

A JUST RECOVERY RENEWABLE ENERGY PLAN FOR AFRICA



FRIENDS OF
THE EARTH AFRICA
CLIMATE JUSTICE
& ENERGY

AUGUST | 2021



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FRIENDS OF THE EARTH AFRICA IS A COLLECTIVE OF SOVEREIGN ORGANISATIONS WORKING WITH GRASSROOTS COMMUNITIES ON ENVIRONMENTAL AND RIGHTS-BASED STRUGGLES IN THE AFRICAN REGION. WE SEEK TO CONTRIBUTE TO THE STRENGTHENING OF NATIONAL GROUPS IN AFRICA BY DEVELOPING COLLECTIVE STRATEGIES TO UNDERSTAND, EXPOSE AND DISMANTLE THE ROOT CAUSES FOR THE OVERLAPPING CRISES WE ARE FACING IN THE REGION. THROUGH CONTINENT-WIDE COORDINATION, FOE AFRICA WORKS TO BUILD PEOPLE POWER TOWARDS A COMMON AFRICAN AGENDA FOR ENVIRONMENTAL, ECONOMIC, GENDER, AND SOCIAL JUSTICE.

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The modelling and costing of this Just Recovery Renewable Energy Plan for Africa is based on the detailed work of University of Technology Sydney (UTS) and Sven Teske's book Achieving the Paris Climate Agreement Goals: Global and Regional 100% Renewable Energy Scenarios with Non-energy GHG Pathways for +1.5°C and +2°C.¹ This Just Recovery Renewable Energy Plan for a renewable energy independent Africa is based on the 1.5°C scenario modelled in Teske's book. The assumptions for all the scenarios are based on stated population and Gross Domestic product (GDP) growth figures, as well as assumed levels of energy intensity from globally recognised institutions and agencies, including the United Nations and International Energy Agency's World Energy Outlook.

¹ S Teske (Ed) 2019 Achieving the Paris Climate Agreement Goals: Global and Regional 100% Renewable Energy Scenarios with Non-energy GHG Pathways for +1.5°C and +2°C. https://doi.org/10.1007/978-3-030-05843-2_1

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POLITICAL STATEMENT: A JUST RECOVERY RENEWABLE ENERGY PLAN FOR AFRICA

THE JUST RECOVERY ENERGY PLAN IS FOR A 100% RENEWABLE ENERGY INDEPENDENT AFRICA.

We commit to the Just Recovery Renewable Energy Plan for 100% Renewable Energy independent Africa. This plan is needed to tackle the twin crises of climate change and Covid-19.

AFRICA IS SUFFERING FROM THE IMPACTS OF CLIMATE CHANGE AND COVID-19.

Africa is facing multiple inter-related crises. The continent of Africa is vulnerable because it is so exposed to climate change impacts. Our people are still reeling from the devastating impacts of cyclones Idai (2019), Kenneth (2019) and Eloise (2021) that caused extensive flood damage and deaths in Southern Africa. The Covid-19 pandemic has exacerbated the suffering of Africa's peoples and exposed the unequal, unjust and exploitative policies which are a legacy of the colonial and post-colonial systems.

THE LEVEL OF ENERGY POVERTY IN AFRICA IS UNACCEPTABLE.

Three-quarters of those without access to electricity now live in Africa, a share that has risen over recent years.² The majority of all Africans do not have clean energy sources for cooking. The number of deaths from respiratory infections is enormous and avoidable. The economic effects of Covid-19 increased the numbers of people who could not access electricity and who went into energy poverty. Africa's vast natural resources have been exploited for the benefits of others through transnational corporations and have left behind the majority of Africa's peoples, especially rural African women.

WE DEMAND CLEAN AND AFFORDABLE ENERGY FOR HUNDREDS OF MILLIONS OF AFRICANS CURRENTLY LIVING IN ENERGY POVERTY.

This means a need for over 300 gigawatts (GW) of new renewable energy by 2030, as agreed by the African Union, and over 2000GW by 2050.³ The continent surpasses all other regions in having the most potential for renewable energy. We need to dismantle the existing dirty energy systems in order to leapfrog Africa to 100% renewable energy for all by 2050. The renewable energy systems must be socially-owned and community-based, and not be a pretext for privatising the electricity sector. The transformation to renewable energy must be accompanied by key principles such as energy sufficiency, energy sovereignty, seeing energy as a common good rather than a commodity. Our energy system should protect biodiversity, strengthen land rights of communities, promote gender justice, and should not lead to increased extractivism.

THIS PLAN IS SUPPORTED BY MOVEMENTS AND CIVIL SOCIETY ACROSS AFRICA AND HAS BEEN MODELLED BY RENOWNED SCIENTISTS AND ECONOMISTS.

It is technically and financially feasible, with an annual investment requirement of around US\$130 billion per year.⁴ We know that this plan can easily be financed through stopping illicit financial flows, providing public climate finance and the cancellation of Africa's debt.

² IEA 2019 <https://www.iea.org/reports/sdg7-data-and-projections/access-to-electricity>

³ AfDB News 2015: AfDB to support electricity access for all by 2030 with African Renewable Energy Initiative <https://www.afdb.org/fr/news-and-events/afdb-to-support-electricity-access-for-all-by-2030-with-african-renewable-energy-initiative-15119>

WE SUPPORT THE CREATION OF 7 MILLION WELL-PAID JOBS IN SOLAR, WIND, AND CLEAN PEOPLE POWERED RENEWABLE ENERGY THROUGH ADDRESSING CLIMATE CHANGE TO BUILD A JUST RECOVERY FOR OUR PEOPLES ACROSS AFRICA.

We support renewable energy jobs that respect worker's rights and oppose discrimination on the basis of gender or any other forms of discrimination. We demand a just and feminist transition, guided by workers and communities, including protecting jobs by upskilling and reskilling of workers and the communities which are currently in the grip of fossil fuel extraction and use.

WE CALL ON THE AFRICAN UNION, ALL REGIONAL BODIES AND NATIONAL AFRICAN GOVERNMENTS TO ADOPT AND DEVELOP JUST RECOVERY PLANS AT THE REGIONAL AND NATIONAL LEVEL TO ENSURE THIS ENERGY TRANSFORMATION.

We demand a deep yet fast transformation of the energy system to enable people to choose and decide on democratic energy systems that work for communities. We cannot wait any more. We demand our governments remove all barriers for achieving the goal of 100% renewable energy for all.

WE INSIST ON A BAN FOR ANY NEW FOSSIL FUEL DEVELOPMENT, AS RECENTLY CALLED FOR BY THE INTERNATIONAL ENERGY AGENCY AND AN ACCELERATION IN RETIRING EXISTING ONES AS THEY ARE REPLACED BY CLEAN AND AFFORDABLE ENERGY SYSTEMS.⁵

This must include addressing the environmental and social problems created by fossil fuel extraction to date. We need to deploy peoples-centred solutions. We demand to be consulted and to be part of the decisions for the future energy systems.

WE DEMAND THAT OUR GOVERNMENTS TAKE EFFECTIVE MEASURES TO PREVENT THE CORPORATE CAPTURE OF OUR DEMOCRACIES, including by supporting the ongoing process towards a UN binding treaty on transnational corporations and human rights; and by pulling out from any free trade agreement or investment treaty that allows corporations to obstruct the transition to a clean energy system.

A JUST RECOVERY RENEWABLE ENERGY PLAN FOR A 100% RENEWABLE ENERGY INDEPENDENT AFRICA IS POSSIBLE.

The finance exists and must be paid by those who caused the climate crisis in the first place. We demand a release of the pledged climate funds by the developed world. A just recovery energy plan for renewable energy Africa is our choice and our right.

See <http://foeafrica.org/foeafrica-politicalstatement/> for organisational endorsements of the Just Recovery Renewable Energy Plan for Africa Statement.

⁴ S Teske (Ed) 2019 Achieving the Paris Climate Agreement Goals: Global and Regional 100% Renewable Energy Scenarios with Non-energy GHG Pathways for +1.5°C and +2°C. https://doi.org/10.1007/978-3-030-05843-2_1

⁵ <https://www.iea.org/topics/net-zero-emissions>; <https://www.uts.edu.au/isf/news/response-iea-1.5c-pathway>

EXECUTIVE SUMMARY

It is essential for justice, for the planet and for Africa's peoples that Africa changes its energy development pathway. We must move away from harmful fossil fuels towards a transformed energy system that is clean, renewable, democratic and actually serves its peoples. This plan provides an analysis based around the need to prevent the worst impacts of climate change and limit average global temperature rise to 1.5°C over pre-industrial level. It is based on the research and modelling of renowned academic Dr. Sven Teske that shows it is feasible to achieve a 100% renewable energy goal for Africa by 2050.⁶ Africa has enough renewable energy sources available to support a development path for solving energy poverty, creating jobs for Africans and also reducing emissions.

