



**ANALYSIS OF THE SHORT-TERM AND LONG-TERM  
IMPACTS OF THE CORONAVIRUS CRISIS ON  
INTERNATIONAL CLIMATE POLICY**

**KORONAVİRÜS KRİZİNİN ULUSLARARASI İKLİM  
POLİTİKASI ÜZERİNDEKİ KISA VE UZUN VADELİ  
ETKİLERİNİN ANALİZİ**

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**ABSTRACT**

The coronavirus pandemic has caused far-reaching precautionary measures around the world. Governments' attempts to get the coronavirus under control have led to the negligence of other important policy areas. Climate policy in particular has been significantly influenced and lost importance on the political agendas of states after the outbreak. Over time, the coronavirus will either disappear or lose its initial impact due to medical measures. Two years after the outbreak of the coronavirus, this paper aims to analyse and evaluate the short-term and long-term impacts of the coronavirus crisis on international climate policy. It is important to analyse how it has shaped international climate policy and what lessons can be learned for dealing with climate change. The analysis is based on the principles and regular functioning of the International Climate Change Regime.

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## **ÖZ**

**Koronavirüs pandemisi nedeniyle tüm dünyada çok sayıda geniş çaplı önlemler alınmıştır. Hükümetlerin koronavirüsü kontrol altına alma girişimleri diğer önemli politika alanlarının ihmal edilmesine neden olmuştur. Özellikle iklim politikası bu süreçte devletlerin siyasi gündemlerinde önemini kaybetmiştir. Zaman içinde koronavirüs tıbbi önlemler nedeniyle ya yok olacak ya da baştaki etkisini kaybedecektir. Bu makalede, koronavirüsün ortaya çıkmasından iki yıl sonra, koronavirüs krizinin uluslararası iklim politikasına kısa ve uzun vadeli etkileri analiz edilerek değerlendirilmektedir. Bu bağlamda pandeminin uluslararası iklim politikasını nasıl şekillendirdiğini ve iklim değişikliği ile mücadelede hangi derslerin alınabileceğini analiz etmek önemlidir. Analiz, Uluslararası İklim Değişikliği Rejimi'nin ilkelerine ve düzenli işleyişi temel alınarak gerçekleştirilmiştir.**

**Anahtar Kelimeler: İklim Değişikliği, Uluslararası İklim Politikası, COVID-19, Korona Virüs Krizi, Tehdit Algısı.**

## **INTRODUCTION**

Starting to spread in Wuhan, China, at the end of 2019, the COVID-19 pandemic has had wide-ranging effects worldwide. The highly contagious virus can cause serious damage to human health, even leading to death. Over 508 million cases have been registered worldwide, including more than 6.2 million deaths (John Hopkins University, 2022). Within a short time, governments have taken a variety of measures and have adopted several restrictions that have a profound impact on all areas of life. The urgency of addressing the global pandemic made it the focus of the political agenda. The new threat perception of states has pushed other important political issues, including the fight against climate change, into the background. However, while international climate policy became less important especially at the beginning of the coronavirus crisis, it can currently be stated that the work of the international climate regime is becoming more and more possible.

Two years after the outbreak of the coronavirus crisis, it still seems to have an effect on climate policy. This leads to the research question of this paper: *What significance does the coronavirus crisis have for international climate policy?* This paper will analyse the short- and long-term effects of the coronavirus on climate policy in order to answer this question. It will work out the differences of the effects for climate policy caused immediately after the outbreak of the coronavirus and governments' first reactions to the new crisis during the first waves until the beginning of 2021 and the time afterwards the so-called long-term effects.

This article is based on a comparative approach. The regular work and functioning of international climate policy before the pandemic will be compared with the situation after its outbreak. Two phases after the outbreak of the pandemic will be examined. The time frame immediately after the outbreak and the first coronavirus waves until the beginning of 2021 represent the first phase, whereas the time afterwards encompasses the second phase. By considering and analysing two time frames, this comparative approach makes it possible to determine the differences in impacts of the pandemic and the associated measures on international climate policy. Thus, conclusions can be drawn about short-term and long-term impacts. The principles and the (regular) functioning of the international climate regime will serve as a basis for analysing the effects of the coronavirus crisis on international climate policy. The effects of the coronavirus crisis will be determined by the deviations from the valid principles or the functioning of international climate policy.

