The Living Planet: Seeking a Just and Sustainable Global Community
Statement by the WCC 11th Assembly in Karlsruhe 2022, Germany

The earth is the Lord’s, and everything in it, the world and all who live in it; for he founded it on the seas and established it on the water”. (Psalm 24)

“...cease to do evil and learn to do right; Pursue justice and champion the oppressed. Give the orphan his rights, plead the widow’s case”. (Isaiah 1:16b-17)

He said to them, “Go into all the world and preach the gospel to all creation.”
(Mark 16:15)

Together we believe...

The earth is the Lord’s, and everything in it. Human beings, created in God’s own image, are called to serve as faithful and responsible caretakers of God’s precious unique creation, of which we are at the same time an inherent part and inextricably dependent on the health of the whole natural world. A narrow anthropocentric understanding of our relationship with Creation must be revised to a whole of life understanding, to achieve a sustainable global ecosystem. We are all interdependent in God’s whole creation. As Christ’s love moves the world to reconciliation and unity, we are called to metanoia and a renewed and just relationship with Creation, that expresses itself in our practical life.

We are running out of time for this metanoia to take place. The Central Committee, meeting in June this year, noted the Pacific Island of Kiribati, facing rising sea-levels, had declared a State of Natural Disaster due to a prolonged drought. As we gather for the 11th Assembly of the World Council of Churches, our sisters and brothers in Pakistan face the heaviest rainfall in living memory and flooding that has killed 1,162 people, injured 3,554 and displaced 33 million. Four years of failed rains in the Horn of Africa have put 22 million people at risk of starvation. In Europe, a drought unprecedented in 500 years has affected large swathes of the continent. Such extreme weather, and accompanying humanitarian crises are the alarm bells of a Climate Emergency. Moreover, instability and increased competition for resources resulting from climate change greatly exacerbates conflict risks. In addition, climate change is a public health emergency, having been recognized as a leading cause of human mortality and morbidity. Climate-induced displacement, relocation or migration is no longer a matter of if or when, but is occurring now.

These lived realities bear testimony to the numerous reports by the Intergovernmental Panel on Climate Change[1]. The climate emergency is an ethical, moral and spiritual crisis,
manifested in a fixation on profit. The extractive and, ultimately, unsustainable systems of production and consumption, by those complicit in this crisis, continue to ignore increasing scientific, and moral warnings.

We are running out of time. [2] We must repent from our continuing human selfishness, greed, denial of facts and apathy, which threatens the life of all creation.

We are running out of time. This Assembly is the last chance we have to act together to prevent the planet from becoming uninhabitable. [3] In particular, no further delay is possible if we are to have any chance of staying within the safer limit of +1.5°C global warming and of avoiding vastly more catastrophic climate change.

Christ’s love calls us to deep solidarity and a quest for justice for those who have contributed to this emergency the least, yet suffer the most, physically, existentially, and ecologically, through a transformation of systems and lifestyles. Our theology must respond to an emergency of such dimensions.

Indigenous Peoples are among the first to face the direct consequences of climate change, due to their dependence upon, and close relationship with, the environment and its resources. However, Indigenous Peoples and the role they play in combating climate change through the restoration of the wholeness of creation, are rarely considered. This must change, through a reimagining and deconstructing of the prevailing worldview and theology.

Action that does not recognize historic responsibilities for the drivers of the climate emergency and environmental degradation, and the injustice perpetrated against poor and vulnerable communities who are suffering the worst impacts while having the smallest carbon footprints, cannot qualify as faithful stewardship.

Together we call the world to urgently respond to the following demands for climate and environmental justice, and for governments to join in practical actions – and not only commitments – to meet the pressing need to avert ecological disaster:

- A just transition to renewable energy sources must be expedited. Use of existing fossil fuel sources must be phased out without further delay. No new fossil fuel or nuclear energy projects can be developed. Subsidies to fossil fuel industries that artificially reduce the price of fossil fuel production must be ended. Large-scale nature-based solutions and sequestration technologies and capacities to offset residual emissions must be implemented.

- Wealthier populations and countries that are responsible for the bulk of emissions must take the lead in reducing their own emissions and in financing emission reductions in poorer nations. They must also respond constructively to claims for reparations for the loss and damage already suffered and providing financial support for the mitigation and adaptation measures that all must take, but not all have the means to achieve. The voices, experiences and perspectives of those most affected and most vulnerable groups, such as children, youth, people with disabilities, women, Indigenous Peoples, smallholder farmers, and poor and marginalised communities...
must be lifted up and amplified in all negotiations on climate change and environmental sustainability.