The impacts of Covid-19 have openly displayed the unequal legacies of colonialism and shown the vulnerability of the African peoples to both climate change impacts as well as health pandemics. Recovery from the impacts of Covid-19 and ensuring that any future pandemics are effectively curtailed requires concerted efforts by African governments, and a flow of finance from developed countries.

The Just Recovery Renewable Energy Plan for Africa offers a practical opportunity to change the trajectory of energy development, distribution and access. It opens up energy systems to a more democratic process, frees them from the power of transnational corporations (TNCs) and enables people and communities to access sufficient energy. For the plan to succeed it requires deep systemic transformations that are determined through public consultations, peoples-centred approaches and decentralisation of the sector. It requires a complete shift from current energy systems.

African governments must recognise socially owned and controlled renewable energy as a right and ensure that it is prioritised in policy agenda and fiscal budgets. Energy should not be developed solely for profit but to ensure dignity of all peoples and reduce the energy poverty so as to catalyse sustainable societies. African governments must work with all people and remove all obstacles that may retard progress and/or detract from attaining this goal.

The one thing that stands in the way of achieving a 100% renewable future for Africa is the political commitment and funding. This plan shows that Africa needs approximately \$130 billion a year (including heating) between now and 2050 as investment towards achieving the 100% renewable energy goal.⁷ This plan identifies three funding sources that could enable the continent to achieve the goal and produce enough energy to meet demand and eliminate energy poverty. These sources include the:

- demand for the developed world to meet its long-standing climate finance commitment in compensating the developing world for climate change impacts, loss and damage and providing finance for mitigation
- debt cancellation for African countries
- implementation of measures to eliminate tax evasion and the flow of illicit funds.

A 100% renewable energy supply can unlock immeasurable employment opportunities in equipment manufacture, operation and technical support for the sector, while empowering African people, reducing inequality and eliminating energy poverty. A 100% renewable energy goal for an independent Africa by 2050 is not just aspirational, it is possible.

ABBREVIATIONS

AU	African Union
CSP	Concentrated solar power
ECOWAS	Economic Community of West African States
GW	Gigawatt
IEA	International Energy Agency
IRENA	International Renewable Energy Agency
OECD	Organisation for Economic Co-operation & Development
PV	Photovoltaic
SADC	Southern African Development Community
UNCTAD	United Nations Conference on Trade & Development
UNECA	United Nations Economic Commission for Africa



⁶ S Teske (Eds) 2019 Achieving the Paris Climate Agreement Goals: Global and Regional 100% Renewable Energy Scenarios with Non-energy GHG Pathways for +1.5°C and +2°C. https://doi.org/10.1007/978-3-030-05843-2_1

⁷ *ibid.*



HOW A JUST RECOVERY RENEWABLE ENERGY PLAN FOR AFRICA CAN RESPOND TO THE COVID-19 & CLIMATE CRISES

01



Friends of the Earth Togo solar oven exhibition at the national forum on Just Energy Transition.
© Ekue Assem / Friends of the Earth Togo

Africa has a history and legacy of colonial extractivism, which has now morphed into corporate, impunitive extractivism. Fossil fuels are removed at a large scale across the continent for burning and making profit elsewhere. Africa's peoples bear the brunt of climate impacts and suffer the impacts of pollution from fossil fuel extraction, and yet also face enormous and unjust energy poverty. Around half of sub-Saharan Africans lack access to electricity.⁸

The loss of human life and the damage to African economies wrought by Covid-19 have exposed the chronic weaknesses and injustices in the continent's energy and health systems.⁹ The response by African governments to Covid-19 exposed some serious challenges for the continent which need urgent attention. For example, the logistics for vaccine distribution and storage will require refrigeration and electricity, infrastructure which is lacking and inadequate in all African states. The very same unequal systems and structures that led to the climate crisis now mirror the repeated surges of the Covid-19 pandemic.

The impact of Covid-19 goes well beyond being a tragic health crisis. It is the consequence of an economic system that abuses the planet and prioritises profits over peoples' rights and the environment.

It also shows that the continent's governance systems are controlled and captured by the agendas of transnational corporations. The pandemic has exposed and compounded the consequences of decades inaction by rich countries both in addressing climate change and their harmful fossil fuel supportive policies which is compounded by the capitalistic systems that govern our world.



Solar hybrid power plant in Somalia, Africa.
© Sebastian Noethlich

8 IEA (2020), SDG7: Data and Projections, IEA, Paris <https://www.iea.org/reports/sdg7-data-and-projections>
9 <https://www.africaclimatejustice.org/>

The biophysical environment has not been spared from the colonial legacy. The expansion of agribusiness and other extractive activities in Africa, a key legacy of colonial history and neoliberal globalisation, has led to the destruction of biodiversity and natural habitats, as well as land grabbing. This devastation of territories and livelihoods now threatens peoples' health. Neoliberalism has led to the privatisation and weakening of public health and social security systems and public services, and to a trend for flexibilisation of labour at the same time as dismantling workers' rights. It has led to increased exploitation of women's work and bodies. It has given extraordinary powers and privileges to transnational corporations (TNCs), as well as reducing the role and position of the State, leaving our world more vulnerable to the impacts of any crisis. Covid-19 has also created a care crisis in our societies, with traditional care systems which had been developed over centuries being stressed to breaking point.¹⁰ We need a valuing and reorganisation of care and domestic work urgently. An African Union (AU) study on the economic impact of Covid-19 released in April 2020 showed that the continent could lose up to \$500 billion and that countries may be forced to borrow heavily to survive after the pandemic.¹¹

While the world's focus is currently on the Covid-19 pandemic health crisis; climate injustice, climate related disasters, such as the 2019 Cyclone Idai that hit Mozambique, Malawi and Zimbabwe and the 2021 floods and landslides across many African countries, continue to bring suffering and increase poverty.

By the close of 2020, the developed world started rolling out Covid-19 vaccinations, while the majority of Africa's peoples have no prospects of accessing the vaccine in 2021. With these countries' lack of robust health services, the situation remains dangerous and very concerning. Unabated, the pandemic is likely to continue its devastation on the African continent well beyond other nations due to so-called "vaccine apartheid".¹² Yet again an example of unequal and unjust systems.

The impacts of Covid-19 on the energy sector worldwide, including in Africa, manifested as reduced energy demand due to reduced economic activities; and an increase in energy poverty as reduced earnings left people unable to pay bills.¹³ Already struggling utilities such as in South Africa and many other African countries struggled to remain afloat. The failure of centralised energy utilities during the Covid-19 pandemic, provides an opportunity to decentralise and diversify the energy mix in Africa and decouple economic growth and CO₂ emissions by hastening the deployment of peoples-centred renewable energy systems. The falling cost of micro and utility scale wind and solar energy provides an affordable solution to energy poverty while off-grid systems can provide access to areas that are not covered by national grids.

Friends of the Earth Africa believes that a Just Recovery Renewable Energy Plan for Africa built on environmental, social, gender and economic justice is urgently needed to address all the impacts of the multiple interrelated crises across the continent, which are being compounded by the neoliberal doctrine. Such a recovery plan must be centred on the wellbeing of peoples and the planet and be based on a justice perspective, so it can contribute to solving all these systemic crises.

ENERGY POVERTY

Of the total population of Africa of 1.2 billion, approximately half, (580 million in 2019), do not have access to the most basic electricity supply while almost 900 million rely on traditional biomass and simple stoves for cooking.¹⁴ Over the past two decades, there have been efforts to reduce the heavy reliance on biomass for energy and to scale up the use of electricity. However, there was a rise of 13 million people without access to electricity in Africa from 2019 to 2020 as a result of the pandemic, according to analysis in the World Energy Outlook 2020.¹⁵ The current crisis is likely to have the effect of rendering electricity unaffordable for more than 100 million people who already had electricity connections.¹⁶ Energy poor households spend a larger proportion of their income on energy and more time engaging in energy-intensive tasks compared to wealthier ones.