In order to answer this research question, the impact of the measures associated with fighting the coronavirus due to the new threat perception of states on climate will be worked out. Afterwards, the short-term effects and then the long-term effects of the coronavirus crisis on international climate policy will be analysed. This article concludes by assessing the differences between the short-term and long-term effects of the coronavirus crisis in a concluding discussion and evaluating the results with regard to future international climate policy.

## **1. POSITIVE AND NEGATIVE IMPACTS OF THE CORONAVIRUS ON CLIMATE**

Although the coronavirus causes serious damage to people and their social life, the measures associated with combating the coronavirus have a proven positive impact on the environment and climate change. Lockdowns, restricted transport and air traffic, home office and the closing of national borders have led to a significant decrease in global emissions. Based on these alterations, a 6.4% decrease in global emissions in 2020 compared to 2019 was observed (Tollefson,

2021). With the measures taken against the coronavirus, a decrease in CO<sub>2</sub> emissions was determined that has not occurred for at least 60 years (Le Quéré et al., 2020). Since man-made emissions can cause irreversible damage to the environment and are one of the main causes of climate change, the reduction of the yearly emissions had a positive effect on the environment and the climate. Due to the emission reductions, improved water quality and air quality is determined in many areas around the world. Moreover, reduced traffic and noise allowed species to get back to their natural environment (Khan et al., 2021: 526).

Even though measures to mitigate the coronavirus pandemic have given the environment a break, it needs to be emphasized that these measures are temporary and might quickly return to the earlier situation after the pandemic (Forster et al., 2020). According to experts, the decrease in emissions due to the measures taken to combat the pandemic have a very little impact on the global CO<sub>2</sub> concentration in the atmosphere (Liu et al., 2020). Despite the decrease in global emissions due to various restrictions in 2020, “this dip only translates to a 0.01°C reduction of global warming by 2050” (United Nations Environmental Programme, 2020). Since CO<sub>2</sub> and other greenhouse gases rest in the atmosphere up to hundreds of years, the decrease in 2020 due to the pandemic is too small to have an impact. Moreover, the pandemic had severe consequences for the global economy (Barbier, 2020). It is “the worst recession since the Great Depression, and far worse than the Global Financial Crisis” (Gopinath, 2020). The International Monetary Fund estimated a 3.3% decrease in the global economy for the year 2020 in its World Economic Outlook in October 2020 (International Monetary Fund, 2021: 7). This estimation was 1.1 percentage points lower than estimated due to “higher-than-expected growth outturns in the second half of 2020 for most regions” (International Monetary Fund 2021: 7, 10). In its Global Energy Review, the International Energy Agency reports that CO<sub>2</sub> emissions already started to increase in 2020 (International Energy Agency 2021). To compensate for the damage, even higher greenhouse gas emissions are possible in the future.

Furthermore, the COVID-19 pandemic has a range of serious negative impacts on the climate. Before COVID-19 there was a shift towards sustainable lifestyle that means the reduction of the usage of natural resources, which includes using reusable products and doing less damage to the environment. Due to the coronavirus this lifestyle had to be given up to a certain extent. As a safeguard against the coronavirus pandemic, a new lifestyle has been established that is considered more hygienic and safer and makes sustainable living more difficult (Fuentes et al., 2020). This new attitude includes, inter alia, the use of one-way products, increased packaging of food, increased usage of plastic, the increased number of online orders, the avoidance of public transport and the use of private vehicles instead (Silva et al., 2021).

Although, it has been found that the virus stays on cardboard boxes or copper surfaces (24h) much shorter than on plastic (72h), because of the framing that the use of plastic is useful to protect against the virus, more plastic is used (Brock, 2020; Makki et al., 2021). Especially in 2020, increased plastic production and usage were noticed. The reason for this is the fast and inexpensive production of plastic in contrast to more environmentally friendly recycled alternatives, which are more cost-intensive and time-consuming in production (Brock, 2020; Gorrasi et al., 2021). The amount of plastic produced and used is so high that the demand for recycled materials has decreased significantly (Brock, 2020). At the same time, households have produced too much waste, so that the recycling companies cannot cope with the situation (Brock, 2020).