- So-called “Green” and “Blue” solutions must not be at the expense of poor and vulnerable communities and the already fragile ecosystem. The sourcing of rare earth elements from the land and sea, under the guise of providing alternative pathways, has led to environmental degradation and the suffering of indigenous communities who experience this as “Green and Blue colonisation”[4]. The application of alternative indicators of prosperity and wellbeing that account for the wholeness of economic, social and ecological conditions is an important tool that needs support.

- All governments and authorities must respect, protect and fulfil the human right to a clean, healthy and sustainable environment, as described in the “Escazú Agreement”[5] The consideration of such proposals as the creation of a new UN Economic, Social and Ecological Security Council, a Fossil Fuel Non-Proliferation Treaty, the rights of nature, ecocide laws[6], a Climate Crimes Tribunal[7] and an Advisory Opinion on Human Rights and Climate Change from the International Court of Justice[8], are new and strengthened forms of accountability which need support.

- The New International Financial and Economic Architecture (NIFEA) that promotes an Economy of Life, contributes to the reconciliation of economic, social, and ecological objectives, and expresses Christ’s compassion for all life through systemic reparation and restoration.

- WCC’s Zacchaeus Tax[9] proposes wealth and carbon taxes at global and national levels to curb ever-growing socio-economic divides and raise the necessary resources to respond to poverty and climate change. The development of new international mechanisms to address and pre-empt chronic sovereign indebtedness including the cancellation of unjust foreign debts incurred by developing countries is essential to free up resources for decarbonisation and increasing climate resilience projects.

- An end to wars and military drills, and divestment from fossil fuel, arms and other life-destroying sectors, coupled with a radical mobilisation and redirection of resources towards the health and resilience of our communities and the protection and renewal of ecosystems that form the base of all our economies and societies.

The Assembly joins the WCC central committee in urging all member churches and ecumenical partners around the world to give the climate emergency the priority attention that a crisis of such unprecedented and all-encompassing dimensions deserves, both in word and deed, and to amplify their efforts to demand the necessary action by their respective governments within the necessary timeframe to limit global warming to 1.5°C and to meet historic responsibilities to poorer, more vulnerable nations and communities.

Together we as Churches commit...

- To ‘walk the talk’ and to taking all such actions as we are able in our own contexts to help drive a just transition to a sustainable future, drawing inspiration from the Roadmap for Congregations, Churches and Communities for an Economy of Life and
Ecological Justice[10] and the many other resources made available by the WCC and others.

- To encouraging institutions of theological learning and teaching (e.g. Bossey Institute) to provide programmes of study or scholarships in the field of eco-theology.

- To create and strengthen spaces of encounter for churches to support each other in mainstreaming climate justice to all aspects of the life and work of the church.

- To engage with decision-makers and law enforcement authorities to ensure accountability and the rights of members of future generations to a safe and healthy environment and to a life with dignity.

- To support the claims of poor and vulnerable countries and communities for just recognition and response to their claims regarding loss and damage and for financial support for climate change mitigation, adaptation and relocation.

- To challenge government subsidies[11] to the fossil fuel sector, and any support for nuclear energy or unsustainable industrial agricultural practices. We must work at all levels to promote ethical consumption, ensure divestment and instead promote investment in those initiatives that benefit ecological health and community wellbeing.

- To support land use and agricultural practices which conserve carbon in soil and water resources whilst phasing out unsustainable cattle raising activities, which not only degrade the land but emit methane, one of the most harmful greenhouse gases. We commit also to ensure that our food consumption is based on climate-smart food production and sustainable production practices.

- To engage with our respective financial service providers accordingly, in line with the initiative, “Climate-Responsible Finance: A Moral Imperative towards Children.”[12]

- To empower and embrace young people seeking to take action against climate change and environmental degradation in order to protect their futures which the current generation has so terribly imperilled.[13]

- To advocate for the regulation and monitoring of ecologically harmful chemical products.

- To support small-scale food producers and buy locally-sourced foods. We will seek to avoid food loss and waste in our own practices.

- To ensure that church-owned land is managed sustainably.