The proposed Just Recovery Renewable Energy Plan for Africa is envisioned as an innovative way of boosting peoples-centred recovery as it will create jobs at the same time as reducing emissions and addressing energy inequality. Current estimates suggest that if no action is taken now, the global CO₂ emissions will approach an alarming level of about 550 ppm around 2050, which will certainly cause disastrous and runaway climate change and will be a death knell for most of Africa and many other parts of the world.¹⁷ That is why the Just Recovery Renewable Energy Plan for Africa demands a drastic reduction of fossil fuel emissions and calls for powering Africa with 100% renewable energy for all, all while staying under the 1.5°C scenario.¹⁸

12 Hadas Thier (2021) Vaccine Apartheid. Africa is a Country <https://africasacountry.com/2021/03/vaccine-apartheid>

13 Climate Institute Report, 2021. The energy transition after COVID-19. Perspectives on green recovery and NDC ambition raising.

14 IEA (2020), SDG7: Data and Projections, IEA, Paris <https://www.iea.org/reports/sdg7-data-and-projections>; IEA (2020), SDG7: Data and Projections, IEA, Paris <https://www.iea.org/reports/sdg7-data-and-projections>

15 IEA (2020), The Covid-19 crisis is reversing progress on energy access in Africa, IEA, Paris <https://www.iea.org/articles/the-covid-19-crisis-is-reversing-progress-on-energy-access-in-africa>

16 IEA (2020), World Energy Outlook 2020, IEA, Paris <https://www.iea.org/reports/world-energy-outlook-2020>

17 Riahi, K., Rao, S., Krey, V. et al. RCP 8.5—A scenario of comparatively high greenhouse gas emissions. *Climatic Change* 109, 33 (2011). <https://doi.org/10.1007/s10584-011-0149-y>

18 *While no temperature rise is safe, the International Panel on Climate Change (IPCC) warns that increased warming to 1.50C compared to today will increase the risk for "unavoidable damage" to vulnerable countries, reducing opportunities for adaptation, especially in the tropics and Southern Hemisphere subtropics. Therefore, we are basing the *Just Recovery Energy Plan for Africa* on a scenario that aims to keep global temperature rise below 1.5 degrees. IPCC, 2018: Summary for Policymakers. In: Global Warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty [Masson-Delmotte, V., P. Zhai, H.-O. Pörtner, D. Roberts, J. Skea, P.R. Shukla, A. Pirani, W. Moufouma-Okia, C. Péan, R. Pidcock, S. Connors, J.B.R. Matthews, Y. Chen, X. Zhou, M.I. Gomis, E. Lonnoy, T. Maycock, M. Tignor, and T. Waterfield (eds.)]. World Meteorological Organization, Geneva, Switzerland, 32 pp.

10 FOE International (2020), Principles for a Just Recovery from the COVID-19 crisis <https://www.foei.org/features/principles-for-a-just-recovery-from-the-covid-19-crisis>

11 Kingsley Ighobor (2020), AU Study: COVID-19 could cost Africa \$500 billion, damage tourism and aviation sectors. United Nations Africa Renewal <https://www.un.org/africarenewal/magazine/au-study-covid-19-could-cost-africa-500-billion-damage-tourism-and-aviation-sectors>



PRINCIPLES TO UNDERPIN A RENEWABLE ENERGY INDEPENDENT AFRICA

02



Solar energy, Madagascar.
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The proposed Just Recovery Renewable Energy Plan for Africa is underpinned by a set of principles which guarantee a just and sustainable energy system for all. As described in Friends of the Earth International’s 2013 publication, *Good Energy, Bad Energy*, “Energy is... a necessary condition of a dignified life. We need energy for fuel and electricity to cook our food, to have habitable homes and workplaces in hot and cold places, to ensure that everyone has access to basic services like health and education, to communicate and travel, and to share and access information via the internet.”¹⁹

There is no justice when nearly 800 million people in the world (nearly 600 million of these being from Africa) do not have access to electricity.²⁰

Under the current global energy system, the way we produce, distribute and consume energy is unsustainable, unjust and harming to communities, workers, the environment and the climate. This is fundamentally an issue of corporate and elite interests outweighing the rights of ordinary citizens and communities. The pursuit of 100% people-powered renewable energy is based on the following principles adapted from previous reports of Friends of the Earth International:²¹

19 Friends of the Earth International (2013). *Good Energy, Bad Energy: Transforming our Energy System for People and the Planet* <https://www.foei.org/resources/publications/publications-by-subject/climate-justice-energy-publications/g-e-b-e>
20 IEA (2020), *SDG7: Data and Projections*, IEA, Paris <https://www.iea.org/reports/sdg7-data-and-projections>
21 Partick Hearps & Sam Cossar-Gilbert (2016), *An Energy Revolution is Possible: tax Havens and financing climate action*, Friends of the Earth International <https://www.foei.org/resources/an-energy-revolution-is-possible> and Friends of the Earth International (2018), *People Power Now Manifesto* <https://www.foei.org/peoplepowernow>; Friends of the Earth International (2013), *Good Energy - Bad Energy?* <https://www.foei.org/resources/publications/publications-by-subject/climate-justice-energy-publications/g-e-b-e>

PRINCIPLES TO UNDERPIN A RENEWABLE ENERGY INDEPENDENT AFRICA CONTINUED

1. SYSTEM CHANGE! PEOPLE POWER NOW!

System change means building alternatives to replace the current system, not simply trying to fix it. The way we manage, extract, use and distribute the Earth's natural resources under the current dominant economic model has put us on a path towards ecological and social crises. We need system change – a new model of environmental, social, political, economic and gender justice – and we need to build the power of the peoples.

2. ENERGY AS A COMMON GOOD.

Everyone should have the right to energy. It should be a common good and not a commodity. The sun and the wind are shared resources that should not be exploited for corporate gain. Our energy system should not be run for profit but should exist to meet the needs of the peoples.

3. ENERGY SUFFICIENCY FOR ALL.

This means sufficient universal energy access at a level that respects everyone's right to a dignified life. It also means an end to energy waste, through energy efficiency and energy saving, and an end to overconsumption by corporates and elites – those who currently hold the economic, political and social power.

Energy access for all is a basic human right and a necessary condition of a dignified life. Everyone must have access to sufficient sustainable, clean, safe, affordable, reliable and appropriate energy to meet their energy requirements for a dignified life. We need energy for fuel and electricity to cook our food, to have habitable homes and workplaces in hot and cold places, to ensure that everyone has access to basic services like health and education, to communicate and travel and to share and access information via the internet. We need energy for lighting and ensuring clean water supplies for adequate sanitation, irrigation and to run small scale agricultural industries and other small businesses.



Wind farm in Erg Chebbi, Morocco.
© Yellowj / Shutterstock

4. FINANCE FOR THE ENERGY REVOLUTION.

Countries must make their contribution to the climate effort in line with their fair share and the principles of equity, justice, and repayment of the climate debt.²²

5. 100% RENEWABLE ENERGY FOR ALL.

The need for a global transformation to a renewable energy system is urgent and must go hand-in-hand with a managed but rapid phase-out of fossil fuels and extractive projects, and a total ban on any new dirty energy projects such as fossil fuels, nuclear, mega dams, industrial agrofuels and biomass, and waste-to-energy incineration.

Energy will be generated from climate-safe sources with low social and environmental impacts.

This means no energy sources that:

- are high carbon or produce significant quantities of other dangerous greenhouse gas emissions through their production, combustion, distribution, or the direct or indirect land use change caused by their development
- abuse the rights of local communities and Indigenous Peoples
- result in deforestation or forest degradation
- result in the production of toxic waste
- result in significant air, land or water pollution
- deplete non-renewable resources.

Energy technologies will also be appropriate to the needs of the communities who are using them and to their local and regional environmental, economic, social and cultural contexts.

6. RENEWABLE TECHNOLOGY THAT IS CLIMATE RESILIENT, LOCALLY-APPROPRIATE & LOW-IMPACT.

Renewable energy should be as small-scale and decentralised as possible, and all communities should have access to technology, knowledge and skills. Our energy system should protect biodiversity, strengthen the land rights of communities and Indigenous Peoples and should not lead to exploitation of workers in the production chain.