The lower global demand for oil during the coronavirus crisis led to a temporary drop in oil prices. This can lead to greater use of oil in the future. As an example, people might prefer to use fossil fuel driven cars to electric vehicles because of their affordability (Helm, 2020). Another problem associated with the coronavirus is the increased amount of waste that is harmful to the environment. Disruptions in food production due to lockdowns (e.g. lack of workers) led to high levels of food waste (Bajzelj, 2020). Such waste is responsible for an important part of greenhouse gas emissions and is therefore harmful to the climate (Bajzelj, 2020).

The production, use and often inadequately disposal of vast quantities of Personal Protective Equipment (PPE), that is disinfectant wipes, gloves and masks, pose particularly great danger to the climate (Ammendolia et al., 2021). These products, often made of plastic, have been produced much more globally since the disease first spread (Ammendolia et al., 2021). Although they were originally intended for medical purposes and law prescribes only some of them, all individuals use them since they are easily available. The one-time usage of these products poses the biggest problem for the environment. Due to the inappropriate disposal of large quantities of PPEs the environment (esp. oceans) gets increasingly polluted (Saadat et al., 2020). Products (such as gloves) that do not protect against the coronavirus are also used. Here, it is important to make clear that regular hand washing is more effective against an infection (Saadat et al., 2020). Cities use large amounts of disinfectants to fight the virus, which poses a high risk to ecosystems and biodiversity (Silva et al., 2021; Zhang et al., 2020).

Table 1 summarizes the above-mentioned positive and negative impacts of the coronavirus on the climate. It clearly illustrates that the coronavirus has more negative than positive impacts on the climate. A closer look at the positive impacts reveals that they are more short-lived than the negative impacts. While

the positive impacts will only exist during the application of the COVID-19 restrictions, negative impacts, e.g. increased greenhouse gas emissions due to economic recovery, can also exist in the longer term.

**Table.1: Impacts of the COVID-19 Pandemic on Climate**

Positive Impacts	Negative Impacts
<ul style="list-style-type: none"> <li>- Decrease of global greenhouse gas emissions</li> <li>- Improvement of water and air quality</li> <li>- Break for the environment</li> <li>- Reduction of traffic and related noises</li> </ul>	<ul style="list-style-type: none"> <li>- Positive impacts on climate are temporary</li> <li>- Compensation of the economic damages may lead to more greenhouse gas emissions</li> <li>- Sustainable lifestyle needed to be given up to a certain extent</li> <li>- Increased use of one-way products</li> <li>- Increased use of plastic (PPE, packaging)</li> <li>- Use of disinfectants poses a risk to ecosystems</li> </ul>

**2. INTERNATIONAL CLIMATE CHANGE POLICY**

The foundation of international climate change policy goes back to the very first international conference on environment hold in Stockholm in 1972 (United Nations, 1972). Publications on the seriousness of the environmental damage have drawn further international attention to the problem (Carson, 1962; Meadows et al., 1972). In subsequent years, states have increasingly dealt with the issue of environmental protection and climate change policy. After the scientific confirmation of the existence of climate change in the first IPCC in 1990 report, the international community has established an international regime to combat climate change that poses a serious threat to all countries worldwide (IPCC, 1992). The framework for this was laid in 1992 with the adoption of the United Nations Framework Convention on Climate Change (UNFCCC). Since 1995, the international community met annually at the so-called Conference of the Parties (COP), in order to discuss the current situation of the climate change problem, possible solution approaches and goals achieved so far (Bodansky, 2005). The Kyoto Protocol (1997) intended to reduce the reduction of greenhouse gases in the period 2008-2012 by at least 5.2% compared to the emissions in 1990 (United Nations, 1997). The 2015 Paris Agreement is currently the central document of the International Climate Change Regime with the aim of limiting global warming to 2°C. The Paris Agreement calls on the countries to make their own contributions, the so-called Nationally Determined Contributions (NDCs), for the year 2030 (or 2050) (United Nations, 2015). International climate policy consists of two components: mitigation and

adaptation. Mitigation means reducing emissions and other climate-damaging factors in order to protect the climate. Adaptation is about how people, their social environment and further areas can adapt to the consequences of climate change (Daschkeit, 2012).

