Global Renewables Alliance 3xRenewables Policy Agenda















DOUBLE DOWN, **TRIPLE UP**. THE WORLD NEEDS #3XRENEWABLES

Purpose and intended use of document: This document has been collated by the Global Renewables Alliance to inform stakeholders of the common policy recommendations across the key renewable energy technologies required to triple renewables in order to comply with a 1.5°C trajectory.

3xRenewables Policy Agenda

Five key action items to deliver a clean, secure and just energy transition



AMBITION

Update national and regional targets to align with the ambition set at COP28 to triple global renewable energy capacity to at least 11,000 GW by 2030, in line with a 1.5 °C pathway.



ACCELERATE

Dramatically accelerate global deployment of large and smallscale renewable energy, enabled by: streamlined permitting; strong and diverse supply chains; grid action plans; clear and long-term policy ambitions; low-cost financing; integrated planning for crosssector decarbonisation and system integration of renewables.



Establish market mechanisms for procurement of energy storage and system flexibility, to support increasing renewable shares in power markets and incentivise flexibility.

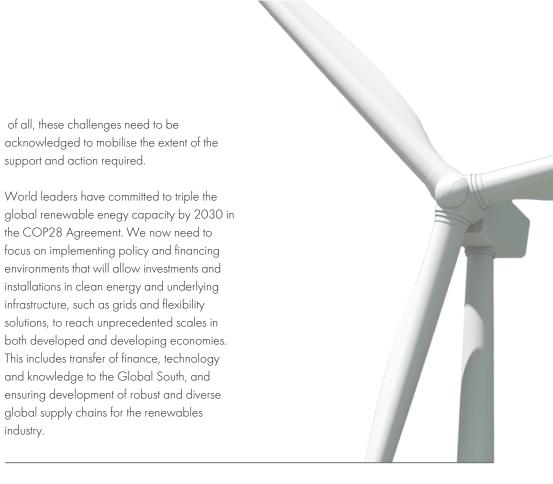


Progress the implementation of robust carbon pricing mechanisms to drive phaseout of fossil fuels alongside renewable energy ramp-up.

All stakeholders need to collaborate to ensure that gains from the energy transition are equitably distributed, in line with a just and inclusive energy transition. This should include multilateral North-South partnerships to support local value creation in developing economies, as well as mobilising access to low-cost financing and transition-related needs, such as grid expansion.



Context A clean, secure and just future



We are in the 'make or break' decade to avoid an irreversible fossil-fueled climate catastrophe. A global energy transition that dramatically accelerates the build-out of renewable energy in all regions of the world gives us the best chance of fighting climate change and building a clean, secure and just future.

Looking ahead at the actions needed for a 1.5°C pathway, policymakers and heads of international energy agencies are convening around a shared goal to triple cumulative global renewable energy capacity to at least 11,000 GW by 2030. That means accelerating annual installations of renewable energy sources like wind power, solar power, hydropower and geothermal power to reach annual installations of at least 1,500 GW by 2030. This would then set the stage for transformative technologies like long-duration storage and green hydrogen to take off and ensure energy systems are not just clean, but secure and resilient. In parallel, Power-to-X facilities can help to stabilise the grid and therefore support the ramp up of renewables. Renewable energy is already transforming communities around the world, powering homes with clean electricity, building a sustainable workforce generating millions of jobs and attracting public and private capital

to propel economic growth. Tripling this activity represents an enormous opportunity to set the world on a path to clean, sustainable and inclusive growth and socio-economic development.

of all, these challenges need to be

support and action required.

acknowledged to mobilise the extent of the

World leaders have committed to triple the

the COP28 Agreement. We now need to

focus on implementing policy and financing

environments that will allow investments and

installations in clean energy and underlying

This includes transfer of finance, technology

ensuring development of robust and diverse

and knowledge to the Global South, and

global supply chains for the renewables

industry.

infrastructure, such as grids and flexibility solutions, to reach unprecedented scales in

System transformation will only be possible with widespread electrification, enhanced energy efficiency and the commercialisation of clean fuels like green hydrogen and its derivatives (e.g. e-methane, e-ammonia, emethanol) to decarbonise hard-to-abate sectors. This will require the renewable energy industry's close collaboration with local communities, societal interests and other industries to ensure that renewables expand in harmony with nature, citizens and the wider economy in a bid to learn from the historic mistakes of the energy sector.

