

The Republic of South Africa

Positions for the Group of 20

I. Developing a Post-Paris Agreement Global Energy Policy

Internationally, the Paris Agreement's central aim to strengthen the global response to the threat of climate change goes in accordance with South Africa's position on climate change. In both South Africa and around the world, there are many scientists who are focusing on understanding how the global climate can adapt to medium- or long-term changes. South Africa recognizes that the global temperature rise must be well below 2 degrees Celsius. With these ambitious goals, South Africa prioritizes the strengthening of the abilities of Member States to deal with the subsequent impacts, both economically and environmentally; specifically, more developed Member States should be able to help the economies of lesser developed Member States contribute to the global efforts set forth in the Paris Agreement. Additionally, South Africa looks upon fellow Member States to consider investing in modern energy services. In South Africa, the Renewable Energy and Energy Efficiency Partnership (REEEP) develops sector-specific interventions, and has globally funded 154 clean energy projects in 57 countries. To date, the program has invested around \$17.5 million and leveraged an additional \$34.8 million in co-funding from private sectors. REEEP aims to facilitate the wide availability of reliable and coherent clean energy information to ensure that all information from REEEP is useful for other states. South Africa does this with their Renewable Energy Centre of Research and Development (RECORD), which shares studies, research results, and other important documents through the internet for South Africa and all other states alike. **Regionally**, the continent of Africa could be one of the most promising markets for renewable energy. It has an abundance of solar, wind, biomass and geothermal resources. On the other hand, Africa also contains the population who suffers the most power shortages. Approximately 600 million people aren't connected to a power line. In order to properly address this, South Africa and other African nations must take advantage this abundance of renewable resources and supply those Africans in desperate need of consistent energy. The G20 recognizes this, and launched the G20 Africa Partnership at the 2017 Hamburg Summit. This partnership builds on existing regional and international strategies in order to align the efforts of nations supporting industrialization in Africa. South Africa has the second largest economy in Africa, and can be a catalyst for these investment in these renewable energy sources for the entire continent. Concerning the negative impacts of climate change, the continent of Africa is extremely vulnerable. According to 350 Africa, an organization aiming to end climate change in Africa, one in four people are still undernourished in sub-Saharan Africa; climate change impacts make it even more difficult for governments across the continent to improve food distribution and security. South Africa also recognizes these problems among many others, including impacts on weather patterns, water supply and quality, agriculture, shelter, national security, and natural ecosystems. **Nationally**, South Africa is investing heavily in transforming its energy sector. The heart of this is a transition to a low-carbon energy sector. South Africa's energy sector is currently heavily based on coal, but it is nearing the end of its life cycle. Part of this transition is a complete transformation of future energy producers; it is designed to replace and inefficient coal-fueled power plants with clean and high efficiency technology. South Africa is conducting this change through the South African National Energy Development Institute (SANEDI). SANEDI is a state-owned entity that directs, monitors and conducts applied energy research and development, demonstration and deployment as well to undertake specific measures to promote the uptake of green energy and energy efficiency in South Africa. Also, South Africa is calling on the private sector to assist in investing significant money into renewable energy sources. The Renewable Energy Independent Power Producer Procurement Programme (REI4P) is encouraging private investment to help further develop the renewable energy sector within South Africa through 79 different projects. South Africa suggests a 3-point **Action Plan A.I.R.** to help develop a Global Energy Policy. **Adjust**, Member States need to adjust their current energy systems into cleaner and more efficient energy sectors. This includes replacing existing fossil fuel infrastructure with either cleaner fossil fuel infrastructure or eliminating it completely, if possible. **Invest**, Member States should encourage investment from the private sector. Private investment can take the financial strain off the governments for increased cooperation and more beneficial programs and projects. **Renewable**, finally, Member States should look to invest in Africa's abundance of renewable energy. If Member States can harness the power generated from the abundance of renewable energy sources in South Africa, it can serve as an example of its efficiency elsewhere.