### **3. THE ANALYSIS OF THE IMPACTS OF THE CORONAVIRUS CRISIS ON INTERNATIONAL CLIMATE CHANGE POLICY**

The impacts of the measures taken to combat the coronavirus on international climate policy cannot be denied. However, owing to the extent and duration of both crises, these effects did not always remain the same. Although both crises can have far-reaching consequences worldwide, the impacts of climate change are more complex and can also be more serious. The fact that pandemics are just one of several consequences of climate change underlines this statement. While pandemics can be taken under control through right medical precautions (vaccination, treatments, etc.) and they therefore last for several years, climate change extends to the entire upcoming century and beyond, with increasingly serious consequences.

It can be stated that the effects on international climate policy are not the same today as they were at the beginning of the outbreak of the pandemic. Therefore, it is important to examine what impacts the coronavirus crisis and related preventive measures have on international climate policy and how these impacts vary over time. International climate policy that was initially hardly practicable is currently possible again, albeit under different conditions.

#### **Short-Term Impacts of the Coronavirus Crisis on International Climate Change Policy**

After the outbreak of the coronavirus pandemic, countries around the world tried to fight the life-threatening virus. This has pushed all other problems and policy areas into the background. The pandemic has been regarded as a more urgent threat by states that needs to be addressed since the coronavirus will leave severe permanent damage. Climate change was also seen as a less pressing problem to solve “because the time scale for climate change stretches to years and decades, making these changes may appear less urgent than the ones required for a global pandemic” (Jordan and Palmer, 2020: 1).

According to the representative of the Copenhagen School, Barry Buzan, security is not limited to military security and encompasses many more areas (political, economic, societal, environmental security) (Buzan, 1991; Buzan et al., 1998). With the expansion of the concept of security, various threats are perceived. “Threat perception is the decisive intervening variable between action and reaction in international crisis” (Cohen, 1978: 93). For this reason, states

must first perceive a threat to mobilize their defensive resources (Cohen, 1978). At the beginning of the coronavirus crisis, climate change was perceived less of a threat for states than the coronavirus and its side effects. This situation is well represented by the Giddens' Paradox, which goes back to the sociologist Anthony Giddens. The Giddens' Paradox states that politics is not addressing climate change because there are other problems to be solved and "since the dangers posed by global warming aren't tangible, immediate or visible in the course of day-to-day life" (Giddens, 2009: 2) there won't be sufficient actions to prevent them. It will be waited until the dangers are visible and then it will be too late to do anything about them (Giddens, 2009: 2).

Since the International Climate Regime began its work, it was the first time that the annual Conference of the Parties (COP26), which is important for the functioning of the regime, had to be postponed. The pandemic kept states from exchanging their climate policy content and discussing future goals and projects at the international level. Because of the circumstances caused by the pandemic, other climate related conferences (e.g. World Oceans Summit) have also been cancelled, making climate policy considerably more difficult (Worland, 2020).

In order to achieve a successful international climate policy, it is important that countries adhere to the obligations set out in the global climate agreements. The United Nations have evaluated the impact of the coronavirus on their 17 Sustainable Development Goals (SDGs). For 'Climate Action', they predicted that the effects of the pandemic would result in a "reduced commitment to climate action" (United Nations, 2020b: 12). The measures have a positive impact on the environment due to the decrease in emissions but these effects are "short-lived" (United Nations, 2020b: 11) and won't be sufficient to achieve the goals of the Paris Agreement.

Overall, the coronavirus crisis also has a negative impact on the two components of climate policy. When considering the component mitigation, it can be said that the coronavirus crisis makes climate protection and the prevention of climate change more difficult. Since PPEs are produced in large quantities, are often inappropriately disposed of and are hardly degradable, but are at the same time essential to protect people against the coronavirus, mitigation gets more difficult. The same applies to the increased consumption of plastic due to the virus. The sustainable lifestyle, which is central to environmental protection, was no longer possible as before COVID-19 due to the increased usage of single-use products and plastic.