While renewables like wind, hydro and solar are already more cost-competitive than fossil fuel or nuclear-based electricity in countries representing the majority of the world's population, progress towards our 2030 goal cannot be taken for granted. Governments, industry and civil society must work together to address the barriers to global renewables deployment as a matter of utmost urgency, from permitting to grids, regulatory uncertainty, supply chain bottlenecks, and rising costs. First

Tripling renewable energy capacity by 2030 will be the defining mission of this era, and the GRA - representing the joint industry voices of the energy transition - is ready to work with governments, the private sector, financing institutions and society to reach this goal and create a just, equitable and inclusive energy transition for all.

Policy Agenda for 3xRenewables



Update national and regional targets to align with the global target set at COP28

to triple renewable energy capacity by 2030 to at least 11,000 GW, in line with IRENA's World Energy Transitions Outlook and science-based pathways to prevent global temperature rises exceeding 1.5°C above pre-industrial levels.

Atleast 130 countries and the EU have signed the Global Renewables and Energy Efficiency Pledge and the final COP28 agreement includes a tripling of global renewable energy capacity.

To achieve this target, wind, solar, hydropower and geothermal power need to ramp up deployment to reach 1,500 GW of annual installations by 2030. Support massive deployment of both large and small-scale renewable energy, underlying infrastructure as well as flexibility solutions on supply and demand side and complementary technologies. There are various technologies and sectors to consider such as electrolysers, demand-side management, batteries, pumped storage, and electrified transport to increase energy access through electrification and power economic growth through industrialisation.

Economies in the Global South can benefit from local and regional renewable energy supply chains and the establishment of decarbonised local industries, as drivers of job creation and trade opportunities.

3. GRID AND GREEN HYDROGEN INFRASTRUCTURE

Urgently invest in grid action plans which rapidly build out electricity grids, green hydrogen infrastructure, and heat systems for integration of large volumes of renewables and long-duration energy storage solutions. This can further support cross-sector decarbonisation, such as for energy-intensive heavy industries.

As grid build-out often requires a longer lead time than construction of renewable projects themselves, the lack of available grid connections and transmission poses a significant bottleneck to the scale-up of clean energy and green hydrogen.

4. FINANCE



Multilateral and national finance flows should be aligned with investment needs for a 1.5°C-compliant pathway, and provide access to low cost capital in developing countries. Investments – including export finance, climate finance, public and private capital – should be made under "Do No Significant Harm" principles. Climate and energy transition targets should be mainstreamed across financial ministries, development banks and export credit agencies to align public spending with renewable energy goals.

Developed countries must fulfill the commitment to the annual USD 100 billion flow of climate action finance for developing countries, to build international trust and collaboration on mitigation needs.

5. SUPPLY CHAIN

Commit to ambitious energy transition plans/milestones to allow the renewables and storage industry to effectively plan for efficient supply chain development, to be reflected in updated NDCs by the end of 2023. These plans should be specific and concrete, including ambitious technology targets with a longterm horizon and a frequent schedule of sizable procurement to meet targets.

Regional supply chain development can have huge benefits in fostering a level playing field in addition to promoting global trade agreements. This will ensure global competitive supply chains, and support countries in fostering a green economy. 6. PERMITTING

for grid-scale renewable energy

Urgently streamline permitting schemes

projects, as well as long-duration energy

7. DEMAND SIDE



8. ENERGY STORAGE



Include simplified mechanisms for clean power procurement and pricing. Drive and facilitate demand for renewable electricity, green hydrogen and its derivatives by incentivising industries to transition to clean energy sources. This includes enabling direct/bilateral procurement by corporates and large industrial users and facilitating market conditions that accelerate the move towards high-impact corporate sourcing, including hourly matching of renewables. It further involves creating policies and financial incentives to encourage the adoption of green hydrogen and its derivatives in various hard-to-abate sectors, such as transportation and industry, and to use it as a versatile energy carrier to store and transport renewable energy.

Furthermore, fostering international cooperation to establish a global green hydrogen market can stimulate demand and ensure its widespread adoption as a clean energy source. Establish market mechanisms and remove barriers for energy storage, allow energy storage to participate in all markets, including spot market and ancillary market, and encourage renewable +BESS hybrid auctions and PPAs. Lack of integration capacity, lack of flexibility and low inertia are among the biggest challenges to a power system with high renewable penetration.

Energy storage with grid-forming capability will increase the stability and resilience of the power system.

supply chainstorage projects (co-located or remote) in
addition to underlying infrastructure (e.g.
grids, ports), in line with guidance from the
Planning for Climate Commission, to
accelerate renewables deployment in this
decade and build a net zero-compatible
targets.opment can
g a levelproject pipeline. The process needs to be
both predictable, transparent, and without
compromising social or environmental
sustainability. Policymakers can consider
implementing the administrative, licensing and
environmental permitting stages of project
a green

considering implementing permitting frameworks that facilitate the integration of contemporary, efficient technologies.