II. The Digital Economy and Cyber Security

Cyberspace is borderless, and national cooperation as well as international cooperation is required to effectively improve the digital economy as well as keep it safe. **Internationally**, South Africa recognizes that the digital economy is not limited to one or a few Member States. This is a global entity, and it must be treated inclusively rather than exclusively. Knowing this, barely 50% of the world's population has access to the internet today. South Africa believes there should be a uniform system in place which provides Member States with the best technology available. South Africa is focusing on world-wide cybersecurity strategies that aim to set clear policy goals, measures and institutional responsibilities. The primary concern is to ensure the confidentiality, integrity and availability of computer data and systems, and to protect against or prevent attacks on South Africa's digital infrastructure. Priority is also given to critical information infrastructure protection. In the Hamburg Leaders' Declaration: Shaping an Interconnected World, the 2017 Hamburg G20 Summit leaders, including South Africa, agreed to strive to ensure that all citizens will be digitally connected by 2025. The members of the G20 also engaged in world trade organization (WTO) discussions relating to the advancement of the digital economy. Member states will sustain and improve existing frameworks while ensuring no Member States' technological infrastructure falls behind. **Regionally**, South Africa's digital economy is the most developed in the entire continent of Africa. But with this growth, cybercrime is also increasing at a more rapid rate in Africa than in any other area of the world. One of the drivers behind these increasing rates is the widespread use of outdated or unlicensed software programs on African computers. Approximately 36% of software coming from an illicit source contains malicious malware that jeopardizes the security of the users. This directly affects the digital economy, which comes at a cost for Member States in the continent. For example, cybercrime costs South African economy an estimated 573 million dollars each year according to a study conducted by the International Data Group Connect. The current challenges include low level of security provisions, lack of technical knowledge in some African states, and inability to develop the necessary cybersecurity framework. The African Union has taken the steps to recommend various security measures that will effectively strengthen the security of the digital economy. At the African Union Convention of Cyber Security and Personal Data Protection, the African Union created an institutional framework for the protection of personal data (EX.CL/846(XXV)). It designated these measures to national protection authorities to ensure the security and protection of critical data in the African internet infrastructure, including the digital economy. **Nationally**, the goals of South Africa were set forth in the South African National Cyber-security Policy Framework (SANCF). The framework ensures that priority is placed on safety and security response in respect of the cyber security environment, and addresses all of the following but not limited to: the financing of cybersecurity infrastructure and knowledge, fighting cybercrime effectively through the promotion of coordinated approaches by all role players in the South African government, and ensure a comprehensive legal framework that governs cyberspace. South Africa passed a new policy at the e-Strategies Africa Forum in July 2016 that introduces a digital development fund, also known as the Cape Digital Foundation (CDF). It will focus on the extension of infrastructure, end user and equipment subsidies, support digital literacy and skill development, extend access to digital government services, and improve productivity, sustainability, and competitiveness. A majority of South Africans do not yet have access to the internet due to a variety of social roadblocks; South Africa has 21 million internet users with a population of 55.9 million people. The CDF wants to reduce or eliminate these roadblocks so that the digital economy can become more accessible to all people. In addition to the CDF, the National Cybersecurity Policy Framework (NCPF) will work to make sure all people feel safe when accessing the internet in South Africa. This policy outlines measures to address national security in the cyberspace. This policy will keep citizen's data safe, as well as protect the integrity of the state's digital economy. To "future proof" the policy, framework to update existing laws and procedures will be in place to ensure that South Africa and its users do not fall behind the rapid pace of technology development. Moving forward, South Africa proposes a 3-point **Action Plan P.D.F.:** **Propel**, developed Member States should propel forward developing countries and ensure they have ample opportunity to access modern technologies. In accordance with the 2017 Hamburg G20 Summit, all citizens must be digitally connected by 2025, and developing countries cannot be forgotten about to achieve that goal. **Develop**, all Member States must work to develop an international framework to improve cyber security. All citizens must be protected in the digital economy, otherwise they will be at high risk of being victims of cybercrime. **Finance**, digital development funds must be established to improve overall infrastructure for all citizens of Member States. Various roadblocks, including structural and financial, preventing citizens from accessing the digital economy must be torn down.