Since forests act as carbon sinks and can thus remove emissions from the atmosphere, they are an essential part of mitigation (Canadell and Raupach, 2008). Therefore, afforestation and the protection of existing forests are



important for states as part of their climate policy. Since governments have focused on combating the pandemic and were therefore no longer concentrating on forests like before, more illegal deforestation and actions that are harmful to the environment have been established (Troëng et al., 2020). Due to deforestation, important sinks for greenhouse gas emissions disappear. If the deforestation occurs by burning forests, additional CO<sub>2</sub> emissions will be produced through the fires (Sengupta, 2019).

One of the main causes for the production of greenhouse gases is the high energy consumption worldwide. Therefore, increasing energy efficiency and the use of renewable energy sources are central to climate protection. However, the current crisis is likely to make it more difficult to invest in renewable energy sources. The International Renewable Energy Agency (IRENA) estimates that \$5.7 trillion are needed to be invested annually by 2030 to achieve a global transition to renewable energies (IRENA, 2022). Since the precautions against the coronavirus have led to immense economic disadvantages, it is even more difficult to provide the necessary budget for the transition to renewable energies. Instead, cheaper energy alternatives (oil, coal, etc.) might be used. In the short-term, due to the economic crisis following the pandemic financial resources for climate protection decreased. The policy areas that are much more urgently in need of financial resources are being given priority. At this point adaptation has also been more difficult. The lack of financial resources is hindering the implementation of adaptation projects that are essential for a successful climate policy.

Some measures against the spread of the pandemic, accompanied by changes in people's behaviour, have proven to be positive for the climate. This shows that certain changes in behaviour and norms can reduce greenhouse gas emissions (Fuentes et al., 2020). For this reason, the coronavirus crisis could offer an incentive for rethinking; some measures that have proven to be positive for the climate could be continued to uphold. An example of this is the use of the Internet for meetings, because it replaces long business travel and thus saves emissions.

### **Long-Term Impacts of the Coronavirus Crisis on International Climate Change Policy**

It is important to examine which impacts the coronavirus crisis is still having on climate policy, to what extent the coronavirus crisis has shaped international climate policy and what long-term impacts it might cause. The coronavirus crisis will lose its initial strong impact because it will be contained more and more by medical measures and people worldwide are adjusting to live with the virus. The decline in its impact on international climate policy can

already be seen. The international climate conferences are now possible again and climate change is once again appearing as an important topic on the political agendas of states.

Even if the influence of the coronavirus crisis on international climate policy seems to be decreasing currently, there is still an impact. For example, the annual meeting of the Conference of the Parties was held in Glasgow in 2021, but it took place under very strict precautions and various restrictions. Even the pre-meetings, which serve to prepare for the Conference of the Parties' Conference, could only take place online and were therefore not satisfactory (The Guardian, 2021). Due to dissatisfactory preparations and the postponement of the conference, a lot of catching up is needed (The Guardian, 2021). Participation in the conference was only possible for vaccinated delegates and for delegates from red list countries only after quarantine (The Guardian, 2021).

Since the outbreak of the virus the number of infections rose more sharply for certain time periods in the form of waves. Currently, the emergence of the so-called variants (delta, omicron, delmicron, etc.) makes it difficult to contain the virus, since vaccines developed to date are not effective enough against all variants of the virus. At the beginning of 2022 record numbers of infections were recorded in many countries around the world. These figures indicate no end to the pandemic in the foreseeable future.

