

## PUBLIC HEALTH

## REVIEW OF POLICIES AND ACTIONS ON TACKLING GLOBAL CLIMATE CHANGE - COP26 - IS THIS THE LAST CHANCE?

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## Abstract

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The world is facing the visible and potential consequences of climate change. No place on the Earth is immune to these changes. Current policy applied worldwide anticipates global warming of about 2.7°C compared to pre-industrial level by the end of the century. By implementation of Nationally Determined Contributions (NDCs), warming will be kept to 2.4°C. If long-term commitment targets or net-zero targets are included, then warming would be kept to about 2.1°C above the pre-industrial levels. The warming projections dropped by 0.3°C after the made pledges and established targets by the USA and Peoples' Republic of China. According to the "optimistic" scenario, if the 140 analysed countries reach the zero emission targets, then the average warming will be 1.8°C, or below 2°C. There is a significant gap between the pledges made by the governments and the total level of actions they have undertaken so far. With the new economic challenges, it is clear that we are at a crossroads. The impact of COVID-19 crisis will be crucial for the future of the climate policy. Climate changes will not wait. Their threat is over our heads and each and every day we face them. Every individual has a role to play in dealing with global climate change and we all can contribute to this threat if we all work together in a synchronous way. A greater political involvement is needed along with collective actions taken by all social actors. Over the last two years, the World Health Organization has advocated for greater inclusion of health authorities and services in Nationally determined contributions through activities to reduce the implications on health by climate change.

## ЈАВНО ЗДРАВЈЕ

## ПРЕГЛЕД НА ПОЛИТИКИ И АКЦИИ ЗА СПРАВУВАЊЕ СО КЛИМАТСКАТЕ ПРОЕМЕНИ- КОП 26 - ДАЛИ Е ТОА ПОСЛЕДНАТА МОЖНОСТ?

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## Изводок

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**Печатарски права:** ©2023 Михаил Кочубовски, Гордана Ристовска, Александра Петрова, Џансун Буковец, Кристи Дишо, Томислав Хаџи Тосев, Александар Петрески. Оваа статија е со отворен пристап дистрибуирана под условите на нелокализирана лиценца, која овозможува неограничена употреба, дистрибуција и репродукција на било кој медиум, доколку се цитираат оригиналните автор(и) и изворот.

**Конкурентски интереси:** Авторот изјавува дека нема конкурентски интереси.

Светот се соочува со видливи и потенцијални последици од климатските промени. Нема место на Земјата кое не е зафатено од овие промени. Сегашната политика што се применува ширум светот предвидува глобално затоплување од околу 2,7°C во споредба со прединдустриското ниво до крајот на векот. Со имплементација на националните одредени придонеси (NDCs), затоплувањето се одржи на 2,4°C. Доколку се вклучат долгорочни цели или целите на "net-zero", тогаш затоплувањето би се задржало на околу 2,1°C над прединдустриските нивоа. Проекциите за затоплување се намалија за 0,3°C по дадените ветувања и воспоставените цели од страна на САД и Народна Република Кина. Според „оптимистичкото“ сценарио, доколку 140-те анализирани земји ги достигнат целите за нулта емисија на штетни гасови, тогаш просечното затоплување ќе биде 1,8°C или под 2°C. Постои значителен јаз помеѓу ветувањата дадени од страна на владите и вкупното ниво на активности што тие ги презеле досега. Со новите економски предизвици, јасно е дека сме на крстопат. Влијанието на КОВИД-19 пандемијата ќе биде клучно за иднината на политиката поврзана со климатските промени. Климатските промени нема да чекаат. Нивната закана е над нашите глави и секој ден се соочуваме со нив. Секој поединец има улога во справувањето со глобалните климатски промени и сите ние можеме да придонесеме за отстранување на оваа закана ако сите работиме заедно на синхронизиран начин. Потребно е поголемо политичко вклучување како и колективни активности преземени од сите општествени чинители. Во текот на последните две години, Светската здравствена организација се залагаше за поголемо вклучување на здравствените власти и услуги во Национално одредени придонеси преку активности за намалување на импликациите врз здравјето од климатските промени.

