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Climate protection as an ethical challenge

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Summary
Mitigation of the global climate change is one of the most important challenges facing humanity in the 21st century. It will require significant changes in the economy, consumption, the style of life. However, the climate protection is also an ethical problem. It is a problem of responsibility for the climate – the common good of all creatures.
This article discusses selected ethical issues that are related to the implementation of climate policy. It was indicated that the acceptance of research results indicating human responsibility for climate change is a prerequisite for active climate action. It has also been found that the common but differentiated responsibility of individual countries is primarily due to their historical greenhouse gas emissions. It also results from the fact that most of the significant negative impacts of climate change will occur in the poorest countries, whose share of greenhouse gas emissions is very small.
The rejection of human responsibility for climate change and the responsibility of rich societies for already occurring changes and their effects in developing countries means that climate mitigation actions are not being sufficiently addressed. Behind the Pope Francis repeated that without changing ethical attitudes towards the natural environment and accepting responsibility for the whole world around us, effective climate protection would not be possible.

Key words
climate change, ethic, common and differentiated responsibility, climate policy, greenhouse gases

1. Introduction

Global climate change and the need to protect climate are generally seen as environmental, economic and political problems. This is a legitimate approach. Mitigation of the climate change is an issue of environmental protection, because it requires significant reductions of greenhouse gas emissions, primarily carbon dioxide, but also methane, nitrous oxide and so-called industrial gases, which can be obtained through engineering, organizational and technological changes. Achieving the necessary level of emission reductions will not be possible without the profound transformation of many sectors of the economy: energy, industrial production, transport, agriculture, municipal management and many others. The very rapid development of renewable energy, improved energy efficiency, new low carbon means of transport, and transport fuels are just some of the manifestations of this transformation.

Climate protection is also an increasingly important political issue. Since 1992, when the United Nations Framework Convention on Climate Change (UN FCCC) was adopted at the Rio de Janeiro Conference, an international negotiating process has been underway to develop an effective framework for implementing action in this area. Climate policy is the subject of negotiations and political talks in the G7, G20, European Union as well as during bilateral and multilateral talks and political meetings.

However, usually there is no reflection that climate protection is also an ethical challenge. It boils down to the fact that climate is a common good, equally important for every human being and organism living on Earth. Therefore, we are all responsible for its protection. Responsibility is inextricably linked to ethics because, as Kierkegaard wrote (1976: 347), "... a man who has chosen himself ethically has assumed a responsibility for everything that concerns him..." The rejection of this responsibility – either through denying that climate change is occurring and being caused by a human being or undermining the historical responsibility of developed countries for the current crisis – makes it difficult or even impossible to carry out actions to protect the climate.

The purpose of this article is to point to selected ethical issues related to the implementation of the climate policy. The article focuses on three of those issues – the rationality of climate policy, the responsibility for achieving its goals, and the issue of shared but differentiated responsibility for climate protection.

2. Accept responsibility

It is a prerequisite for implementing active climate policy to accept the fact that the global climate is changing, that these changes are triggered by human activity, and that the consequences of this process will be negative for people, the economy, and society. Only then will the efforts to reduce emissions be considered rational. If the climate change were caused by natural processes, or their effects were be positive, reducing greenhouse gas emissions, protecting forests, increasing storage of the organic carbon in soils would make no sense. But if we – the people – have caused the climate change, it is our responsibility to stop it. Hence the importance of the discussion on the causes of climate change and the predicted consequences thereof.

Over the last thirty years, our knowledge on this subject has grown tremendously. This was especially due to the works of the Intergovernmental Panel on Climate Change (IPCC) which was created in 1988[1]. The appointment of the IPCC provided an impetus for intensifying research into the causes, possible effects and ways of tackling climate change. The first IPCC report, issued in 1990 (IPCC 1990: XII) did not prejudge the reasons for the changes. It only stated that the anthropogenic emissions of CO_2, N_2O and CH_4 contribute to their concentration in the atmosphere. Ten years later, knowledge has grown significantly. In the third report (IPCC 2001: 9), published at the beginning of the 21st century, the authors indicated that there was evidence that over the last 50 years the human being had had the greatest impact on the climate. According to the latest (fifth) IPCC report there is more than 95% certainty that the human activity is responsible for the current climate change (IPCC 2013: 19): "...Human impact on the climate is obvious. This is evidenced by the growing concentrations of greenhouse gases in the atmosphere, the positive radiation exertion, the observed warming and the understanding of the climate system...". At the same time, the report shows that the effects of climate change on society, the economy and the natural environment will be very negative. Therefore, the report calls for action to reduce greenhouse gases emissions:

1 The IPCC was set up by two United Nations institutions: the United Nations Environment Program (UNEP) and the World Meteorological Organization (WMO).