- To support the role of WCC member churches and leaders at UNFCCC COPs, the UN High Level Political Forum on Sustainable Development and other relevant forums in bringing the voices of our Christian faith and the perspective of the most vulnerable for a just transition, and to increase our collaborative efforts with other faiths.
traditions in local to global advocacy for climate justice and in action for a just transition.

- To seek reconciliation with Indigenous Peoples and uphold their rights including the right to Free, Prior and Informed Consent to new ‘green’ and ‘blue’ infrastructure and other projects.

- In our respective contexts and according to our respective abilities, we will work to safeguard our forests, woodlands, wetlands and wilderness areas, and the protection of oceans, rivers and other water bodies.

- We will seek to ensure that our churches become ‘green and life-promoting churches’, and witnesses for a New International Financial and Economic Architecture and an ‘Economy of Life’.

Together we decide...

On the need for an emergency response by the WCC, across all areas of its work, to confront the moral and existential crises of climate change and of ecological and economic injustice. Together we commit to providing the necessary resources for such a response.

This calls for the following exceptional measures:

- Urgently establishing a **Commission on Climate Change and Sustainable Development Emergency and Economic Injustice**, convened by the WCC in collaboration with ecumenical partners, in order to monitor progress and to advise on measures to accelerate our efforts for the protection of God’s creation, and for the promotion of just and sustainable communities.

- Declaring an **Ecumenical Decade of repentance and action for a just and flourishing planet**. [14]

- To set an example by committing **WCC to reduce its institutional carbon footprint** to net-zero by 2030.

- Establishing **strict limitations on travel for WCC purposes**, preferring virtual means of consultation and encounter. These online engagements and the use of electronic devices by WCC should also be mindful of ongoing environmental costs and the impact on children forced into extractive industries for rare earth minerals.

**Background/Rationale (for information)**

The **Minute on Climate Justice** adopted by the WCC 10th Assembly in 2013 in Busan acknowledged climate change as “one of the most challenging global threats affecting especially the most vulnerable”. The Busan Assembly observed that despite the growing scientific consensus on anthropogenic climate change and the gravity of its consequences, negotiations at the international level had failed to produce effective responses to meet the challenge. Accordingly, the Assembly called on churches and ecumenical organizations to insist that their respective governments “look beyond national interests in order to be
responsible towards God’s creation and our common future, and urge them to safeguard and promote the basic human rights of those who are threatened by the effects of climate change”.

In the intervening nine years, the scientific evidence of the seriousness of the threat posed by climate change has become ever more dramatic, extreme weather events and fires have become more frequent and more destructive in almost all parts of the world, and the impacts especially on poorer and more vulnerable communities have become ever more disastrous. Concurrently, the threat to the Earth’s biodiversity due to the negligence of human stewardship of nature has escalated. Despite some moments of opportunity and raised hopes - in particular the Paris Agreement of 2015 - the collective human failure to respond effectively to these unprecedented existential challenges and to ensure justice for the most vulnerable - and least responsible for the global ecological crisis - has persisted, while the time remaining for the required action has rapidly dwindled.

Greenhouse gasses (GHG) in the Earth’s atmosphere are now at their highest level in human history. Though emissions fell dramatically in 2020 due to pandemic-related confinement, by 2021 they had equalled or surpassed the records set two years earlier: in 2019 they were already 12% higher than in 2010, and 54% higher than in 1990. However, in a sign of the growing recognition of the threat of climate change, the average rate of increase in emissions over the past decade (2010-2019) was lower than in the previous decade. Further, the cost of many low-carbon technologies has been steadily decreasing. Nevertheless, emissions continue to increase rather than decrease, and with global warming having already risen to +1.09°C in 2021, temperatures are projected to rise by as much as +3.5°C by the end of the century if emissions continue at their current rate.

Well over 3 billion people are now living in situations of high vulnerability to climate change, and the already observable effects on people and ecosystems of the ecological crisis include:

- increased frequency, intensity, geographical distribution and duration of extreme weather events (storms, floods, droughts) and fire disasters.
- reduced availability of water and food resources (in Africa, Asia and small islands in particular).
- negative impacts on health in all regions of the world, through increased heat stress, spread of diseases to new regions, the emergence of new zoonotic diseases and increased risk of pandemics, deterioration of air quality, as well as the health consequences of hunger, malnutrition and water scarcity related to changing climatic conditions.
- rising sea levels, the inundation of low-lying islands and coastal areas, and the beginnings of large-scale climate-induced displacement.
- accelerating loss of animal and plant species.