## Introduction

The world is facing the visible and potential consequences of climate change. No place on the Earth is immune to these changes. The latest paper of Lynas et al. from 2021, clearly states that 99.9% of climate changes have been caused by humans. People all over the world are aware of this, but nonetheless the actions taken and their success are debatable<sup>1</sup>.

Did we have to wait until 2021 to initiate discussion on this issue? No! In 1896, Svante Arrhenius estimated that with increased CO<sub>2</sub> emission, the Earth's temperature would increase for 5°C by 2100<sup>2</sup>.

In 1963, for the first time ever, an expert meeting was held and majority of climate change implications were presented<sup>3</sup>. In 1970, again for the first time, the Earth Day was celebrated and eco-campaigns were globally initiated to increase the awareness for environmental protection<sup>4</sup>.

The first World Climate Conference was held in 1979 in Geneva. It is considered a harbinger of the foundation of Intergovernmental Panel on Climate Change (IPCC) in 1988.

The Secretariat of the United Nations Framework Convention on Climate Change (UNFCCC) was established in 1992 as an entity of the UN located in Bonn, Germany. The Secretariat provides technical expertise and helps in the analysis and review of information about climate change reported/submitted by each country. Today, the Convention is ratified by 196 countries, among them the Republic of North Macedonia<sup>5</sup>.

The aim of this paper was to make a review of the policies and actions

taken to tackle climate change, the accent being on COP2<sup>6</sup>.

## COP as a significant turning point

After the UN Framework Convention on Climate Change (UNFCCC) was ratified in 1994, the next year the first Conference of the Parties in Berlin (COP) was held. Since 1994, COP meets every year and it is the supreme decision-making body of UNFCCC. All states of UNFCCC review the implementation of the decisions and recommendations, undertake measures and necessary decisions to promote the implementation of the Convention<sup>5</sup>.

The Kyoto Protocol was adopted in 1997 and it entered into force in 2005. According to this Protocol agreed at COP3, the industrialized countries for the first period of the Protocol committed to limit and reduce emissions of carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride during the five-year period of 2008-2012 to at least 5% in comparison to the level of these gases in 1990. The EU and its Member States committed to an 8% decrease in their emissions in that period<sup>6</sup>.

The Kyoto Protocol was not ratified by the United States of America and Canada, so this Protocol entered into force in the 36 remaining countries. According to Shishlov *et al.*, the average annual emissions in the period 2008-2012 were 24.4% below the emissions from 1990. If hypothetically the USA and Canada participated, it would have reduced these emissions by 11.8%. Another reason mentioned in this paper was the collapse of the Eastern Bloc and financial crisis in

the period of 2007 and 2008 that significantly contributed to reduction of greenhouse gas emissions<sup>7</sup>.

Specifically, the EU countries, without Cyprus and Malta that did not have targets, succeeded in reducing the emissions of around 19% without counting the additional reductions coming from carbon and trading systems for greenhouse gas emissions<sup>8</sup>.

Unfortunately, this does not present the real picture in the world. According to The Emissions Gap Report 2012, the other countries increased the emissions so much that the increase of global emissions was 32% from 1990 to 2010<sup>9</sup>.

In spite of the international agreements on fight against climate change, countries do not implement the recommendations and assignments and even if they participate, they do not accomplish ambitious goals<sup>10</sup>.

In 2009, COP15 was held in Copenhagen, Denmark, and for the first time the objective of 1.5 to 2°C was established, and at COP16 held in Cancun, Mexico, industrialized countries pledged 100 billion dollars per year by 2020 for fight against global climate change<sup>11</sup>.