"…further emissions of greenhouse gases will cause further warming and changes in all components of the climate system. Stopping climate change requires a significant and sustained reduction of the emissions of these gases … "(IPCC 2013: 19). The arguments of the IPCC convinced Pope Francis, who in the encyclical *Laudato Si'* stated, among others. "… There is a very solid scientific consensus indicating that we are dealing with an alarming warming of the climate system.… Many scientific studies show that most global warming of the last few decades is due to high concentrations of greenhouse gases (carbon dioxide, methane, nitrogen oxides and others) emitted mainly because of human activity…" (Francis 2015:23).

Therefore, although the lack of action in the 1990s can in principle be considered justified – there was insufficient certainty that changes are triggered by human activity – today it is rather difficult to find such justifications. Despite this, such attempts are made (Wang and Oppenheimer 2005: 8-10). Undermining scientific research results serves as an excuse for inaction (Assessment of the impact of establishing reduction targets … 2012: 3). Although in recent years no article has been published in scientific journals offering scientific evidence that would undermine the results and conclusions presented by the IPCC, there are a number of sceptics who are still not convinced (Kundzewicz 2009, Popkiewicz 2014).

This does not mean, however, that research aimed at showing that the hypothesis of the anthropogenic cause of current climate change should not be conducted or funded from public sources. Just the opposite. Science has always evolved through debate and it has always attempted to undermine existing paradigms. But as long as we do not have convincing evidence that it is not the human being who changes the climate, we should apply the Ockham's razor principle, accept our responsibility, and make efforts to stop the changes.

It is also difficult to agree with the argument that there are no currently available technologies that could be used to mitigate climate change or that the climate protection is unprofitable, or even to accept such an argument as being rational. It is well known since the publishing of the so called Stern Review (2008: 24) which recognizes that the cost of losses due to climate change will be many times higher than the effort required to mitigate them. Moreover, since the signing of the Climate Convention, the so-called green technologies – especially greenhouse gases reduction installations – are growing faster and faster (Aldana *et al.* 2014: 31 – 32). Investments in this market are increasingly growing and they attract the interest of both investment funds and pension funds (Inderst 2012: 7). As a result, an increasing number of countries and corporations declare that in the coming decades they will completely abandon fossil-fuel energy and implement low-emission technologies (Web-01). For many, this is a decision motivated above all by economic considerations, but their important premise is to convince people of their responsibility for the fate of future generations and the stability of the Earth's climate system.

3. Common but differentiated responsibility

The next area of climate policy that needs to be considered on ethical grounds is the issue of differentiated responsibility for the current effects of climate change. One of the basic concepts of the Framework Convention on Climate Change (A: Article 4 (2)) is "common but differentiated responsibility" for climate protection. Its pragmatic expression is the differentiation of the responsibilities of individual Parties to the Convention: the well developed countries (the so-called Annex I countries) have imposed further obligations on climate change mitigation as well as funding and reporting activities undertaken to this end than developing countries. The justification for this is outlined in the UNCC Preamble: "… the largest share

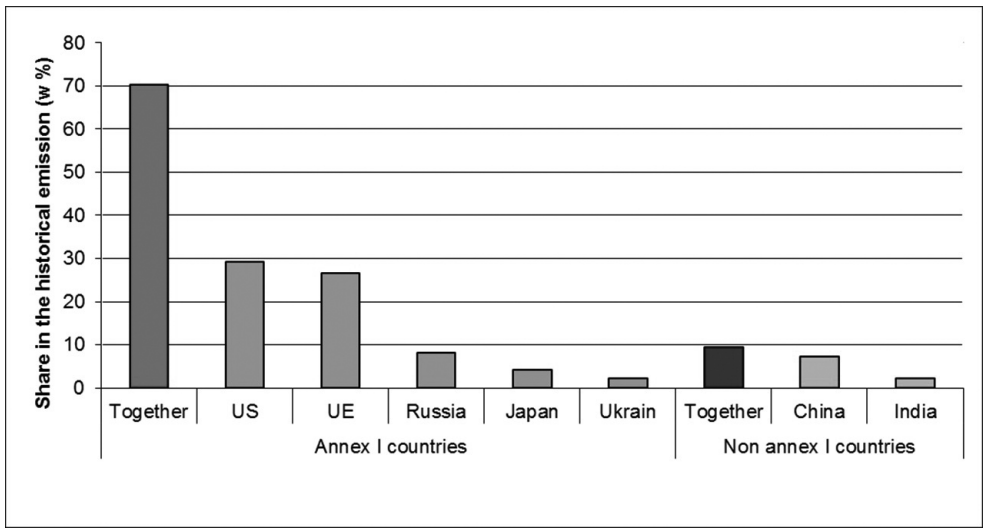

Fig. 1 Share of selected Annex I Countries (developed countries) and developing countries (Non-Annex I Countries) in historical greenhouse gases emissions (source: Baumert *et al.* 2005: 32)