The restrictions to combat the virus today vary regarding their scope to those restrictions at the beginning of the outbreak of the coronavirus. Far-reaching restrictions (flight restrictions, lockdowns, etc.) that have proven to be positive for the climate no longer apply. In other words, the measures and restrictions consistent with climate mitigation no longer exist. On the other hand, PPEs, disinfectants, packaging, etc. that are harmful for the climate and are difficult to degrade, continue to be used in large quantities to protect against the virus. This is not only harmful for the climate but also stands in direct contrast to climate mitigation. As long as the coronavirus is infectious the usage of protection products that cause huge amounts of waste will be continued. Moreover, in many countries PCR tests are foreseen to get access to school, work or other life situations, e.g. social activities. Every day millions of PCR tests are done all over the world (Our World in Data, 2022). Apart from the registered PCR tests, a large number of the so-called rapid tests are done on regular bases. The equipment for these tests produces a large amount of waste. As already mentioned above, the inappropriate disposal of the used products (PPEs, etc.) is problematic.

The outbreak of the COVID-19 pandemic and its long-term effects demonstrate the interconnectedness of various areas such as the health sector,

environment and economy. Especially economy was hit hard by the measures taken to combat the coronavirus. The way states are planning to recover from the economic crisis in turn has wide-ranging impacts on climate policy and climate change in general (Obergassel et al., 2021). Already in 2020, the United Nations stressed the importance of a green recovery because it would be able to “cut up to 25 per cent off the emissions we would expect to see in 2030 based on policies in place before COVID-19” (United Nations Environmental Programme, 2020). Another noteworthy point is that “such a green recovery would put emissions within the range that gives a 66 per cent chance of holding temperatures to below 2°C, but would still be insufficient to achieve the 1.5°C goal” (United Nations Environmental Programme, 2020). The United Nations therefore evaluates the current situation as an opportunity to develop a new greener economy and more sustainability and calls on the states to cooperate internationally in these areas. United Nations Secretary General António Guterres called for building back better from the economic crisis and proposed “six climate-related actions to shape the recovery” (Guterres, 2020; United Nations, 2020a).

States are currently trying to (re)build their economies. There are different ways of economic recovery. A distinction can be made from fossil-fuelled recovery to green approaches that will have a significant impact on future emissions (Forster et al., 2020). At this point, the coronavirus crisis can be seen as a chance that, through a disruption in the whole system, makes profound changes possible (e.g., green economic rebuilding) (Markard and Rosenbloom, 2020). Thus “the way in which the world emerges from this crisis will have consequences for tackling climate change” (Andrijevic and Rogelj, 2020). The European Union already demonstrated its determination in the fight against climate change in 2019 with the European Green Deal (EDG), in which it pursues the goal of climate neutrality by 2050 (European Commission). “The [coronavirus] crisis has tended to strengthen and reinforce the EGD, which itself may be a potentially transformational critical juncture of EU climate policy” (Dupont et al., 1096). The European Union’s handling of the pandemic demonstrates how a climate-friendly reconstruction of the economy is possible.

The OECD Green Recovery Database entails recovery spending of 44 OECD countries and partner economies for the post-pandemic period (OECD, 2021). According to the database, OECD countries are spending 677 billion USD for recovery measures that have a positive impact on the environment and the climate and although this amount is much more than previous spending, it only represents 21% of the total (3200 billion USD) spending on recovery measures (OECD, 2021). The rest of the investments are mixed/negative (10%) or not having a direct impact (69%), but it is questionable if they are not harmful for the environment (OECD, 2021). Although, a noteworthy part of the funds is

invested in green investments, the major part of investments is spent in conventional economic rebuilding, which in turn is not in line with climate mitigation.

The shift of the overall proportion of recovery spending towards greener spending would need to be significantly larger to meet the Paris Agreement targets. Galanakis et al. describe how to deal with challenges in a post-pandemic period and how to recover through a climate-friendly reorientation through bioeconomy by taking into account various areas such as bioenergy, ecosystem services, culture, fashion, etc. (Galanakis et al., 2022). It is important to lay a climate-friendly foundation in the rebuilding, because this will have a major impact on the success of future climate policy. While OECD countries are mostly free to decide what way of recovery they are going to choose, less developed countries and developing countries mostly lack the financial resources, the necessary know-how, technology and much more to achieve a green economic recovery. Mostly, these countries are also confronted with other problems that need to be solved beforehand. The additional burdens that occurred because of the pandemic make it even more difficult for these countries to focus on combating climate change. At the last COP26 in Glasgow, the international community decided to support developing countries more through aids. Further decisions on support measures to aid developing countries will be necessary at the next Conference of the Parties in Egypt (COP27) and also in the future in order to reduce the negative impact of the pandemic on climate policy.