As a continuation of the previous agreements, the Paris Agreement was adopted on 12 December 2015. A total of 193 countries were Parties of the Agreement, and the Republic of North Macedonia ratified it on 9 January 2018<sup>12</sup>.

The objectives of the Paris Agreement are:

1. To reduce global warming below 2 and preferably to 1.5°C compared to pre-industrial levels;
2. To increase the ability to adapt to the negative impacts of climate

change and to encourage climate resilience and development of low greenhouse gas emissions in a way that it does not threaten food production;

3. To prepare financial projections (flows) in compliance with the new climate plans and climate-resilient changes<sup>12</sup>.

The adoption of the Nationally Determined Contributions (NDCs) and their update every five years can be considered as one of the greatest benefits of the Paris Agreement.

Article 6 from the Paris Agreement anticipates implementation of NDCs of the Parties through voluntary international cooperation in order to stimulate cleaner technologies and an overall transition towards a low-carbon economy. Countries with low emissions will be allowed to sell the excess capacity to countries with higher emissions by an overall restrictions of greenhouse gas emissions providing their net reduction. Demand and supply of allowed emissions will lead to formation of a carbon global price that will connect the negative external effects of greenhouse gas emissions and the pollutants. In other words, by paying the price for the carbon the countries that exceed their NDCs would bear the expenses for global warming<sup>13</sup>.

It is indisputable that the goal to reach a healthier world depends on fulfillment of the above-mentioned aims. Also, greenhouse gas emissions should be reduced as soon as possible and to reach net zero by the middle of the 21<sup>st</sup> century. By 2020, each country that adopted the Agreement had to submit its plans for actions regarding reduction of greenhouse gas emissions. According to

this Agreement, developing countries with their financial and technological capacity have to be leaders in accomplishing the objectives. With the establishment of Enforced Transparency Framework (ETF), starting in 2024, countries should report transparently on actions taken to fight climate change<sup>14</sup>.

However, according to the paper published in *Nature*, in addition to Intended Nationally Determined Contributions (INDCs), a median warming of 2.6-3.1 degrees Celsius is expected by 2100<sup>14</sup>.

No consensus was achieved at the COP25 in Madrid on the issue of common time frames for mutual implementation of climate plans. In general, there was no progress in mitigation, adaptation and finance to deal with climate crisis<sup>15</sup>. There was no governing body that could ensure implantation of these agreements and hence, the Conference was considered unsuccessful<sup>16</sup>.

United Nations Environment Programme for 2020 expected that by the end of this century global mean temperatures would rise for more than 3°C. Having in mind that the COVID-19 pandemic contributed to reduction of CO<sub>2</sub> emission, if countries succeed to recover from the pandemic with low carbon emission, and in line with the pre-pandemic estimations, then greenhouse gas emissions would be reduced by 25% until 2030<sup>17</sup>.

Six years after the adoption of the Paris Agreement, climate actions became a key part of the plans for recovering from COVID-19 pandemic. But, in spite of this, having in mind the incomplete implementation of previous plans and agreements, there was

no true hope for adherence to the next plans and agreements. Therefore, under the slogan *Uniting the world to tackle climate change*, COP26 was held.

On 25-26 July 2021, more than 50 ministers and UN representatives discussed about the implementation and goals of COP26. The agenda consisted of five topics: boost adaptation, keeping 1.5°C alive, loss and damage, finalizing the Paris Rulebook – focusing on Article 6, and mobilizing finance<sup>18</sup>.

One month prior to COP, as usual, Pre-COP was held. It took place in Milano (Milano Convention Center) from 30 September to 2 October 2021. In fact, Pre-COP was the last official multilateral event where participants from more than 50 countries, representatives of UNFCCC Secretariat, civil society representatives were present, before the meeting in Glasgow in November<sup>19</sup>.