Energy infrastructure, including supply and distribution, must be decentralised as much as possible. This is the case where energy solutions come from local opportunities at both small and community scale, and where energy is generated at or near the point of use, and either connected to a local distribution network system, supplying homes and offices rather than the high-voltage transmission system, or as stand-alone systems entirely separate from the public network.

Decentralisation will help ensure energy access for people in remote and rural areas; will facilitate subsidiarity and community or local ownership and control; and will reduce energy wastage in

²² Climate debt refers to the finance owed by global North countries to global South countries because of their responsibility for climate change.



distribution because energy and heat will be produced close to the point of use. Some large-scale renewable energy infrastructure such as large-scale wind or concentrated solar energy may be needed to complement decentralised supply to large towns and cities and essential public services and infrastructure. However, decision-making over any such large-scale infrastructure will be subject to the democratic and participative decision-making process set out above, and subject to rigorous testing to ensure that measures to reduce energy dependence have already been exhausted and that the end use of the energy produced has high social importance or value.

7. ENERGY SOVEREIGNTY & ENERGY DEMOCRACY.

Energy production and use should be owned and controlled by the people, for the people. The voices of women and those who are vulnerable or marginalised should particularly be heard. Communities should have free, prior and informed consent, the right to justice and also rights of redress.

In a just renewable energy system, energy infrastructure and resources will be under direct democratic control. Decisions about the production and use of energy need to:

- Be democratic, participative, open and accountable.
- Prioritise social outcomes, including energy access, fairness, environmental sustainability, and dignified work.
- Give adequate power to all directly-affected groups to influence decisions, including energy users, energy sector workers, and people who are excluded from energy systems.
- Respect the rights of communities to define their energy needs and how these needs are met in accordance with their cultures and ways of life, as long as these choices do not have destructive impacts on other people and communities.

The construction of new energy infrastructure will be done on the basis of the free, prior and informed consent and appropriate compensation and/or remuneration of affected communities and will respect the other rights of Indigenous Peoples and affected communities, and customary law.²³ The same holds for the extraction of any material inputs needed to build energy infrastructure and develop and produce energy technologies.

8. A JUST TRANSITION WHICH PROTECTS THE RIGHTS OF ENERGY SECTOR WORKERS, THEIR COMMUNITIES & THEIR LIVELIHOODS.

Workers and communities must have control over decisions that affect their lives and livelihoods. This means that workers must have a say in the future of our energy system, and also with regards to our food system, and the management of nature and our territories.

Workers involved in all aspects of the energy system are assured of their basic rights, including the right to freedom of association and

collective bargaining, a living wage, safe, secure and dignified work, and influence over how energy infrastructure is developed and run. We also need an urgent transition for the communities in which dirty energy projects have been situated, and whose fate gets intricately linked with those dirty energy facilities – their rights must also be protected and upheld, and they must benefit from the transition to a new energy system.

9. THAT PEOPLES-CENTRED RENEWABLE ENERGY IS ALLOWED TO FLOURISH, & THAT OBSTACLES TO PROGRESS ARE REMOVED.

Under the right political and economic conditions, the peoples-led energy revolution will flourish. Favourable policies and incentives must be decided by peoples and communities, and should go hand-in-hand with an end to subsidies and incentives for dirty and harmful energy. This also means an end to false solutions, a rejection of geo-engineering and the dismantling of harmful trade agreements which hinder peoples' climate solutions.

10. A CLIMATE-JUST WORLD THAT IS FREE FROM PATRIARCHY & ALL SYSTEMS OF OPPRESSION, DOMINATION & INEQUALITY.

There can be no climate justice without social justice. We must work for a future free from unequal power relations, where humans live in harmony with each other as well as with nature. This means a world free from injustice, discrimination, racism, sexism, classism, Islamophobia, militarism, LGBTQ-phobia and all other forms of structural and economic oppression.

The above principles speak to an energy transition that is people-centred, that must overcome inequalities and embolden a transformative vision. These principles must be the foundation of a Just Recovery Renewable Energy Plan for Africa so as to build resilience to current and future crises. The Just Recovery Renewable Energy Plan must intertwine climate justice with social justice. It requires a fundamental rethink and commitment to recalibrate the current system to a people-centred system.

Energy access is mostly considered gender neutral, both at the regional and national levels. In Africa, women are key users, suppliers and innovators within energy systems, and their empowerment is crucial in achieving a Just Energy Transition in Africa.

Most development authorities and agencies realise there is a significant difference between the energy needs of women and that of men. Yet most national energy policies and projects do not take into account gender equity as an essential component of development. Little attention has been paid to intersections of gender and energy access, gendered energy needs, the interactions between energy-related practices and gender inequity and integration of gender issues within energy justice agendas at the global, regional or national levels.

Therefore, in defining Just Recovery trajectories in Africa, it is essential to highlight, support and shape gendered dynamics of energy access in order to ensure that the energy needs of women are not disregarded in policy formulation and implementation.

²³ Jodie Lea Martire (2020), Powering Indigenous communities with renewables <https://renew.org.au/renew-magazine/solar-batteries/powering-indigenous-communities-with-renewables/>

A NEW ENERGY SYSTEM FOR AFRICA

03



Solar power station which feeds into national grid in Upington, South Africa .
© Nicole Macheroux-Denault / Shutterstock

The continent of Africa has excellent solar resources and other renewable sources that can be easily harnessed to provide enough electricity for our population's needs. Given the strong case for renewable energy it is reasonable to envision what a renewable energy future for Africa could look like:

- Solar Photovoltaic (PV) distributed across the continent, in stand-alone systems, microgrids and grid-connected installations.
- Some wind power, starting in southern African countries which already have stronger grids, as well as some in the more remote eastern and north-western parts of the continent which will require further transmission links.
- Concentrated solar power (CSP) with storage in the northern and southern parts of the continent, providing important flexible balancing power to electricity grids.

- Use of the existing hydro dams, an increase in geothermal capacity and a small amount of bioenergy to provide electricity from non-weather dependent renewable resources.
- Storage through pumped hydro and batteries. Offshore wind in coastal areas of southern Africa in regions with an offshore oil and gas industry to support a just transition

The advantages of clean energy resources are well known and, if systems are built with and for peoples and communities, will greatly benefit Africa, improve the health of our people, develop our economies through job creation and mitigate against the impacts of the extractive industry. Renewable energy will contribute to reducing emissions and to tackling climate change, ideally averting the worst predicted impacts. While it is rich countries who bear most responsibility for climate change, Africa is one of the hardest hit regions in terms of impacts. A move away from burning fossil fuels will be a boon to the continent's water resources, both in terms of quantity and quality. As different forms of renewable energy are added to the supply mix, there will be less water required for the thermal power plants and far less pollution of precious freshwater resources.



Socially controlled renewable energy designed with and by people can be advantageous for small and rural communities when it directly facilitates local job creation and the growth of local economies. In addition, green jobs in the renewable energy industry are expanding and are predicted to continue until 2050, the target year for a 100% renewable energy development.

Renewable energy is much easier to generate, distribute and manage at a decentralised level, which is a great advantage in Africa where there is no extensive electricity transmission line infrastructure over most of the continent. Rural and energy-poor communities will be able to manage their own energy resources and play a more active role in the functioning and improvement of their villages. Energy secure rural communities will mean that African children can spend more years studying at school, avoiding school drop-outs due to lack of electricity to study at home. This will reduce the education gap between urban and rural populations in Africa. Fossil fuel corporations will no longer have such big powers over governments, opening up this much needed policy space to advance legislation to protect human rights and the environment.

BOX 1: Likely pitfalls to avoid during deep energy transformation (adapted from *An Energy Revolution Is Possible*)²⁴

An energy transformation faces the following risks:

1. Corporations will try to define what constitutes 'renewable energy'
2. Construction of renewable energy infrastructure could drive land grabbing, enclosures
3. Increases in Human Rights' abuses, environmental destruction, land grabbing, environmental destruction from raw material extraction for renewable energy infrastructure
4. Greenhouse gas emissions from the rollout of renewable technologies
5. Poor environmental and labour standards in renewable energy technology manufacturing
6. The renewable transition becoming a Trojan horse for energy privatisation
7. Lack of public consent for renewable energy.

These pitfalls can be addressed and avoided only if the transition to renewables is carried out fairly, in a consultative manner, with a whole supply chain approach to social and environmental sustainability.