Globally by the mid-21st century 1.3 billion people are expected to be exposed to amplified climate-related humanitarian threats. Among other things, it is predicted that a warmer climate will intensify very wet and very dry weather and climate events and seasons, with
implications for flooding or drought, and that consequently the number of people deprived of access to clean water will increase. Water scarcity already affects 40% of the global population, but for every 1°C rise, 500 million more people will face a 20% drop in available water resources.

Concurrently, biodiversity loss - partly related to climate change, as well as other environmental factors – is also presenting a major threat. Of the estimated 8 million animal, fungi and plant species on the planet – only a fraction of which have been scientifically documented - scientists project that without global action the world may lose nearly 1 million species by 2030, with an average extinction rate of one species every 10 minutes. The implications for entire ecosystems, including for human beings, are immense. The WCC executive committee highlighted this challenge in a May 2019 Statement on the Global Biodiversity Crisis and the Urgent Need for Structural Change. In December this year, the second phase of the 15th UN Biodiversity Conference will convene in Montreal, Canada, to try to agree on a new international framework for the protection of biodiversity.

Chemical pollutants continue to pose major environmental challenges, and new concerns surrounding the ubiquitous environmental presence and health impacts of microplastics and PFAS (a group of chemicals that are widely used for their water- and oil-repellent properties) require intensified study and action.

Climate change impacts and environmental threats interact in complex relationship with other factors, resulting in cascading risks across sectors and regions. For example, climate change - and the increasingly frequent and severe natural disasters it provokes - is one of the main drivers of global hunger, but has combined with conflicts and with the ongoing economic effects of the Covid-19 pandemic to produce an amplified global food crisis. It is estimated that about 828 million people currently face hunger, and the prevalence of undernourishment, having been stable for the past five years, has increased by 1.5% to 9.9%. Moreover, if average global temperature should rise by 2°C from pre-industrial levels, an additional 189 million people are expected to be pushed into hunger. In a 4°C warmer world, this figure could increase to a staggering 1.8 billion.

At the same time, together with forestry and other land use, agriculture causes almost one quarter of human GHG emissions. Particularly due to current agricultural practices, a third of global soils are degraded, releasing 78 gigatonnes of carbon dioxide into the atmosphere, and costing over 10% of GDP. Furthermore, 14% of all food produced, worth USD 400 billion, is lost post-harvest before it reaches retailers. Food waste and losses cause 8% of GHG emissions globally.

Cattle raising activities, which not only degrade the land but emit methane, one of the most harmful greenhouse gases, is also a main driver of deforestation by forest burning in Brazil and in many countries of the south. Forest areas when burned release carbon immediately to the atmosphere, displace indigenous peoples, and degrade or eliminate the rich biodiversity on their ancestral lands with their associated cultural and spiritual practices, many times irreversibly. Tropical deforestation and forest degradation account for 11% of GHG emissions. Moreover, the unsustainable rate of deforestation - especially affecting the major remaining rainforests, the ‘lungs of the planet’ - is seriously depleting the Earth’s
capacity to absorb carbon dioxide. Recent reports have illustrated the accelerating fire and climate feedback loop. Hotter and drier conditions due to climate change are making forests more susceptible to more frequent and larger fires, which release even more carbon, thereby adding to emissions and fuelling further global warming, forest degradation and biodiversity loss.

The oceans absorb up to 50 times more CO2 than the atmosphere, and 20 times more than plants and soil combined. But as oceans warm and acidify, their waters become less efficient at taking in emissions, and can even rapidly release it back into the atmosphere.

Climate change models suggest that if the world is to avoid extreme climate impacts, **emissions must begin to fall by 2025 and must be halved by 2030**. The vast majority of carbon emissions come from the use of fossil fuels. Accordingly, immediate action is required to curb fossil fuel use, followed by major ongoing reductions over the next decades.

At the same time we acknowledge that many of the natural resources needed for the ‘green transition’[^15] are primarily mined in the Global South, often associated with displacement and armed conflict, and that the ‘green transition’ also carries with it the risk of the appropriation of these resources by the North, and of disastrous effects on the natural environment, Indigenous population, and the exploitation of children.[^16]

There is also an increasing focus on the ocean as the source for these resources.[^17] We need to reconsider the current Blue Economy framing with critical lens on the geo-political, ideological and neo-liberal economic agenda that present it. These should be closely examined in order to identify who and what, they truly represent.

