Joint Statement by the Global Wind Energy Council and the Global Solar Council on the Occasion of the G20 Investment Forum on Energy Transition

Robust guidelines on investment and faster permitting can accelerate large-scale renewables to help end the energy crisis

Ensuring clarity on green taxonomies is vital for facilitating a rapid shift of investment to carry out the global energy transition

The current global energy crisis has revealed the continued dangers of depending on fossil fuels. The crisis is a reality check to G20 policymakers: These are the symptoms of a delayed and disorderly energy transition. Governments around the world have simply been too slow and too hesitant in carrying out the transition, prolonging reliance on coal, oil and gas.

The only permanent fix for the three related problems of security, affordability and climate change is a determined and accelerated effort to move away from fossil fuels to renewables.

Ambitions in this direction have been set. For instance, the 2030 Breakthroughs under the Race to Zero outlines the pathway to halving global greenhouse gas emissions by 2030 across more than 30 sectors that make up the global economy. But it is now or never, as made resoundingly clear in the latest Intergovernmental Panel on Climate Change (IPCC) report on climate change mitigation and the UN Secretary General's recent remarks on scaling renewables.

As the group of countries representing most of the world's population and more than 80% of its energy-related CO2 emissions, the G20 has the power and responsibility to

lead on energy security and climate action. Without immediate, deep and sustained emissions reductions, it will be impossible to limit global warming to close to 1.5°C.

This will require enhancing policies and market instruments to be more effective in mobilising large-scale investment in renewable energy like wind and solar power.

There is plenty of global capital available to support a decisive shift away from fossil fuels, which are increasingly price-volatile and undermine energy security for importing countries. On cost of power alone, renewables are already out-competing fossil fuels around the world.[1] This statement looks at two areas which could be reformed in the short term to better align investment signals with energy security, affordability and climate goals:

1. Set robust guidelines on green taxonomy which will ensure a merit order is in place for public/private investment in energy projects. This can work to mobilise investment in large-scale renewable energy projects which can support a way out of the energy crisis and are in line with energy, security and climate goals.

2. Accelerate permitting of grid-scale wind and solar projects, through open call procedures for project applications and a series of fast-track measures. This can quickly bring onshore wind, offshore wind and solar projects in the development pipeline, which amount to nearly 1,000 GW globally, to construction within the next 3 years.[2]

In addition to these areas, we acknowledge that investment in other enablers of system transformation will be needed to ease the energy crisis and meet net zero targets, such as grid and transmission infrastructure, energy storage, energy efficiency, and management of supply chain constraints.

[1] https://www.irena.org/newsroom/pressreleases/2021/Jun/Majority-of-New-Renewables-Undercut-Cheapest-Fossil-Fuel-on-Cost
[2] https://assets.ey.com/content/dam/ey-sites/ey-com/en_gl/topics/strategy/pdf/ey-ecf-a-clean-covid-19-recovery.pdf

Clarity around green taxonomies is vital to the success of the energy transition

Green taxonomies are designed to facilitate financing for assets, projects and sectors which support climate and sustainability objectives. They provide a merit order for investment screening based on national and international environmental and socioeconomic standards. They encourage transparency of disclosures, and alignment of investment with science-based targets and "Do No Significant Harm" (DNSH) criteria. They provide confidence to investors to allocate trillions in capital in compliance with Paris Agreement targets of a 1.5°C pathway and net zero goals.[3]

It should be crystal clear that non-renewable investments cannot be labelled green, and that allowing this will only exacerbate the link between fossil fuel supply/scarcity and price volatility in wholesale and retail power markets.

First, allowing gas to access sustainable finance encourages capital shift into new gas generation in this decade, which will lock in emissions along the full value chain of gas for decades to come, from production to end-use.[4]

The IPCC's 2021 report found that methane concentration in the atmosphere is at an all-time high, and has a global warming impact 84 times that of CO2 when measured over a 20-year period.[5] This prompted 105 countries to sign the Global Methane Pledge at COP26, committing to reduce methane emissions by 30% by 2030, compared to 2020 levels.[6] Driving down methane emissions will require intervention in the gas sector; green taxonomies must not send contradicting signals.