Within the frameworks of Pre-COP, it is very important to emphasize the participation of young people, their perspectives, commitments and recommendations presented in the Youth Manifesto that delivers 4 key messages:

- ♦ Increased financial support for the young and their engagement and participation in the decision-making processes regarding climate change.
- ♦ Energy transition by 2030 that prioritizes keeping 1.5°C alive. Urgent use of diverse means available for adaptation and alleviation of damages, especially for the most vulnerable groups and regions. Recognition of tourism's vulner-

ability by the impacts of global climate change and building capacities, monitoring, investment and decision-making processes towards resilient recovery of blue and green tourism.

- ♦ Support participation of young entrepreneurs, artists, farmers, and athletes, particularly those from marginalized groups (ethnic minorities, indigenous people, persons with disabilities, etc.). Enhance ecological transparency and accountability. Abolishing the fossil fuels by 2030 at the latest. All non-states actors, including UN bodies, fashion, sport, art, entrepreneurship, agricultural entities etc. must not accept any fossil fuels investment, lobbying activities from this industry, especially in relation to international negotiations.
- ♦ Raising public awareness, mobilization of more people and active involvement in issues addressing climate change. Informing the entire population in an accessible and understandable way, starting with education of children and students at all levels through a unique and integrated system<sup>18,19</sup>.

Body language, interpersonal communication, the mood, possibility for direct discussion, shared workspaces, establishment of international cooperation and building confidence – all of these greatly affect conference outcomes<sup>20</sup>.

In 2021, the 26<sup>th</sup> meeting of COP was held in Glasgow (Scottish Event Campus), Scotland, UK. The Conference took place between 31 October and 13 November 2021. The Summit was hosted by the UK in partnership with Italy. It was attended by 120 coun-

try leaders, 197 representatives and more than 40,000 participants from governments, a large number of representatives of non-governmental organizations and youth movement, activists and media.

The official negotiations happened within a two-week period. Primarily technical issues were discussed in the first week, and the second week, meetings on high level were held and final negotiated decisions were made<sup>21</sup>.

#### Quote

“1. Secure global net zero by mid-century and keep 1.5 degrees Celsius within reach.

To deliver on these targets, countries will need to:

- ♦ accelerate the phase-out of coal
- ♦ curtail deforestation
- ♦ speed up the switch to electric vehicles
- ♦ encourage investment in renewable sources.

#### 2. Adapt to protect communities and natural habitats

At COP25 we need to work together in order to enable and encourage countries affected by climate change protect and restore ecosystems.

#### 3. Mobilise finance

International finance institutions must play their role and we need work towards unleashing the trillions in private and public sector finance required to secure global net zero.

#### 4. Work together to deliver

We can only respond to challenges of the climate crisis by working together.”

These targets must be translated into action in order to accomplish them as soon as possible. We have to halve emissions over the next decade and reach net zero carbon emissions by the middle of the century<sup>22</sup>.

In line with the UK conditions, the Summit patrons had to give real contribution to global climate change and to agree with the COP26 targets. In fact, to accomplish them businesses are obliged to net zero commitments by 2050 or earlier with a reliable short-term action plan.

Many believed that Glasgow 26 was “the last chance” to put under control global climate change. Although there is agreement for keeping global warming below 2°C compared to the pre-industrial era, and preferably to 1.5°C, and despite the implementation of Nationally Determined Contributions (NDCs), we are not approaching these goals.

At the very beginning of COP26, the leaders by Leaders’ Declaration stated that they would engage themselves in conservation and restoration of forests and other terrestrial ecosystems, decrease in vulnerability, sustainable agriculture, and if necessary, redesign agricultural policies and programmes.

The most vulnerable are at the greatest risk from climate change, but their contribution has been the smallest in causing it. Therefore, COP26 suggested action on adaptation to make plans and allocate more finance for improvement of early warning systems, defence from floods and building resilient infrastructure and agriculture to avoid further loss of life, livelihoods and natural habitats<sup>23</sup>.