Authorities should also leverage the versatility of mature renewable energy technologies across available land, water and ocean sites. Ensuring that community engagement is enacted early in project site areas is important in securing local support for renewables projects.

9. INDUSTRY STANDARDS AND CERTIFICATION

Implement robust sustainability and technology standards/ certification governing new projects and

infrastructure, including the Green Hydrogen (and its derivatives), Hydropower Sustainability and a common accounting standard for reporting hourly matching of Carbon-Free Energy (CFE), on an international level. These will be critical to facilitating sustainable investment and trade across various jurisdictions, while ensuring an enormous scale- up of renewables generation is aligned with global decarbonisation targets and "Do No Significant Harm" principles.

10. ELECTRICITY MARKET DESIGN

Encourage regulatory and revenue stability and provide incentives for flexibility and dispatchability, and introduce simplified mechanisms for clean power procurement and pricing to rapidly unlock investment in line with energy security and net zero goals. This includes ensuring regulatory and revenue stability for investments and provisions to avoid long-term lock-in of fossil fuel-based generation.

Governments should acknowledge that, while market mechanisms can assist in achieving cost reductions, it is imperative to consider the current escalation in the costs of commodities and interest rates, as well as the burgeoning pressure on the global supply chain. Instruments such as tax credits and Contracts for Difference should reflect the political and social priority for renewable energy, green hydrogen and green hydrogen-based fuels (e.g. e-methane, eammonia, e-methanol), energy storage installations and demand-side flexibility. Direct and indirect subsidies for coal, oil, and gas power generation should be urgently phased out, which will help to enable accelerated deployment of cost-efficient renewables for electrification, heating and cooling. Green Capacity Markets should be introduced in more countries to ensure the adequacy of the power system, and the carbon emission threshold should be aligned with the countries' carbon reduction targets. 11. CARBON MARKETS

Progress the implementation of the global rulebook on carbon markets, particularly Articles 6.2 and 6.4 of the Paris Agreement, which will enable countries to achieve emissions reduction targets set out in their NDCs. It will be just as important to diminish demand for emissions-intensive activity as it will be to increase demand for renewable energy, in order to phase out fossil fuels and, in the short term, fossil fuel subsidies.

12. JUST AND EQUITABLE ENERGY TRANSITION

Ensure the energy transition leaves no one behind. Raise awareness about the social, economic and environmental benefits of renewable energy ramp-up to facilitate greater support for the transition and engage stakeholders, including civil society, researchers, youth, indigenous people and marginalised communities, in the design and implementation of policies to ensure that gains from the clean energy system are equitably distributed.

Cooperation between advanced and developing economies will be a crucial factor to address climate change and energy security. Foster multilateral renewable energy partnerships and trade agreements in support of the energy transition among the G20 and Global South in particular, to improve global collaboration on shared challenges, enhance North-South technology transfer to encourage local supply chain development and contribute to a just and equitable transition in developing economies. 13. NATURE POSITIVE

Maximise the potential for an environmentally friendly transition with net-positive biodiversity impacts by integrating renewables deployment plans and targets with wider environmental and biodiversity strategies on land and in the sea. The consideration of existing industries in and around project sites such as fisheries and agriculture as well as impacted communities such as Indigenous Peoples, women, children and youth also need to be taken into account for more holistic planning.

The Global Renewables Alliance (GRA) – Together for a Clean Future

The Global Wind Energy Council, Global Solar Council, International Hydropower Association, Green Hydrogen Organisation, Long-Duration Energy Storage Council and the International Geothermal Association established the Global Renewables Alliance to unify the global bodies representing the clean technologies required for a net zero world by 2050. Collectively they strengthen the private sector's voice on accelerating the energy transition, and call for action to reach the global target of tripling renewable capacity by 2030 to at least 11,000 GW.

#3xRenewables

To learn more about technology-specific aspects of these recommendations, view the below technology-specific explainers:

Global Wind Energy Council: https://gwec.net/cop28/ Global Solar Council: https://www.globalsolarcouncil.org/pages/cop28-policy-agenda/ Long Duration Energy Storage Council: http://www.ldescouncil.com/ Green Hydrogen Organisation: https://gh2.org/ International Hydropower Association: https://www.hydropower.org/iha/discover-facts-about-hydropower International Geothermal Association: https://www.lovegeothermal.org/