of historical and current global emissions of greenhouse gases has originated in developed countries, while per capita emissions in developing countries are still relatively low…" (A: Preamble). The Convention also points out that further growth in emissions in developing countries will be necessary in order to allow for rapid economic development to ensure that the living standards in those countries will be comparable as in the well developed countries. This approach, derived from the enthusiasm of the beginning of the last decade of the twentieth century, when after the collapse of communism the "end of history" (Fukuyama 1996) has come, and that the society would develop harmoniously and unobtrusively in the path of liberal democracy. Unfortunately, this era of optimism was soon over. Its responsibility for climate change has not been recognized by the United States. In July 1997, US Senate adopted unanimously (95 votes) The Byrd -Hagel resolution which says that the United States will not enter into any climate agreement that will require the reduction of the greenhouse gas emissions only to highly developed countries (Hovi *et al.* 2010: 130).

Other developed countries, at least in the initial period, have not denied their greater responsibility for protecting the climate. This was due primarily to the awareness of their significantly higher share of emissions in historical terms. It is because they have used fossil fuels as a source of energy since the beginning of the industrial revolution, while emissions in developing countries – including China, Korea, Brazil and India – began to rise only at the end of the 20th century. As shown in Fig. 1, despite the fact that for some years now China is the largest global greenhouse gas emitting country[2] (Web-02), their historical share (calculated since 1850) is currently around 12% (Ekholm, Lindroos 2015: 11). Developed countries: USA, EU member states, Russia, Japan and Ukraine are responsible for over 70% of historical emissions. Poland's share in global historical emissions is 2.1% (12th place in the world).

However, in recent years, the emissions in some of these countries have grown rapidly: although in Brazil it is still significantly lower and in 2013 amounted to 2.5 Mg CO2eq *per capita* in 2013, in China it was already 7.6 Mg CO2eq *per capita*, and in

2 In 2016 China was responsible for approximately 30% of global emissions.

South Korea as much as 11.8 Mg CO2eq *per capita*. In most African countries, however, this emission still does not exceed 1 Mg CO2eq *per capita* (Web-03).

Such rapid growth in greenhouse gases emissions in some developing countries has led to the need to redefine the issue of the responsibility for climate protection. It has become clear that without halting the growth and reducing the emissions also in less developed countries, the effective protection of the climate will not be possible. Hence, although the agreement signed in Paris in December 2015 did not give way to a common but differentiated approach, it was decided that the reduction effort must also be taken by Non-Annex I Countries. Therefore, the architecture of the global climate agreement has changed. Instead of imposing a reduction obligation on all states together or on selected groups of states, it was decided that the Parties to the Paris Agreement would propose their own national targets (NDCs – Nationally Determined Contributions). By May 2017, 141 countries (Web-04) submitted their climate policy and climate protection goals.

Changing the way of setting reduction targets does not, however, mean rejecting the principle of differentiated responsibility which is related to the financing of climate policy in developing countries. Its significance is that the effects of climate change will be much more severe in poor countries than in rich states (Mendelsohn *et al.* 2006: 159 – 178). The predicted effects of changes will not only affect the economic slowdown of these countries and create new development barriers (Sem and Moore 2009: 46), but will also increase the focus on migration and immigration – the escape of people from areas particularly affected by climate change (Waldinger 2015). Moreover, these countries can neither afford implementing mitigation measures, nor adapt to the predicted consequences of the climate change.

Therefore, during the 15th Conference of the Parties of UN FCCC in 2009 in Copenhagen, the negotiators decided that a special climate fund would be set up. It should collect funds from governments of Annex I Countries to ensure financing of the climate policy implementation in developing countries. According to the agreed provisions, the value of aid provided by Annex I Countries to climate action should amount globally to US $ 100 billion per year by 2020. Unfortunately, currently the value of declared contributions is far lower, raising concerns about the possibility of implementing the necessary actions in the most vulnerable countries (Web-05). This indicates that while in the sphere of declarations, most politicians in developed countries acknowledge the responsibility of their states for the negative effects that are observed in developing countries, in practice the promised actions are not taken. This appears not only to be caused by the loss of the enthusiasm of the early 1990s, but also by the growing tendencies of isolationism in individual countries, growing nationalism, and the reduction of their willingness to work together to solve global problems. Ethics – the sense of responsibility for the quality of the world we leave behind is increasingly being replaced by pragmatism – the need to adapt electoral programs and activities to short-term voters' expectations.