A focal point has been the European Union's (EU) Taxonomy for Sustainable Activities, approved by the European Commission earlier this year.[7] The taxonomy, a framework which sends signals to investors on criteria for climate and net zero compliance and

[3] https://www.bloomberg.com/news/articles/2021-11-08/net-zero-alliance-plans-to-reject-gas-nuclear-as-green-assets#xj4y7vzkg
[4] The gas sector is the primary source of methane emissions in North America, the Middle East, Russia and Central Asia. Saunois et al, The Global Methane Budget 2000-2017. Earth Syst. Sci. Data, 12, 1561–1623, 2020.
[5] https://unece.org/challenge; https://www.ipcc.ch/2021/08/09/ar6-wg1-20210809-pr/
[6] https://ec.europa.eu/commission/presscorner/detail/en/statement_21_5766
[7] https://ec.europa.eu/info/publications/220202-sustainable-finance-taxonomy-complementary-climate-delegated-act_en

requires mandatory disclosure for qualifying activities, labels gas generation as a green investment until 2035 and allows for new gas plants which obtain construction permits as late as 2030.[8]

China has opted to exclude gas, LNG, coal and nuclear generation from its own green finance rulebook, the Green Bond Endorsed Project Catalogue. Colombia has also excluded these technologies from its green taxonomy, the first published by a Latin American country.[9]

Second, green taxonomies set a standard for others. Countries and financial institutions use these to benchmark their own frameworks for sustainable investments.[10] The EU Taxonomy influenced South Korea's K-taxonomy system, which was finalised in December 2021 and includes LNG and mixed-gas generation below a generous emissions threshold of 340g CO2/kWh among "transition sector" investments from 2030 to 2035; this has been criticised as incompatible with the country's net zero by 2050 goal.[11] The first version of the Association of Southeast Asian Nations (ASEAN) Taxonomy for Sustainable Finance released in November 2021 avoids labelling gas as a "red activity" and includes carbon capture, utilisation, and storage (CCUS) as an "enabling sector."[12]

The implications will be significant in the Global South, given gas projects in low- and middle-income countries currently receive as much as four times more international public finance than wind or solar projects.[13] Regions like the EU must hold themselves to a high standard due to the multiplier effect their decisions have globally as a leading voice on the energy transition.

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[8] While gas plants operating before 2035 need to meet an annual emissions threshold of 550 kg CO2e/kW, this is calculated as an average over 20 years and it is unclear when verification would take place. By end of 2035, gas plants must switch to fully renewable or low-carbon gases.
[9] https://www.argusmedia.com/en/news/2321736-colombia-launches-green-taxonomy#:~:text=The%20taxonomy%20is%20aimed%20at,World%20Bank's%20finance%20arm%20IFC.
[10] https://www.climatechangenews.com/2022/02/02/european-commission-endorses-fossil-gas-transition-fuel-private-investment/
[11] https://energytracker.asia/south-korean-green-taxonomy-declared-gas-is-green/
[12] https://asean.org/wp-content/uploads/2021/11/ASEAN-Taxonomy.pdf
[13] https://www.iisd.org/publications/natural-gas-finance-clean-alternatives-global-south

Third, policymakers must support a clean and secure energy transition with effective market signals that shift investment to renewable energy. Excluding gas and even nuclear power from green taxonomies does not exclude them from capital markets.

It does, however, prevent "greenwashing" by investors which have pledged compliance with DNSH principles and green economy objectives. Instead, sources of large-scale, commercially available clean power generation like wind and solar energy should be prioritised for investment, as the energy protagonists of a net zero economy and the only true gateway to international energy security and stable power prices.

Accelerate permitting of grid-scale wind and solar projects

Scaling up utility-scale wind and solar can help to lower energy prices, stimulate investment, foster economic growth and job creation and achieve climate targets. Renewable power generation draws on limitless and indigenous energy resources of the wind and sun, which also enables countries to reduce dependency on imported fossil fuels and restore a healthier balance of trade.

Once permitted, large-scale renewables projects can be constructed very quickly – typically 1 year or less for onshore wind and solar and 2 years for offshore wind, depending on project size.