10% of the world’s population own 75% of all wealth, receive 50% of all income, and are responsible for nearly half of all carbon emissions.[^18] These figures represent a monumental injustice. Those who are most culpable continue to resist the just claims of the victims for support for climate change mitigation and adaptation, and for recompense for the loss and damage already suffered by poorer and more vulnerable nations and communities.

Climate change exacerbates the difficulties already faced by Indigenous communities including political and economic marginalization, loss of land and resources, human rights violations, discrimination and unemployment. And yet, as the *Joint Report of the WCC Ecumenical Indigenous Peoples Network Reference Group and Working Group on Climate Change* emphasizes, the long experience of Indigenous Peoples living sustainably with nature holds essential wisdom for responding to the global environmental crisis.

The 11th Assembly convenes at the mid-point of the Agenda 2030 for sustainable development (2016-2030), and it is becoming increasingly clear that many of the Sustainable Development Goals (SDGs) are seriously off-track, due to the converging and inter-related crises of climate, Covid-19, conflict, food, energy and finance.

Even now, 425 massive fossil fuel projects - so-called ‘carbon bombs’ - with the potential to emit over a gigatonne of carbon are either planned or already operating.[^19] This is twice
the world’s total remaining carbon budget to have any chance of meeting the Paris Agreement commitments. These are weapons of mass environmental destruction.

The Covid-19 pandemic, particularly in 2020 and 2021, caused major economic impacts globally, with many countries incurring significant debts due to the costs of the pandemic response and lower tax revenues from reduced economic activity. Many debt-stricken countries are also locked into costly build-rebuild cycles due to recurring climate disasters, further increasing their debt burdens. Such debts are swiftly becoming unsustainable for some countries as interest rates rise.

The consequences of the Russian invasion of Ukraine, together with the ongoing economic disruption resulting from the pandemic, are compounding the global food security crisis driven by changing climate conditions, causing food prices to spike. Further, controversy and uncertainty over the supply of oil and gas from Russia has contributed to major increases in fuel prices internationally with a consequent impact on economic and political stability in a number of countries, most notably Sri Lanka. And although the danger of irreversible environmental damage from climate change becomes ever more urgent, yet the global addiction to fossil fuels shows little sign of ending.

There is a danger that the pandemic and the conflict in Ukraine may be used as excuses for failure to achieve the SDGs. Churches must remain agents of hope and voices for justice and accountability: the goals of sustainable development must not be abandoned or allowed to fail. Churches can play a significant role in advocating and working for the realization of Agenda 2030.

**The accelerating environmental crisis: WCC response**

With each new piece of evidence of the human-induced threat to future generations and to the living world, and with each new experience of the severity of the consequences, WCC has raised an increasingly urgent voice of concern and demand for action.

In particular, following the IPCC reports on Global Warming of 1.5°C (October 2018), Climate Change and Land (August 2019) and The Ocean and Cryosphere in a Changing Climate (September 2019) - as well as a series of extreme weather events and other natural disasters around the world that caused many deaths and widespread devastation - the WCC executive committee in November 2019 declared a climate emergency, demanding “an urgent and unprecedented response by everyone everywhere – locally, nationally and internationally.” The executive committee expressed “bitter disappointment at the inadequate and even regressive actions by governments that should be leaders in the response to this emergency”, and called “on member churches, ecumenical partners, other faith communities and all people of good will and moral conscience to find the means whereby we can make a meaningful contribution in our own contexts to averting the most catastrophic consequences of further inaction and negative actions by governments” and to “join in confronting this global crisis through concerted advocacy for climate change mitigation and adaptation, zero fossil fuel use and a ‘just transition’.”

Following the IPCC Working Group reports (contributing to the IPCC Sixth Synthesis Report) on *The Physical Science Basis* (August 2021), *Impacts, Adaptation and Vulnerability* (February
2022), and Mitigation of Climate Change (April 2022) - as well as further climate-related disasters around the world - in June 2022 the WCC central committee issued a Statement on the Imperative for Effective Response to the Climate Emergency. In this statement, the central committee observed that “[d]ecades of scientific research have validated the reality of the accelerating climate emergency that now confronts us as an actual imminent catastrophe.” The central committee underlined that “[t]he global metanoia required to confront this challenge must, first and foremost, entail an urgent phase-out of fossil fuel extraction and use, and a just transition to renewable energy sources that protects the rights of Indigenous Peoples and other marginalized communities and takes gender justice into account. However, in stark contrast to this need, the world is currently on track to produce more than twice as much coal, oil and gas by 2030 as would be consistent with limiting the rise in global temperature to 1.5°C”. Against this alarming background, the central committee declared that “continuing wilfully on our current destructive path is a crime – against the poor and vulnerable, against those least responsible for the crisis but bearing its heaviest impacts, against our children and future generations, and against the living world.”

