaczun Z. M., 2010, *Ewolucja polityki klimatycznej polski w latach 1988–2010* (*The evolution of Polish climate policy in the years 1988–2010*), [in]: *Zmiany klimatu a społeczeństwo*, L. Karski, I. Grochowska (eds), Wyd. C.H. Beck, Warsaw, 105–121.
- Kozłowski S., 2000, *Ekorozwój, Wyzwanie XXI wieku* (*Sustainability, the challenge of the 21st century*), PWN, Warsaw.
- Krajowy Plan Rozdziału Uprawnień do Emisji CO₂, pierwszy okres rozliczeniowy 2005–2007* (*National Allocation Plan for CO₂ Emission Allowances, first accounting period 2005–2007*), 2004, Ministerstwo Środowiska (Ministry of the Environment), Warszawa.
- Krajowy raport inwentaryzacyjny 2016. Inwentaryzacja gazów cieplarnianych w Polsce dla lat 1988–2014. Raport syntetyczny, Raport wykonany na potrzeby Ramowej konwencji Narodów Zjednoczonych w sprawie zmian klimatu oraz Protokołu z Kioto* (*National inventory report 2016. Inventory of greenhouse gases in Poland for 1988–2014. Synthetic report, Report for the United Nations Framework Convention on Climate Change and the Kyoto Protocol*), 2016, Wyd IOŚ- PIB-KOBIZE. Warsaw, 15pp.
- Mastalerz P., [brw], [no publication year], *Dwie przeciwko milionom, czyli krótkie argumenty przeciwko szkodliwym mitom ekologicznym* (*Two Against a Zillion Brief Arguments Against Persistent Ecological Myths*), Wydawnictwo Chemiczne, Wrocław, Accessed 6.02.2017 at <http://www.chemia.org/id21.html>.
- Narodowy Program Rozwoju Gospodarki Niskoemisyjnej* (*National Program for the Development of Low-emission Economy*), 2015, Projekt: wersja z dnia 4 sierpnia 2015 roku, Ministerstwo Gospodarki (Ministry of the Economy), Warsaw.
- Nowa religia klimatyczna. Wywiad z Jarosławem Grzesikiem, przewodniczącym delegacji Solidarności na szczycie klimatycznym w Durbanie 28.12.2011* (*A new climatic religion. Interview with Jarosław Grzesik, chairman of the Solidarity delegation at the climate summit in Durban 28.12.2011*), 2011, Accessed 12.02.2017 at <http://www.mpolska24.pl/post/3807/nowa-religia-klimatyczna>.

Pakiet klimatyczny zagrożeniem dla Polski. Do 2030 roku będziemy musieli zamknąć wszystkie elektrownie węglowe (Climate package is a threat to Poland. By 2030, we will have to close all coal-fired power plants), 2015, WPolityce.pl 21.01.2915, Accessed 23.01.2017 at <http://wpolityce.pl/gospodarka/230556-pakiet-klimatyczny-zagrozeniem-dla-polski-do-2030-roku-bedziemy-musieli-zamknac-wszystkie-elektrownie-weglowe>.

Polityka Ekologiczna Państwa (Ecological Policy of the State), 1991, Ministerstwo Ochrony, Środowiska, Zasobów Naturalnych i Leśnictwa (Ministry of Environmental Protection and Natural Resources of the Republic of Poland), MP, Nr 18, poz. 118, Uchwała Sejmu Rzeczypospolitej Polskiej z dnia 10 maja 1991 r.

Polityka Klimatyczna Polski. Strategie redukcji emisji gazów cieplarnianych w Polsce do 2020 roku (Climate Policy of Poland. Strategies for reducing greenhouse gas emissions in Poland by 2020), 2003, Ministerstwo Środowiska (Ministry of the Environment), Dokument przyjęty przez Radę Ministrów w dniu 04.11. 2003 r., Warsaw.

Przegląd Resortu Środowiska (Overview of the Environment Resort), 2017, Ministerstwo Ochrony Środowiska, (6.02.2017), Accessed 13.02.2017 at <https://www.mos.gov.pl/aktualnosci/szczegoly/news/przegląd-resortu-srodowiska/>.

Raport 2030 "Wpływ proponowanych regulacji unijnych w zakresie wprowadzenia europejskiej strategii rozwoju energetyki wolnej od emisji CO₂ na bezpieczeństwo energetyczne Polski, a w szczególności możliwości odbudowy mocy wytwórczych wykorzystujących paliwa kopalne oraz poziom cen energii elektrycznej" (Report 2030 "The impact of the proposed EU regulations on the introduction of a European strategy for the development of CO₂-free energy for Poland's energy security, and in particular the possibility of rebuilding production capacity using fossil fuels and the level of electricity proces), 2008, Badania Systemowe EnergSys Sp. z o.o., Polski Komitet Energii Elektrycznej, Warsaw.

Tomczykiewicz T., 2014, *Odpowiedź sekretarza stanu w Ministerstwie Gospodarki z uprawnienia ministra na interpelację nr 24856 w sprawie formułowania celów polityki energetycznej Polski do 2030 r.*, (Reply to interpellation No. 24856 on formulating the objectives of Poland's energy policy until 2030), Odpowiadający: sekretarz stanu w Ministerstwie Gospodarki Tomasz Tomczykiewicz na interpelację Piotra Chmielowskiego i Adama Kępińskiego posłów na Sejm RP, z dnia 28 lutego 2014 r. znak: SPS-023-24856/14, Warszawa 24/3/2014, Sejm Rzeczypospolitej, Sejm Rzeczypospolitej Polskiej, VII kadencja Archiwum, Accessed 28.12.2016 at <http://www.sejm.gov.pl/Sejm7.nsf/InterpelacjaTresc.xsp?key=306446D1>.

Wang J., Oppenheimer M., 2005, *The Latest Myths and Facts on Global Warming*, Defense Fund, New York.

Pakiet klimatyczny zagrożeniem dla Polski. do 2030 roku będziemy musieli zamknąć wszystkie elektrownie węglowe (Climate package is a threat to Poland. by 2030, we will have to close all coal-fired power plants), 2015, WPolityce.pl 21.01.2915, Accessed 23.01.2017 at <http://wpolityce.pl/gospodarka/230556-pakiet-klimatyczny-zagrozeniem-dla-polski-do-2030-roku-bedziemy-musieli-zamknac-wszystkie-elektrownie-weglowe>.

Zielone szaleństwo owładnęło Watykanem. Papież wzywa do utworzenia Nowego Porządku Świata (Green madness overwhelmed the Vatican. The Pope calls for the creation of a New World Order), 2015, PrisonPlanet.pl. 2015.07.09, Accessed 12.02.2017 at http://www.prisonplanet.pl/polityka/zielone_szalestwo,p590985101.