Studies estimate there is a global development pipeline of nearly 1,000 GW of onshore wind, offshore wind and solar projects which could be quickly constructed within the next 3 years under fast-track measures.[14] Most of these projects are located in G20 economies, with 100-200 GW ranges in the US, China, India and Australia, and more 10+ GW pipelines found in Brazil, the UK, Canada, Mexico, Spain, South Korea, the Philippines, Japan, France, Sweden, Poland, Vietnam, Germany and more.

If permitting and grid access were accelerated for grid-scale renewable energy projects, these wind and solar projects could materialise from 2023-2025, contributing substantially to energy supply, affordability and emissions reductions.

[14] GWEC Market Intelligence;A clean COVID-19 recovery: The global opportunity 13,000 renewable energy projects for a green recovery. Prepared by EY-Parthenon, funded by the European Climate Foundation.

The COVID-19 experience has shown that expansive physical and digital infrastructure can be assembled in a crisis under the national interest. This urgency should be applied to shifting away from fossil fuels in the energy sector.

To start, national governments should immediately conduct an assessment of shovel-ready wind and solar projects within their jurisdictions.

At the same time, governments should employ executive powers to significantly accelerate permitting processes for renewable energy projects, fast-tracking enabling legislation where necessary and moving to simple, digital permitting systems (see Annex).

Renewables are the way out of the energy and climate crises

At this critical juncture, policymakers in the G20 and beyond must be clear-eyed in making choices which will ease fossil fuel dependency, energy insecurity and price turbulence. Accelerating the route to market for grid-scale wind and solar projects to get built within the next few years is a sensible choice, with billions in capital investment unlocked via project approvals.

Maintaining robust rulebooks on green finance can reinforce this investment and avoid redirecting public and private capital to the fossil fuel sector.
This is even more important amid the current energy crisis, where large fossil fuel-based infrastructure, import and reserve packages are under consideration and might result in stranded assets in the coming years.

Instead of actions which prolong fossil fuel phaseout and risk future energy crises, governments should take action to restore order to energy systems and mobilise massive volumes of investment in renewable energy.

Annex

Ten steps to streamline permitting for grid-scale wind and solar projects

I. Conduct an assessment of "shovel-ready" onshore and offshore wind energy and solar energy projects within national jurisdictions, identifying those which can be green-lit for construction within the next 1-3 years.

II. Mandate maximum lead times to permit grid-scale wind and solar energy plants. Standard recommended lead times are 2 years for greenfield onshore wind projects, 3 years for offshore wind projects and 1 year for repowering projects – these could be halved in light of the current energy supply crisis. For solar, 1.5 years for utility-scale projects and 6 months for repowering projects – these lead times could be reduced to 6 months to 1 year for utility-scale projects and to 1 month for repowering.

III. Dedicate centralised authorities and single focal points who can work with renewable project developers to streamline the siting and permitting process, such as through a "one-stop shop" model.

IV. Invest in more staff and resources for the public authorities which make decisions during the permitting process of grid-scale renewable and related infrastructure projects.

V. Build digitised, searchable and up-to-date databases for land registrations and siting of renewable energy projects, including an inventory of local ordinances and records of where energy projects have met community resistance, which can support local authorities with zoning for projects.

VI. Align land and ocean use guidance at national and sub-national level, prioritising projects which support energy security, DNSH principles, minimal impact to biodiversity and the green economy. This requires a strategic approach to managing biodiversity impacts and nature recovery, which recognises wind and solar energy's mitigation of adverse effects from climate change.

VII. Promote active dialogues between local authorities, communities and industry to ensure a shared understanding of priorities and concerns during the consenting and construction stages of grid-scale wind and solar projects. This is important to ensure a balance of interests across many stakeholders, reduce cross-sector conflict and foster harmonious co-existence of the renewables industry with other land/ocean users.

VIII. Policymakers can consider attaching community benefit schemes to renewables projects to improve public support.

IX. Implement an emergency clearing house mechanism for legal disputes to prevent extended delays to critical infrastructure projects, and a structured and time-limited process for developers to provide evidence.

X. Enable repowering via regulatory fast-tracks covering EIA procedures, grid expansion and extensions for site licensing and use, allowing upgraded turbine and solar technologies to expand power generation at existing sites.