As already mentioned, the coronavirus has led to significant changes in behaviour and consumption at the micro-level, most of which have a negative impact on the climate. Since people display these climate-harming patterns of behaviour (e.g., increasing usage of plastic, driving by car than using public transport) primarily to protect themselves against the coronavirus, they will most likely not change until the pandemic is tackled. Even in the post-pandemic period, people worldwide could stick to these behavioural patterns and it could be quite difficult to change them. Micro-level behaviour and especially consumption behaviour is very important in terms of climate mitigation because “around two-thirds of global emissions are linked to private households, when using consumption-based accounting” (United Nations Environmental Programme, 2020).

Changes in behaviour concerning the problem of climate change are quite difficult. According to Elke U. Weber the reason for this is “because our focus, evolutionarily, is on the here and now, and in the here and now reside the costs of action, not the benefits. The benefits lie in the future” (Weber, 2015: 566). Nevertheless, the outbreak of the coronavirus pandemic has shown that drastic changes in behaviour are possible worldwide in a relatively short time when

threat is directly perceived. Even though the current IPCC report (IPCC, 2022) stresses that there are limits of adaptation and the international community perceives climate change as a huge risk that needs global action, especially on the micro-level, this consciousness is still missing. In order to promote action against climate change in the long-term, especially at the individual level, the existence of the risk should be made clear by evoking “visceral reactions towards the risk of global warming, perhaps by simulations of its concrete future consequences for people’s home or other regions they visit or value” (Weber, 2006: 103). Meijers et al. describe “three key drivers for climate change action [on the individual level]: changing perceptions of governmental policy and perceptions of threat to close others and priming participative efficacy beliefs” (Meijers et al., 2021) in their article that deals with learning from the pandemic to fight climate change.

The media play a decisive role in forming public opinion and shaping the risk perception on certain topics and thus indirectly influence future human behaviour practices. Before the outbreak of the coronavirus, climate-related content (national disasters worldwide, wildfires, Fridays for Future Movement) were part of media reports. The outbreak of the coronavirus made up a large part of the media coverage whereas media coverage on climate change decreased (Stoddart et al., 2021: 13). A survey on Canadian newspapers noted media coverage of climate change related to the coronavirus for the first time in early 2020 (Stoddart et al., 2021: 9). Two different framings could be examined: On the one hand, the necessity of a green recovery is stressed (‘prognostic’) and on the other hand, the two crises “should be interpreted as parallel crises with potentially similar causes – in terms of unsustainable human intervention in the natural world – and impacts” (‘diagnostic’) (Stoddart et al., 2021: 10). A media coverage that covers climate change, gives information on its potential dangers and illustrates the importance of climate change action could be helpful in the future to establish a more climate-friendly attitude at the micro-level and enable better climate policy.

Another important aspect that arose from the outbreak of the coronavirus is worth mentioning. Following the worldwide spread of the coronavirus pandemic, numerous scientific papers on coronavirus and climate change have been published. These scientific articles have different areas of focus of tremendous importance. Papers dealing with the similarities and differences between both crises clarify their character and enable a better assessment of their relationships (Fuentes et al., 2020; İba Gürsoy, 2021; Kumar and Ayedee, 2021; Markard and Rosenbloom, 2020; van der Ven and Sun, 2021; Vinke et al., 2020). A further important focus of investigation are scientific articles on the lessons that can be learned from the coronavirus crisis for tackling the problem of

climate change (Engström et al., 2020; Klenert et al., 2020; Manzanedo and Manning, 2020). A series of works describe ways of a new beginning/recovery after the pandemic and demonstrate that this is possible, especially in the area of economy, in a climate friendly way (Allan et al., 2020; Andrijevic and Rogelj, 2020; Barbier, 2020; Bogojević, 2020; Forster et al., 2020). This scientific literature has a special importance not only because a previously unexplored new area has been investigated, but also because it represents a very important scientific basis for policymakers. These publications contain different policy approaches and include important recommendations for action for a successful international climate policy in the 21<sup>st</sup> century.