Low risk: Solar and wind, as renewable energy sources, offer low levels of risk in terms of operations and maintenance, as they do not require high technical skill levels to operate them. They have the added advantage that they can be deployed at different scales from single buildings to entire cities.

Independence and reliability: Renewable energy avoids reliance on foreign energy resources. When well-managed and integrated with other sources there is less intermittency. Most important of all, renewable energy offers storage capabilities. A Just Recovery Renewable Energy Plan for Africa envisages a deep system transformation that encompasses the aforementioned characteristics and mitigates/avoids some of the pitfalls inherent in the current energy systems on the continent.

Low cost: Africa's potential for renewable energy resources are enormous and accessible at a relatively low cost.

Solar resources: As a continent Africa has excellent solar resources. Even in the equatorial regions which experience higher cloud cover, the solar Global Horizontal Irradiance (GHI) resource is among the best on the planet. Outside of this equatorial band, in most of the northern and southern areas of the continent, the Direct Normal Irradiance (DNI) resource (most relevant to Concentrated Solar Power CSP technology) is among the best on the planet.²⁵ (Figure 1).

Wind resources: Like most continents, Africa has regions with very high and very low wind power potential. Coastal areas in the far east, north-west and southern parts of the continent have particularly good wind resources (as well as pockets of the Saharan desert and northern Madagascar), while much of the equatorial part of the continent has quite poor average wind speeds (Figure 2).

Concentrating solar power (CSP): CSP is a different method of using the sun's energy to generate electricity. It uses combinations of mirrors to concentrate sunlight to heat fluids to high temperatures, which can then be used to run steam turbine cycles similar to those used in conventional fossil and nuclear power plants. Some CSP technologies use molten salt as the operating fluid which can be stored for later use in insulated tanks, thereby integrating very high efficiency energy storage into the power plant. CSP requires direct sunlight to operate, and while sunlight is only available during the day, plants with integrated storage can operate at night and through cloudy periods. CSP is a less mature technology and therefore more expensive than solar PV and wind, though with great potential to reduce in cost in the future

Geothermal: While there are questions over the appropriate use of Geothermal in Africa, there are sources located primarily in the Rift Valley region.

²⁴ Patrick Hearn & Sam Cossar-Gilbert (2016), *An Energy Revolution is Possible: Tax Havens and Financing Climate Action*. <https://www.foei.org/wp-content/uploads/2016/09/foe-energy-revolution-full-reportNEWdraft2.pdf>

²⁵ Global Horizontal Irradiance (GHI) is the sum of Direct Normal Irradiance (DNI), Diffuse Horizontal Irradiance, and ground-reflected radiation. GHI is the total solar radiation incident on a horizontal surface.

FIGURE 1 SOLAR ENERGY RESOURCE (GHI) FOR AFRICA
POTENTIAL & EXISTING SITES FOR SOLAR GENERATION IN AFRICA

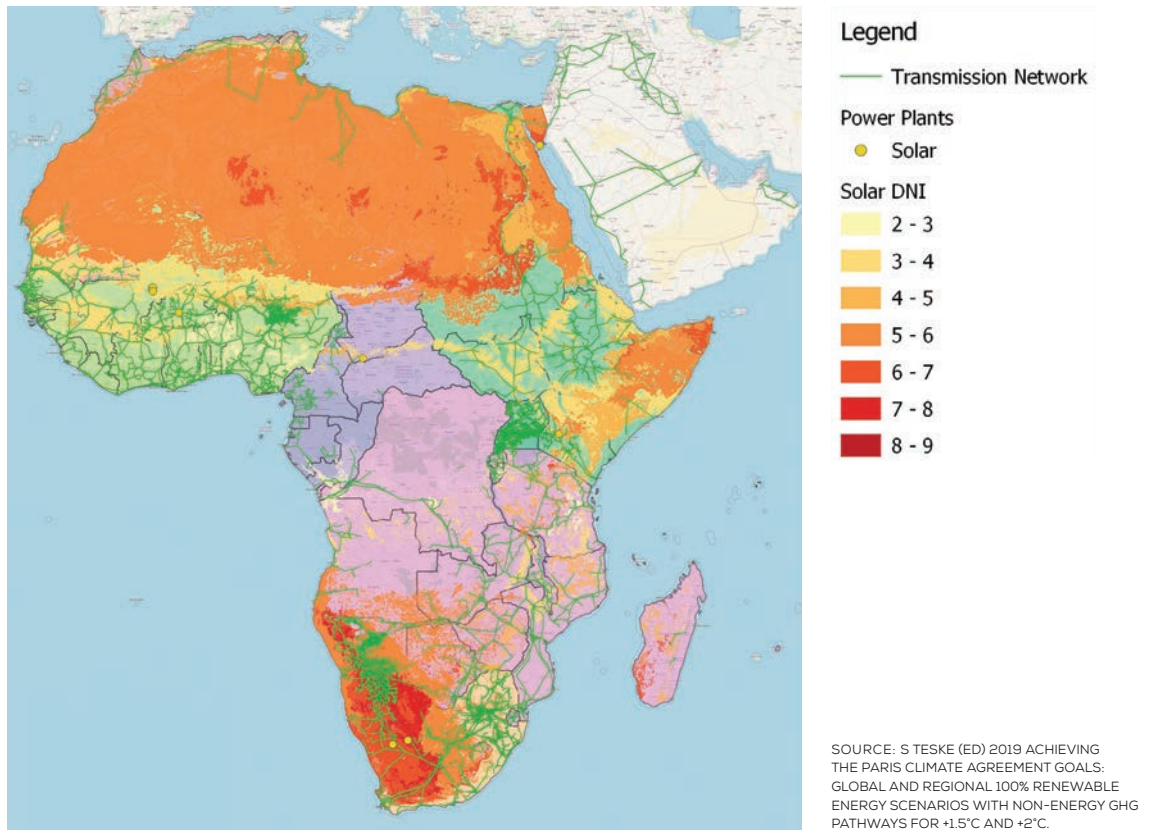


TABLE 1 SOLAR ENERGY POTENTIAL FOR AFRICA

This table shows the capacity for solar generation across Africa.

SOURCE: ACHIEVING THE PARIS CLIMATE AGREEMENT GOALS, EDITORS: TESKE, SVEN (ED.) PAGE 193.

REGION / SUB REGION	SPACE POTENTIAL	SOLAR GENERATION POTENTIAL	
	[GW]	[TWh]	[PJ]
Africa	914,180	1,828,360	6,582,096
North - Africa	243,160	486,320	1,750,752
East - Africa	159,464	318,928	1,148,141
West - Africa	208,424	416,848	1,500,653
Central - Africa	180,728	361,456	1,301,242
Southern - Africa	81,741	163,482	588,535
Rep. South Africa	40,663	81,326	292,774

Bioenergy: Due to a range of ecological and social reasons, Friends of the Earth Africa does not see bioenergy as an energy source to be used extensively for power generation. It should be noted that in many rural parts of the Africa world, biomass from traditional sources – woodcutting, animal dung etc – is already the main source of energy for heat and cooking, and that this can be hugely harmful health-wise, especially for women and children. There are high numbers of illnesses and deaths linked to pollution from biomass. The Just Recovery Renewable Energy plan based on Teske’s modelling has factored in small amounts of biomass alongside existing hydro to meet the final few percent of electricity demand,

helping to get through particularly low periods of wind and solar, yet this modelling has increased use of wind and solar power to replace much bioenergy for heat use in order to help reduce overall levels of biomass harvesting.