4. Summary

Although the concept of responsibility can be linked to many meanings, it undoubtedly refers to moral issues as well (Krzysztofek 2015: 220-230). To be responsible means to be ready to bear the consequences of our activities and to feel the obligation to repair what has been destroyed or degraded by our fault. This also includes responsibility for the climate and the whole world around us. Directly expressed it Holy Father Francis in *Laudato Si* (2015): "…The degradation of the natural and human environment and the ethical degradation are closely related…". In Pope's view, the main cause of anthropogenic climate change and the wider destruction of the natural environment are greed

and egoism and the escape of responsibility that allows politicians and managers of large corporations to take care of their own short-term interests, ignoring the rights of the weak and the victims of wrong decisions. Such attitudes also allow for decision -making without reflection as to how their consequences will affect the quality of life of future generations. The view of the Pope is unequivocal: *"...Why try today to retain the power, which has proved unable to intervene when it was urgent and necessary ?..."* (Francis, 2015: 57).

Also Polish politicians have problem with accepting our responsibility for climate protection. On the one hand, they rightly claim that Poland is a country of climate success, and that current greenhouse gases emissions, despite more than double GDP growth, are 30% lower than in the baseline 1988 year. On the other hand, they publicly discredit climate policy goals and don't recognize our country's responsibility for climate change which lies not only in reducing the greenhouse gases emission, but also in supporting the developing countries in this respect. Currently Poland's input in both areas is far below the real economic potential of the country and below the efforts made by other developed economies. This escape from responsibility, supposedly in the interests of endangered mining jobs, is in fact aimed at preserving political and financial power over a large part of the economy that – depends on energy producing sector which is state controlled. Such approach will not only lower the prestige of our country on the international arena[3], but it may also result in slowing down the economic growth, losing international competitiveness and permanent stagnation of Poland in the middle income zone.

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3 Clear evidence that the climate policy of Poland is observed in the world can be found i.a. in the words of Anglican Bishop Tutu (the Nobel Peace Prize laureate for a long-standing, peaceful fight against racism and apartheid in RPA). He appealed to the then Prime Minister of the Polish Government for a greater solidarity in climate policy when Poland vetoed the EU climate plans: "…today Poland is among the 50 richest countries. Many countries have expressed their solidarity with Poland and helped to rebuild the country after years of repression and improper economic policies (…) Millions are watching and waiting. Show them that you care about them, give them hope… ".

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Legal acts

(A) Ramowa Konwencja Narodów Zjednoczonych w sprawie Zmian Klimatu, (Dz. U. nr 53 z 1996 roku poz. 238).

Ochrona klimatu jako problem etyczny

Streszczenie

Powstrzymanie globalnej zmiany klimatu to jedno z najważniejszych wyzwań jakie stoją przed ludzkością w XXI wieku. Wymagać to będzie znaczących zmian w gospodarce, konsumpcji, sposobie życia. Ale ochrona klimatu to również problem etyczny. To problem odpowiedzialności za wspólne dobro jakim jest klimat. W artykule omówiono wybrane problemy etyczne, jakie związane są z wdrażaniem polityki klimatycznej. Wskazano, że zaakceptowanie wyników badań naukowych wskazujących na odpowiedzialność człowieka za zmiany klimatu jest warunkiem koniecznym dla prowadzenia aktywnych działań na rzecz ochrony klimatu. Stwierdzono także, że wspólna, lecz zróżnicowana, odpowiedzialność poszczególnych krajów wynika przede wszystkim z ich historycznej emisji gazów cieplarnianych. Wynika ona także stąd, że większość znaczących, negatywnych skutków zmiany klimatu wystąpi w krajach najbiedniejszych, których udział w emisji gazów cieplarnianych jest bardzo mały. Odrzucanie odpowiedzialności człowieka za zmiany klimatu oraz odpowiedzialności bogatych społeczeństw za już występujące zmiany i ich skutki w krajach

rozwijających powoduje, że działania na rzecz ochrony klimatu nie są prowadzone w wystarczającym zakresie. Za Ojcem Św. Franciszkiem powtórzono, że bez zmiany postaw etycznych wobec środowiska przyrodniczego i przyjęcia odpowiedzialności za cały otaczający nas świat skuteczna ochrona klimatu nie będzie możliwa.

Słowa kluczowe
zmiana klimatu, etyka, wspólna i zróżnicowana odpowiedzialność,
polityka klimatyczna, gazy cieplarniane