## **COP26 PLEDGES**

Glasgow Food and Climate Declaration has confirmed the necessity of all parties involved in food systems to bring decisions on sustainable and righteous transition and coordinated decision-making for all involved parties. Development and implementation of integrated food policies as key elements in the fight against climate change, reduction of greenhouse gas emissions and appeal to governments to establish policies for support of these objectives.

Food systems currently account 21-37% of total greenhouse gases, and extreme inequalities are spread throughout the food system and disproportionately affect communities.

A total of 130 countries have promised to end deforestation by 2030. Furthermore, they committed to zero emission cars and vans transition by 2040, and no later than 2035 in leading markets<sup>24</sup>.

## **Finance as a huge challenge**

The amount and access to finance are very important for implementation of the Paris Agreement and play a key role in reaching “the green” recovery from the COVID-19 pandemic. Participants concluded that the amount of climate finance was increasing as well as the challenges in accessing available finance from the climate funds, including Green Climate Fund (GCF). Participants emphasized that political will was necessary to direct and simplify approaches and that greater individual and collective actions would be necessary to overcome the current and future catastrophic effects of global climate change<sup>25</sup>.

Presidency asked the Canadian and German governments to lead the 100 billion dollars delivery plan. Within UK's Clean Green Initiative, finance would be provided for supporting the deployment of sustainable infrastructure and green technology in developing countries<sup>26</sup>.

Developed countries agreed to continue with providing 100 billion dollars annually as financial support to developing countries until 2025<sup>27</sup>.

In order to reach Nationally determined contributions, South Africa as the world's largest carbon-intensive producer of electricity would be given 8.5 billion dollars over the next 3-5 years. However, trillion of dollars of additional investment annually would be needed to provide a safe future with low carbon and to support countries that already live with the devastating impacts of climate change. Also, the United States, the European Commission and United Kingdom committed to work together with other countries to support a green recovery from COVID-19 and to increase financial support for clean, green infrastructure in developing countries<sup>28</sup>.

The anticipated 20 trillion US dollars should be shifted to infrastructure from fossil fuels to renewable sources and energy efficiency by 2050<sup>29</sup>.

At least 23 countries undertook new commitments to gradually discontinue the usage of coal energy. On the other hand, major international banks committed to end the entire international public financing of coal power by the end of 2021. At least 25 countries and public finance institutions committed to stop international public support of fossil fuels energy sector by the end of 2022. If these

commitments are fulfilled, it is clear that COP26 meant gradual ending of coal energy as the major cause of climate change. Furthermore, it was planned to end the support for new coal power plants<sup>30</sup>.

Governmental steps are concentrated on economic support. Will the high-emission reduction be a priority or the recommendations from the Paris Agreement and all its previous heralds will be ignored? In spite of the fact that World Bank (2020), International Monetary Fund (IMF) (2020), International Energy Agency (IEA) (2020) and International Renewable Energy Agency (IRENA) (2020) have developed guidelines and recommendations for sustainable recovery, they have no political support.

By completion of the Paris Rulebook and how the Paris Agreement is being delivered, for the first time the developing countries and at the same the most vulnerable ones to climate change agreed to gradually end the use of fossil fuels<sup>29</sup>.

At COP26, six years after the Paris Agreement, no resolved issues on financing global climate action, transparency and mutual frameworks for climate commitments were approved. In fact, this refers to Article 6 of the Paris Agreement. Thus, the pathway to full implantation to the Agreement was opened<sup>31</sup>.