Hydro power: Generation from large mega-dams causes severe ecological and social problems, and in regions that will get drier with climate change it will also be a wasted effort. Friends of the Earth Africa opposes large hydro dams, they offer dirty and harmful energy. Teske’s 1.5°C model and this Just Recovery Renewable Energy Plan models focuses on the continued use of existing hydro

FIGURE 2 | POTENTIAL WIND POWER PRODUCTION FOR AFRICA, ALSO SHOWING EXISTING TRANSMISSION LINES

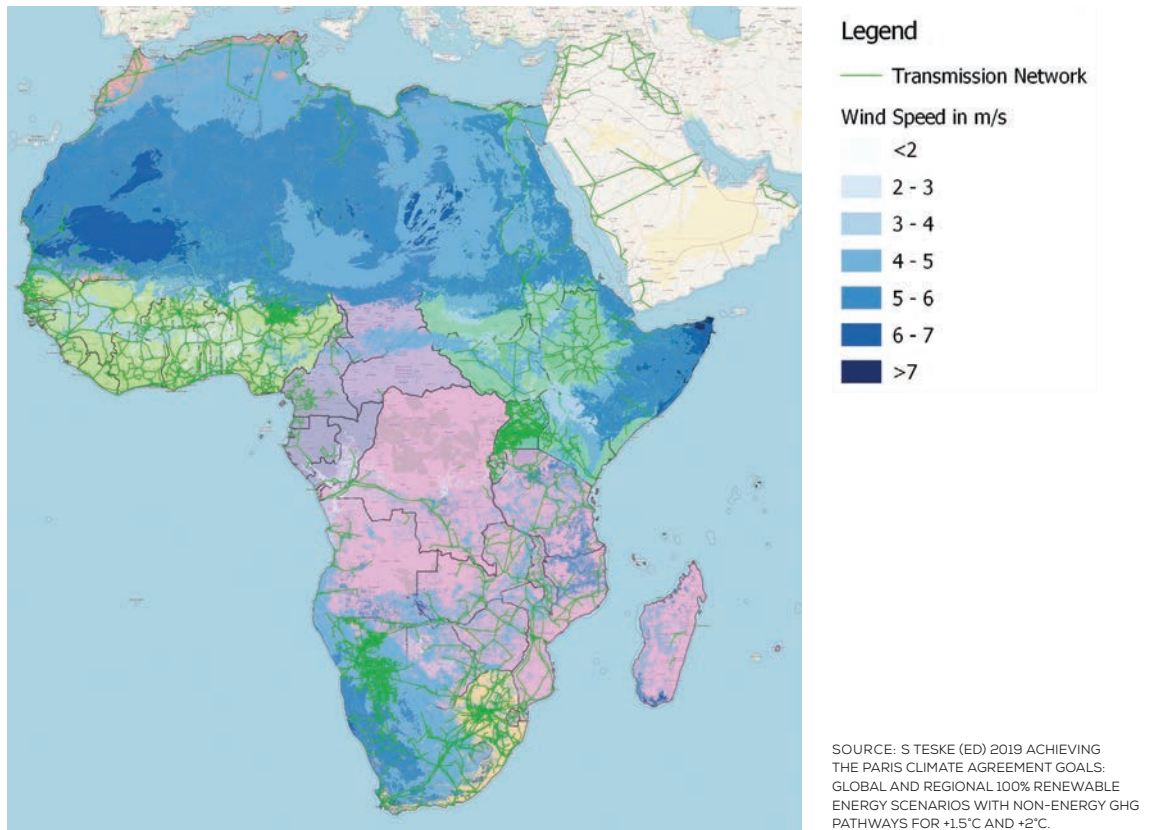


TABLE 2 | WIND ENERGY POTENTIAL FOR AFRICA

This table shows the capacity for wind power generation across Africa.

SOURCE: ACHIEVING THE PARIS CLIMATE AGREEMENT GOALS. EDITORS: TESKE, SVEN (ED.) PAGE 193.

REGION / SUB REGION	WIND GENERATION POTENTIAL		
	SPACE POTENTIAL [GW]	[TWh]	[PJ]
Africa	190,711	476,775	1,716,390
North - Africa	48,923	122,308	440,307
East - Africa	34,902	87,255	314,118
West - Africa	43,348	108,370	390,132
Central - Africa	37,547	93,868	337,923
Southern - Africa	17,738	44,345	159,642
Rep. South Africa	8,252	20,630	74,268

facilities and a substantial decrease in market share of hydro energy produced. Friends of the Earth Africa advocates for the eventual removal of existing large and mega dams in the region to restore river ecosystems.

Storage: There are many ways of storing energy for later use and this is an essential part of wind and solar energy generation. A range of battery technologies for use with renewables are maturing and reducing in costs. Battery systems, similar to solar PV, are modular and scaleable – they can be sized to supply a single dwelling, a community, a large commercial facility, or be integrated

into the electricity grid.²⁶ They are well-suited to the decentralised energy model that will likely play a large role in Africa. Pumped Hydro Energy Storage (PHES) is the most widespread form of grid-scale electricity storage worldwide, and is a mature technology. It consists of simply pumping water up an upper reservoir with excess/cheap electricity, and later using this water to generate power with standard hydro turbines, released to a lower reservoir or body of flowing water, or even the ocean in the case of saltwater.

²⁶ However, a note of caution on battery storage – Friends of the Earth Africa also has concerns about the materials mined for use in battery storage. All renewables must adhere to Friends of the Earth International’s principles outlined in section 4.

A NEW ENERGY SYSTEM FOR AFRICA CONTINUED

MODELING A RENEWABLE ENERGY INDEPENDENT AFRICA

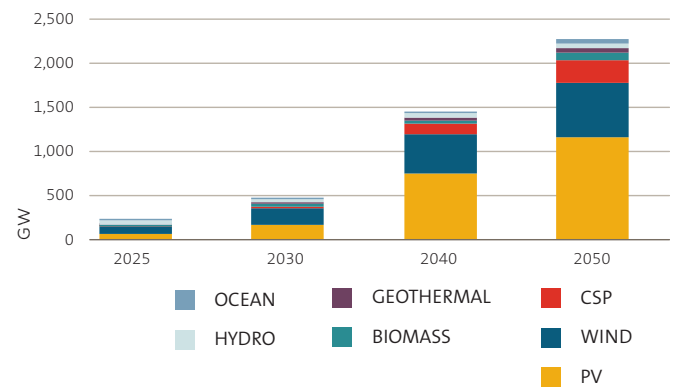
The Just Recovery Renewable Energy Plan envisions the building of over 300GW (equivalent to Africa’s energy poverty gap) of clean wind and solar renewable energy by 2030, ramped up to over 2000GW by 2050. During COP21 African leaders committed to 300GW by 2030 through the African Renewable Energy Initiative (AREI).²⁷ “We need to light up Africa... This will save the dwindling waters of our lakes and transform the lives of our women, who bear the brunt of climate change. We should invest more in technology and innovation so that we equip our youths with the necessary skills to transform our continent,” said Nkosazana Dlamini Zuma, former Chairperson of the African Union Commission (AUC) in support of the initiative.²⁸

Teske’s 1.5°C model projects an installed capacity of 360GW by 2030 and 2280GW by 2050. To achieve this electricity generation capacity a total investment of US\$3910 billion – an annual average US\$109 billion yearly until 2050. This shows how this vision is both technically and financially possible. The model aims to rapidly phase-out the fossil sources of coal and oil, thus increasing the share of renewable energy to more than 98% in 2050 (this increase includes non-energy consumption that may include fossil fuels).²⁹

DEVELOPMENT OF POWER PLANT CAPACITIES

Table 3 and Figure 3 below show that solar PV will become the dominant technology by 2050, producing the majority of the total energy generation, followed by onshore wind. Geothermal, hydro, biomass, and ocean will all play a minor role. The proportion of hydro to the total energy sources of electricity generation will decrease substantially.

FIGURE 3 THE DEVELOPMENT OF RENEWABLE ELECTRICITY 2025-2050



SOURCE: ADAPTED FROM S TESKE (EDS) 2019.

TABLE 3 AFRICA: DEVELOPMENT OF RENEWABLE ELECTRICITY – GENERATION CAPACITY IN THE 1.5°C SCENARIO IN GW.

RENEWABLE ENERGY	2025	2030	2040	2050
PV	70	166	757	1,162
Wind	87	197	453	633
CSP	2	19	108	257
Biomass	8	25	42	72
Geothermal	7	16	33	64
Hydro	46	48	51	54
Ocean	2	10	20	43
Total	222	481	1,464	2,285

SOURCE: ADAPTED FROM S TESKE (EDS) 2019.

27 AREI (2016) Africa Renewable Energy Initiative Framework <http://www.arei.org/wp-content/uploads/2018/09/AREI-Framework.pdf>
 28 AfDB (2015) AfDB to support electricity access for all by 2030 with African Renewable Energy Initiative <https://www.afdb.org/fr/news-and-events/afdb-to-support-electricity-access-for-all-by-2030-with-african-renewable-energy-initiative-15119>
 29 S Teske (2019) Achieving the Paris Climate Agreement Goals: Global and Regional 100% Renewable Energy Scenarios with Non-energy GHG Pathways for +1.5°C and +2°C. https://doi.org/10.1007/978-3-030-05843-2_1

RENEWABLE HEATING

Teske’s 1.5°C model projects renewable energy technologies will contribute 79% of heating energy needs in 2030, increasing to 100% in 2050.³⁰ The demand for energy for heating can be reduced by investment and focus on energy efficiency measures. Non-fossil hydrogen sources could lower dependency on fossil fuels contributing 720PJ/year towards heating, while direct electricity

will contribute 37% by 2050.³¹ The future investments for renewable heating technologies will average US\$21 billion annually with a total of US\$760 billion required by 2050.³² The data in Table 4 show the progressive increases in contribution by the different types of renewable energy to the continental supply mix between 2015 and 2050.