The central committee therefore called on this 11th Assembly of the World Council of Churches in which we now meet - “the last such global ecumenical assembly within the remaining window of opportunity for action to avoid the worst impacts of climate change” - to serve as a platform “for promoting the ecological metanoia we need in the ecumenical movement and in the wider world, through the encounter of churches from rich nations and poor, from the privileged and the imperilled”, encouraged all WCC member churches and ecumenical partners “to come to the Assembly prepared to listen and learn from the stories of struggle and resilience from affected communities, to share their commitments and initiatives, and to match their words with deeds, to help ensure a sustainable future for the living world that God created in such abundance and complexity”, and invited consideration of the establishment of a new Commission on Climate Change and Sustainable Development “in order to bring the appropriate focus to this issue in this pivotal period.”

Decades of advocacy by WCC have articulated the need for action to reduce emissions to sustainable levels, for a just transition to a sustainable future, and for climate justice for the most vulnerable poorer communities and Indigenous Peoples, reflecting the historic responsibility of the most developed industrialized nations. Throughout the period since Busan, WCC has continued to engage in advocacy – often with interfaith partners – in the UN climate change conferences (Conference of Parties to the UNFCCC) and other intergovernmental forums. Adding to and complementing this advocacy, the WCC has during this period worked to present to its members and partners practical means by which they might take meaningful action in their own contexts, including through the Roadmap for Congregations, Churches and Communities for an Economy of Life and Ecological Justice, Walk the Talk, and the recent Climate-Responsible Finance Initiative.

Elements of the WCC’s response have also been carried forward through its leadership of the Ecumenical Water Network, and the Ecumenical Advocacy Alliance ‘Food for Life’ Campaign, as well as through partnerships such as the International Partnership on Religion and Sustainable Development (PaRD) and the Interfaith Rainforest Initiative (IRI). And recognizing that the root causes of the climate and environmental crisis lie in the unjust and
unsustainably exploitative economic models that currently prevail, the WCC has continued
to promote an ‘Economy of Life’ through the New International Financial and Economic
Architecture (NIFEA) programme - reflected also in the November 2018 WCC executive
committee Statement on the Urgent Challenge of Economic Transformation: 10 years after
the Global Financial Crisis. Responding to the inter-connected global health, economic and
ecological crises, the WCC together with sister ecumenical bodies have pointed to the
urgency of “system change” and of rooting our systems in the New Creation where the
justice and the care of the Creator is “reflected not in a Creation exploited endlessly but
blessed deeply” (WCC et al 2020).

The WCC Faith & Order Commission has also published “Cultivate and Care: An ecumenical
teology of justice for and within creation”, and WCC partnered with UEM, Brot für die Welt,
EKD and EMW to publish “Kairos for Creation: Confessing Hope for the Earth”.

[2] Quote
[3] IPCC
[4] Message from the 11th WCC Indigenous Peoples Pre-Assembly 28-30 August 2022, Karlsruhe,
Germany. See also https://www.pacificblueline.org/
[5] The Regional Agreement on Access to Information, Public Participation and Justice in
Environmental Matters in Latin America and the Caribbean
https://repositorio.cepal.org/bitstream/handle/11362/43583/1/S1800428_e...
multilingual-versions
to-stop-treaty-that-aids-fossil-fuel-investors
[14] This was first articulated in the “Wuppertal Call”
https://www.oikoumene.org/resources/documents/kairos-for-creation-confessing-hope-for-the-
earth-the-wuppertal-call
[15] For example minerals and rare-earth elements such as coltan, lithium, nickel, cobalt, copper,
euodymium, magnesium, platinum, titanium, vanadium.
See also [16] https://www.theguardian.com/global-development/2019/dec/16/apple-and-go...
https://www.cbsnews.com/news/cobalt-children-mining-democratic-republic...
https://news.mongabay.com/2022/05/scheme-to-stop-conflict-minerals-fail...
[17] https://www.pacificblueline.org/