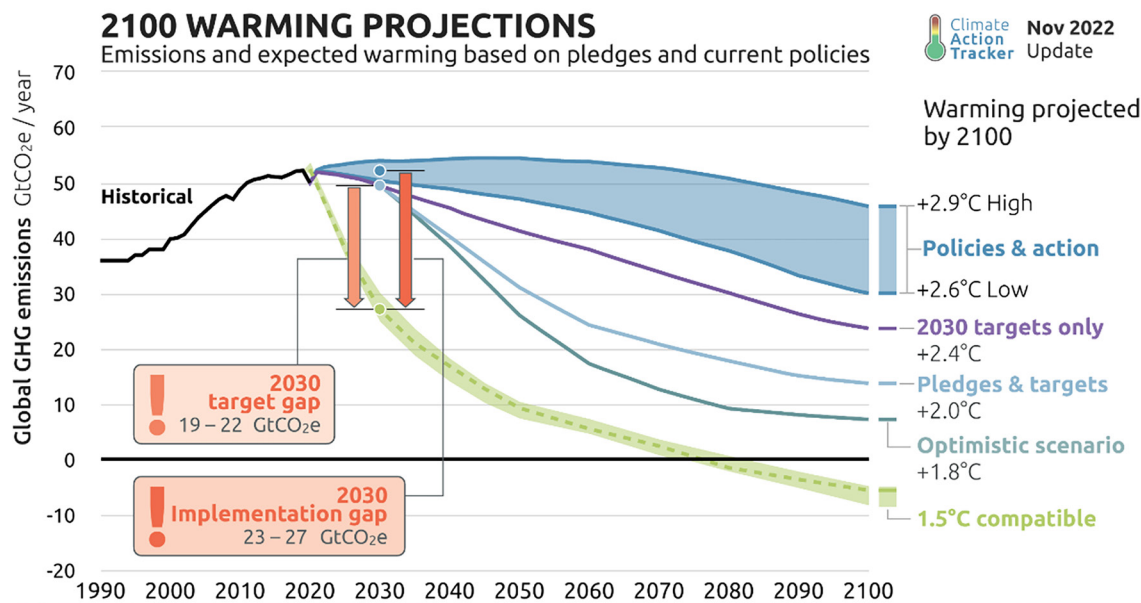
Now the resolute implementation of the contributions and targets remains to be seen.

### **Assessments and expectations**

Current policy applied worldwide anticipates global warming of about 2.7°C compared to pre-industrial level

by the end of the century. By implementation of NDCs, warming will be kept to 2.4°C. If long-term commitment targets or net-zero targets are included, then warming would be kept to about 2.1°C above the pre-industrial levels. The warming projections dropped by 0.3°C after the made

pledges and established targets by the USA and Peoples' Republic of China. According to the "optimistic" scenario, if the 140 analysed countries reach the zero emission targets, then the average warming will be 1.8°C, or below 2°C.



**Chart 1.** Warming projections until 2100

Available at: <https://climateactiontracker.org/global/temperatures/>

There is a significant gap between the pledges made by the governments and the total level of actions they have undertaken so far. To accomplish limiting warming to 1.5°C above pre-industrial levels means that greenhouse gas emissions should be reduced rapidly in the next years and decades and reach zero around the middle of the century<sup>32</sup>.

It is estimated that natural causes such as changes in solar radiation or volcanic activity are estimated to contribute to less than plus or minus 0.1°C to total warming between 1890 and 2010<sup>33</sup>.

EU member states, although considered to be the leaders in implementation of climate change promises, have

not reached the targets required by the Paris Agreement<sup>34</sup>.

According to the National broadcasting system of the UK (BBC), after long negotiations, despite the expressed disappointments, “the countries agreed to phase down rather than phase out coal”<sup>35</sup>.

With the new economic challenges, it is clear that we are at a crossroads. Although COP26 did not deliver the full range of ambitions necessary to tackle climate change, COP26 must start now by a persistent, strenuous fight for our lives<sup>36</sup>.



## Conclusions

The impact of COVID-19 crisis will be crucial for the future of the climate policy. Climate changes will not wait. Their threat is over our heads and each and every day we face them. Every individual has a role to play in dealing with global climate change and we all can contribute to this threat if we all work together in a synchronous way. A greater political involvement is needed along with collective actions taken by all social actors. Over the last two years, the World Health Organization has advocated for greater inclusion of health authorities and services in Nationally determined contributions through activities to reduce the implications on health by climate change.

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