TABLE 4 | INSTALLED CAPACITIES FOR RENEWABLE ENERGY HEAT GENERATION IN 1.5°C SCENARIOS IN GW.

RENEWABLE ENERGY	2015	2025	2030	2040	2050
Biomass	3,655	3,562	3,069	2,440	1,307
Geothermal	0	5	8	15	37
Solar heating	1	39	150	404	654
Heat Pumps	0	3	16	54	227
Total	3,656	3,609	3,243	2,913	2,225

SOURCE: ADAPTED FROM S TESKE (EDS) 2019.



A young student in Zambia.
© Patrick Bentley / SolarAid

³⁰ *ibid.*

³¹ Friends of the Earth International opposes fossil hydrogen as we oppose all fossil fuels, and does not yet have a firm position on non-fossil hydrogen.

³² US\$109 billion annual costs for electricity and heating costs of US\$21 billion annually means a total of US\$130 billion investment a year.

JOB CREATION THROUGH THE JUST RECOVERY RENEWABLE ENERGY PLAN FOR AFRICA

04



We Care Solar, Africa.
© Ashden

100% renewable energy Africa has been modeled and creates over 5 million jobs in solar, wind and other modern renewable energy in Africa by 2030 and 7 million jobs by 2050 and create millions more livelihoods and support a just recovery from Covid-19.³³

THE JUST RECOVERY RENEWABLE ENERGY PLAN FOR AFRICA WILL CREATE JOBS

Many studies and reports, notably the IRENA Renewable Energy and Jobs Annual Review, published yearly and the UTS 2018 have presented evidence that the renewable energy industry will create employment opportunities that far surpass the number of jobs currently offered in the fossil fuel, oil and gas industries. The energy transition to 100% renewables is far more positively impactful on employment worldwide, under the 1.5°C scenario. The most recent, IRENA 2020 Renewable Energy and Jobs Annual Review reported the following findings (also see Figure 4).³⁴

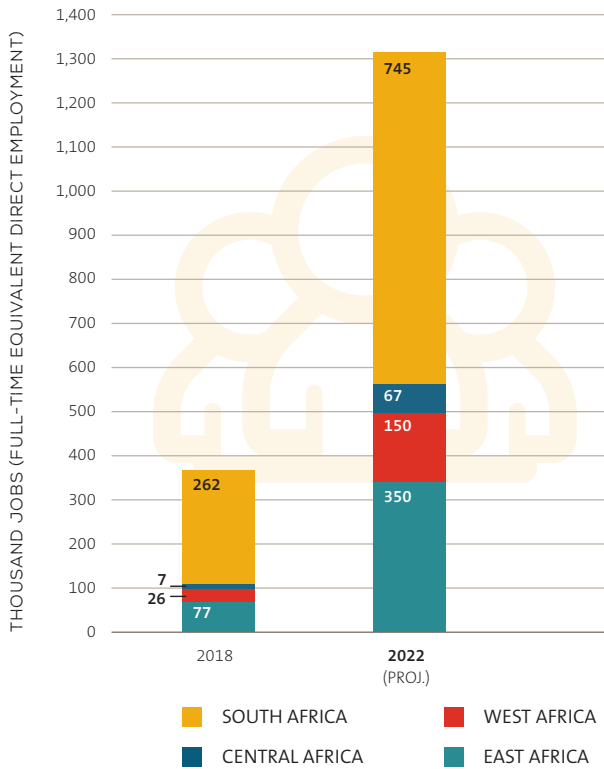
- Globally renewable energy jobs have continued to grow on an annual basis increasing from 11 million in 2018 to 11.5 million in 2019 worldwide.
- Solar photovoltaic (PV) technology with a share of one third of the jobs, had the highest growth rate followed by bioenergy, wind energy and solar heating.
- The off-grid solar PV employment continued to increase in importance in Sub-Saharan Africa and South Asia, with 56% of the jobs located in rural areas and 27% being filled by women.
- Around 32% of the global renewable energy workforce are women (occupying positions in manufacturing, trade and administration) compared to 22% in the global oil and gas industry.

The UTS projection of jobs in the energy sector in Africa is shown in Table 5. These have modelled that more than 7 million jobs will be created through a transition to renewable energy independent Africa. The type of jobs referred to include manufacturing, construction, operations, administration, trade and maintenance. These are jobs that will increase women's participation, and will spread into rural areas where jobs are needed most.

³³ S Teske (Eds) 2019 Just Transition: Employment under 100% renewable energy scenarios, ISF, 2019.

³⁴ IRENA (2020) Renewable Energy and Jobs Annual Review 2020 https://www.irena.org/-/media/Files/IRENA/Agency/Publication/2020/Sep/IRENA_RE_Jobs_2020.pdf

FIGURE 4 DIRECT EMPLOYMENT IN RENEWABLE ENERGY



SOURCE: IRENA 2020, GOGLA AND VIVID ECONOMICS, 2018.

Millions of workers and whole communities are currently dependent for their basic livelihoods on the current unjust and unsustainable energy systems. To name a few this includes workers across many sectors, from energy, transport and agricultural industries. But our vision doesn't just include the workers. We also need an urgent transition for the communities in which dirty energy projects are situated, and whose fate is intricately linked with those dirty energy facilities.

Workers do face different challenges based on their gender, race, class, age, educational background, nationality and much more. The transition must be just for all, and women and youth voices must be at the forefront. Currently, new 'green' jobs rarely offer the same levels of union support, collective organising or rights and conditions. So, it is crucial that the Just Recovery Renewable Energy Plan for Africa supports workers' rights and conditions in new 'green' industries.



Martin Sumuhale has electricity for the first time in his life thanks to this solar panel. He can see the benefits it brings his grandchildren, Polokwane, South Africa.
© Mujahid Safodien / Greenpeace

TABLE 5 NUMBER OF JOBS CREATED IN AFRICA UNDER THE 1.5°C SCENARIO

RENEWABLE ENERGY	2015	2020	2025	2030	2050
PV	66.3	323	806	1,862	2,621
Solar thermal power	1.4	1.8	53.7	342.6	1,311.4
Wind	18.7	226	569	1,046	1,923
Hydro	143	144	73	94	103
Geothermal Power	3.7	23.7	49.2	39.8	61.9
Ocean	-	28	60	21.6	95.1
Solar-heat	6	64	281	968	666
Geothermal & heat pump	-	21	44	118	626
Total Jobs (Thousands)	239.1	831.5	1,935.9	4,492	7,407.4

SOURCE: ADAPTED FROM UTS, 2018.

HOW TO WIN THE FINANCE FOR THE JUST RECOVERY RENEWABLE ENERGY PLAN FOR AFRICA

05



Baobab+ technicians demonstrating a Sun King TV to villagers in Digipoune, Ounck commune, Casamance, Senegal. © Ashden

To achieve a Just Recovery Renewable Energy Plan for Africa with 100% renewable energy deployment that is in line with 1.5°C climate target requires an approximate annual investment of US\$130 billion (as modelled by UTS for electricity and heating).³⁵ This energy plan is possible based on funding sources identified.

African countries, however, face huge challenges in mobilising any of these funds mainly due to limited fiscal space, huge flows of illicit funds from the continent and never-ending debt servicing. These challenges constrain the countries, reducing their ability to respond to climate crises in the same manner that they recently fared poorly in their response to the Covid-19 pandemic.

In order to implement the Just Recovery Energy Plan for Africa the pillaging of African financial resources must be stopped, unjust debt dropped and the continent supported with access to finance. The UN Framework Convention on Climate Change establishes that finance and technology must flow from the global North to the global South to support the energy transition.