Through the examination of the long-term impacts of the pandemic on international climate change policy in addition to the short-term impacts, this article not only compares different impacts of the crisis within two different time frames, but also analyses the transformation in the original impact of the coronavirus. The research results of this analysis can thus complement the existing literature and provide useful content for international climate change policy.

With no doubt, over time the coronavirus will either completely disappear, be mitigated or people will learn to live with the virus. In contrast, however, climate change is still present and is long-lasting. There are many ways to view the coronavirus crisis as an opportunity and learn lessons from it, how to react better to climate change as a global crisis, see it as a chance for a green economic restart and learn from the mistakes of insufficient preparedness for crises of this magnitude. Furthermore, this can lead to reflections on a better prevention and adaptation to climate change. The knowledge gained from the coronavirus crisis for dealing with climate change might also be helpful for a successful future climate policy.

#### **4. DISCUSSION AND CONCLUSIONS FOR INTERNATIONAL CLIMATE CHANGE POLICY**

The COVID-19 Pandemic has had a significant impact on many areas. This article analysed the importance and impact of the coronavirus crisis on international climate policy. A differentiation has been made between the short-term impacts that encompass the time frame immediately after the outbreak and the first coronavirus waves until the beginning of 2021 and the long-term impacts that capture the time afterwards. The measures taken to combat the coronavirus have contributed to lower global greenhouse gas emissions, which in turn have a positive impact on the climate and are in accordance with the international climate policy objectives.

In the short-term, restrictions lowered worldwide emissions for a limited period of time but the coronavirus crisis has made international climate policy more difficult in many ways. 2020 should have been an important year for international climate policy, but the focus had shifted to the current pandemic and related crisis. Mitigation in particular was no longer adequately possible due to the new, more environmentally harmful behaviour of individuals, among other things. A new framing is needed, e.g. to overcome the distrust of reusable products, so that climate protection is better possible again (Makki et al., 2021).

In the long-term, the decline in the coronavirus crisis impact could already be observed. International climate conferences are now taking place again but under different conditions and influenced by the pandemic. Although the coronavirus seems to have lost its initially strong impact, its indirect impacts are still present and will be observable in the future once it has been tackled. There are currently numerous efforts to make a new green start in the economy. However, the proportion of investments in green reconstruction compared to conventional ones is much lower. The long-term (indirect) impacts of the coronavirus crisis on international climate policy are a matter of interpretation of the problem. The way how future climate policy will be affected depends on how the international community, governments, economy and the media deal with the coronavirus crisis and what lessons they learn and what conclusions they draw from it. This in turn has a formative effect on the micro-level. All of this in turn will be important for the success in the two components of climate policy, mitigation and adaptation.

The pandemic has shown that the world is unprepared for global crises of this magnitude (Vinke et al., 2020). Better preparedness and early action by governments could have kept the scale of the crisis smaller. For the climate change problem, it will be too late to react from the policy of urgency. Therefore, it is important to take action in the two components of climate policy in the present even before the far too noticeable consequences occur. The fact that pandemics are just one of many negative consequences of climate change demonstrates the seriousness of the problem.

Limitations of this work are the partly vague statements about the long-term impacts of the coronavirus crisis on international climate policy. Future research, especially in the post-pandemic period, can examine possible impacts and draw safer conclusions. In addition, it would be interesting to see which path the international community and governments have chosen and to evaluate its meaning for international climate policy.

In this paper, it has been demonstrated that the COVID-19 Pandemic has had a significant influence on international climate policy in the short-term as

well as (a more indirect influence) in the long-term. However, the actors of the international community, governments, economy and also the media will determine if this impact will be a more positive or negative one in the long-term. Although the coronavirus crisis and climate change are two global crises, they differ in terms of their duration and extent. It is certain that the coronavirus crisis will disappear or its magnitude will decrease over time. Climate change, on the other hand, is a crisis that will continue to affect people's lives worldwide for decades with increasing impact. The outbreak of the coronavirus could therefore be regarded as an opportunity to learn lessons for dealing with climate change and invest in a successful future climate policy.

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