We propose three new funding mechanisms and sources:

1. STOPPING TAX AVOIDANCE, EVASION AND ILLICIT FINANCIAL FLOWS

According to Tax Justice Network every year up to US\$600 billion dollars of government revenue is lost through tax avoidance havens and tax evasion globally.³⁶ In addition, Africa loses between US\$50 billion (OECD estimates) to US\$100 billion (UNECA estimates) in tax evasions annually.³⁷ While UNCTAD estimated that Africa alone loses up to US\$89 billion through illicit financial flows every year.³⁸

Tax havens create legal loopholes that enable people or businesses to minimise or escape entirely the taxes they should pay on substantial economic activities. Tax havens, evasions and illicit flows deny governments huge sums of money and undermine their ability to address climate change, fund health and education. It also dramatically reduces the revenues available to fund the transition to 100% renewable energy, provide access to energy and deliver public services that address inequality. The practice of wealthy corporations and individuals hiding their profits abroad in tax havens, is abhorrent and must be stopped.

³⁵ S. Teske (eds 2019).

³⁶ Patrick Hearps & Sam Cossar-Gilbert (2016), An Energy Revolution is Possible: Tax Havens and Financing Climate Action. <https://www.foei.org/wp-content/uploads/2016/09/foe-energy-revolution-full-reportNEWdraft2.pdf>

³⁷ Kyle Linder (2019), Tax Evasion in Sub-Saharan Africa <https://borgenproject.org/tax-evasion-in-sub-saharan-africa/>

³⁸ United Nations (2020), Tackling Illicit Financial Flows for Sustainable Development in Africa https://unctad.org/system/files/official-document/aldcafrica2020_en.pdf



2. RICH COUNTRIES SHOULD FULFIL THEIR CLIMATE FINANCE OBLIGATIONS TO THE GLOBAL SOUTH, INCLUDING AFRICA

Rich countries have caused the majority of carbon emissions and have a climate debt to developing countries of many billions of dollars. The commitment made at COP15 by developed countries to contribute US\$100 billion a year of climate finance by 2020 to address the needs of developing countries is not an adequate reflection of what is actually owed (many hundreds of billions). Nor indeed has the US\$100 billion a year ever been met.³⁹ Countries often seek to count Official Development Assistance (ODA), loans, private finance and carbon offsetting towards this goal. In October 2020, it was estimated that nearly 80% of climate finance to developing countries took the form of loans, rather than grants.⁴⁰ While inadequate as a repayment of the climate debt, US\$100 billion a year in public finance with a fair share apportioned to Africa would be a start. These funds would bring renewable energy to many people and go a long way in closing the energy inequality gap, though our position is that rich countries owe far more than this sum as their climate debt to the global South.

3. CANCELLATION OF AFRICA'S DEBT

According to the World Bank, the total debt for sub-Saharan Africa climbed nearly 150% to US\$583 billion between 2008 and 2018.⁴¹ Africa's debt to the developed world and China was estimated to be US\$770 billion in 2018.⁴² As a consequence of the Covid-19 pandemic it is estimated that 54% of low-income countries are in debt distress or at high risk of getting into debt distress.⁴³ For example, Mozambique's debt-GDP ratio was 100% in 2018 but ballooned to 130% in 2020 as a result of Covid-19.⁴⁴ Through speculation, vulture funds, have earned profits between 300% and 2,000% through the cheap purchase of debts of 15 African countries.⁴⁵ A strong program to cancel the debt for Africa would create a win-win situation that would enable its nations to recover and start on a just recovery. Debt cancellation includes making it illegal for vulture funds implemented by private creditors who have built windfall profits from loans to African countries.

A complete debt cancellation is a right, for a continent that has been repaying odious debts for long and has suffered the brunt of the climate crisis yet has very low carbon emissions. There are instances where African elites took out illegal debts, like in the case of Mozambique. In such cases, these elites as well as the international financial institutions which gave out illicit loans should be penalised, but the African people should not be left holding the debt.

4. GLOBAL PANDEMIC SOLIDARITY TAX ON WORLD'S WEALTHIEST

There has been a US\$5 trillion surge in the wealth of the world's richest billionaires in the past year while ordinary people have struggled and millions have lost their jobs.⁴⁶ A one-off pandemic solidarity tax on the world's billionaires and transnational companies could address inequalities and contribute to the Just Recovery funds.

39 UNFCCC (2009) Copenhagen Accord https://unfccc.int/files/meetings/cop_15/application/pdf/cop15_cph_auv.pdf
40 Oxfam International (2020) Climate Finance Shadow Report 2020: Assessing Progress Towards the \$100 Billion Commitment <https://oxfamlibrary.openrepository.com/bitstream/handle/10546/621066/bp-climate-finance-shadow-report-2020-201020-en.pdf>

5. JUST RECOVERY RENEWABLE ENERGY PLAN WILL HAVE LONG-TERM ECONOMIC AND SOCIAL BENEFITS

Access to electricity is a key factor in improving human and economic indicators of employment, education, productivity, human health and gender equality. Therefore, the majority of public investment providing access to electricity acts as an economic and social benefit multiplier and will pay for themselves many times over. Furthermore, the cost of renewable power systems is increasingly cheaper than fossil fuel systems in the majority of the world, especially over the long term.⁴⁷ A public investment in a people powered renewable energy system is crucial to long term sustainable societies. African governments must be accountable to their peoples, not to polluters or elite interests. African peoples are owed the repayment of the climate debt from the rich developed countries in the global north. However, as Africa citizens, we will also hold our governments accountable and urge them to choose development pathways that centre peoples' needs and renewable energy systems, not fossil fuel projects that damage lives and worsen climate change.

African countries face huge challenges in mobilising any of these funds mainly due to limited fiscal space, huge flows of illicit funds from the continent and never-ending debt servicing. These challenges constrain the countries, reducing their ability to respond to climate crises in the same manner that they recently fared poorly in their response to the Covid-19 pandemic.

HOW TO ACCESS THE FUNDING

- African governments need to improve data collection and tax systems, as well as transparency and access to information, and engage within the region and internationally on how to cooperate in plugging tax loopholes.
- African governments have to escalate the demands for debt cancellation.
- African governments must continue to demand payment of climate finance owed by global North governments.
- African governments have to unite and work with civil society organisations and fulfil commitments under the African Renewable Energy Initiative and expand it to come up with a strong program for attaining 100% renewables to demand delivery of climate funding.

To conclude, the finance exists to fully fund the Just Recovery Renewable Energy Plan for a 100% renewable independent Africa. This plan presents a credible pathway towards clean energy for the peoples of Africa, simultaneously addressing the climate crisis and providing significant job creation.

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43 Emmanuel Louis Bacani (2020) Global public debt to hit record 100% of GDP amid pandemic response - IMF <https://www.spglobal.com/marketintelligence/en/news-insights/latest-news-headlines/global-public-debt-to-hit-record-100-of-gdp-amid-pandemic-response-8211-imf-60730892>
44 Mickaël Sallent (2020) External debt complicates Africa's COVID-19 recovery, debt relief needed <https://www.un.org/africarenewal/magazine/july-2020/external-debt-complicates-africas-post-covid-19-recovery-mitigating-efforts>
45 Daniel Bradlow (2020) Vultures, doves and African debt: here's a way out <https://theconversation.com/vultures-doves-and-african-debt-heres-a-way-out-137643>
46 Alex Woodward (2021) The world's billionaires added \$5 trillion to their wealth during the pandemic, the biggest surge in decades <https://www.independent.co.uk/news/world/americas/forbes-billionaire-list-richest-people-b1827616.html>
47 IRENA (2020) Renewable Power Generation Costs in 2019 <https://www.irena.org/publications/2020/Jun/Renewable-Power-Costs-in-2019>

A JUST RECOVERY RENEWABLE ENERGY PLAN FOR AFRICA

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Cameroon
Ghana
Liberia

Mali
Mozambique
Nigeria

Sierra Leone
South Africa
Tanzania

Togo
Uganda

Cameroon | The Center for Development and the Environment (CED)



Ghana | Friends of the Earth-Ghana



Liberia | Sustainable Development Institute



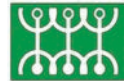
Mali | Guamina



Mozambique | Ja! Justica Ambiental



Nigeria | Environmental Rights Action (ERA)



Sierra Leone | Friends of the Earth Sierra Leone



South Africa | groundWork



Tanzania | Lawyers' Environmental Action Team (LEAT)



Togo | Les Amis de la Terre-Togo



Uganda | National Association of Professional Environmentalists (NAPE)



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