ARE YOU IN?

GLOBAL
WIND
ENERGY
MANIFESTO
FOR COP27

GWEC
GLOBAL WIND ENERCY COUNCIL

#WINDAREYOUIN
WWW.WINDAREYOUIN.COM

The world is in a critical moment, facing unprecedented challenges to energy security, rising inflation and a narrowing time window to limit dangerous global heating. COP27 in November 2022 presents a unique opportunity for governments around the world to take decisive action on climate change, bolster energy security and make clear and practical commitments to a clean, secure and affordable energy system based on renewable energy.

The wind industry is ready to work together with governments, business, communities and citizens to achieve new scales of growth for wind energy and true system transformation.

Are you in?

The current global energy crisis and conflict in Ukraine have exposed the stark reality and costs of prolonged dependency on volatile fossil fuels. Without accelerating action to scale up wind and renewable energy in this decade, we will miss our global target of net zero emissions by 2050 – and risk civilisational threats of social disorder, irreversible environmental damage and economic hardship.

The <u>net zero roadmaps</u> and the <u>scientific consensus</u> are crystal-clear: Rapid phase-out of fossil fuels and ramp-up of renewable energy are both urgently required to achieve deep reductions in emissions across all economic sectors, and to keep a 1.5°C pathway within reach. The IPCC has called for global greenhouse gas emissions to peak before 2025 and halve by 2030 – and believe that this is possible by stepping up political will and implementation.

The tools, technology and know-how are on our side. The industry has decades of experience in building GW-scale pipelines, thriving green industrial hubs and a global workforce of more than 1.25 million people.



Wind energy has delivered incredible cost reduction over the last decade – onshore wind is amongst the most cost-efficient forms of new-build power generation in countries covering two-thirds of the world's population, and offshore wind is rapidly outcompeting fossil fuels.

Wind energy is one of the most competitive, mature and quickly deployable energy technologies we have today, and has a central role in keeping the lights on, improving global energy security, ensuring energy independence and meeting emissions reduction targets. But for wind to thrive, it needs large, steady and visible volumes for deployment and a robust global supply chain. Roadmaps to net zero already show that annual wind installations must quadruple from current levels to 2030 to get on-track for our Paris Agreement targets (see Annex). By 2050, wind energy must generate more than one-third of global electricity, up from 6% today.

The world is at a crossroads: The next few years of decisions will determine whether we can secure a liveable future for all and a just and equitable energy transition. This will require clear-eyed policymaking and global solidarity to ensure that renewables scale up in a sustainable way, and distribute the benefits of the transition to everyone around the world.

It will require wind energy's close collaboration with local communities, societal interests and other industries to ensure that wind expands in harmony with nature, citizens and the wider economy. And system transformation will only be possible with widespread electrification, enhanced energy efficiency and the commercialisation of green fuels like renewable hydrogen to decarbonise hard-to-abate sectors.

As the companies and organisations representing more than 80% of wind installations and supply chains worldwide, we are calling on governments to commit to dramatic action to mitigate climate change and the energy security crisis at COP27 this year. National policymakers in every region of the world must:



Scale up ambition and higher volumes for wind power, and reflect this in updated Nationally Determined Contributions (NDCs) by the end of 2022, comprehensive national climate and net zero strategies and short- and long-term energy plans.

Greater short- and long-term ambition in wind power is needed, in line with a net zero trajectory and energy security imperatives. While different regions of the world will transition at different speeds, concrete renewable installation or generation targets should carry a horizon to 2030, 2040 and beyond. Clear short-term actions for the next few years are then required to translate these ambitions into a market-ready framework and effective investment signals.

Targets should be aligned between the public bodies governing climate, energy, economy, environment, infrastructure and workforce, to ensure that various government bodies are adequately prepared to implement them. Targets should also be integrated into national climate, energy and industrial development strategies which recognise the linkages between grid-scale renewable energy, energy security, energy affordability, sustainable growth, socioeconomic benefits and adequate speed of development. National and sub-national governments can also consider Power-to-X and green hydrogen strategies backed by large volumes of renewable power to decarbonise hard-to-abate sectors such as heavy industry, aviation and shipping, or to provide for a more environmentally friendly agriculture sector.





Urgently streamline permitting schemes for grid-scale renewable energy projects to accelerate wind energy deployment and build a net zero-compatible project pipeline in the energy sector.

Scaling up wind energy is a win-win in terms of lowering energy prices, stimulating investment, economic growth and job creation and achieving climate targets while supporting energy security. But overly complex permitting schemes are slowing down deployment in some world-leading wind markets, from Italy to India. In some countries, nearly a decade of lead time is required to develop a wind project. This is a universal challenge which must be addressed on a grand scale to rapidly accelerate renewable energy. The COVID-19 experience has shown that robust physical and digital infrastructure can be assembled in an emergency to reorganise governing procedures and supply chains in line with national interests. Amid the energy security and climate crises, this urgency needs to be applied to renewable energy projects and enabling infrastructure.

Streamlined permitting can be achieved while supporting harmonious co-existence of the industry with other land/ocean users and local communities, as well as adhering to high environmental and social standards. With strong steering, higher renewable energy targets and a clear permitting scheme can strike a balance of interests among many stakeholders. The following measures should be considered, among others:

- Mandated maximum lead times to permit renewable energy plants, such as the recent pledge from the EU Energy Council to accelerate home-grown renewables as a matter of "overarching public interest," with a deadline of 2 years for permitting projects;
- Centralised authorities and single focal points to work with developers on streamlining siting and permitting, such as a "one-stop shop" process;

- Digitised, searchable and up-to-date databases for land registration, local ordinances and records of local opposition to projects, which can accelerate zoning for projects;
- Aligned land and ocean use guidance at national and sub-national level, prioritising projects which support energy security and "Do No Significant Harm" principles;
- Emergency clearing house mechanisms for legal disputes to prevent extended delays to critical infrastructure projects;
- A strategic approach to managing biodiversity impacts and nature recovery, which recognises wind energy's mitigation of adverse effects from climate change;
- Overlapping permitting procedures for offshore wind (which has longer development times), such as allowing simultaneous applications for environmental assessment and network access, and ensuring sufficient construction timelines so that granted permits do not expire too early; and
- Regulatory fast-tracks to enable repowering of existing onshore wind farms where turbines are reaching end-oflifetime, covering EIA procedures, grid expansion and site licensing.





Commit to action plans to rapidly build out grids for integration of clean energy and cross-sector decarbonisation.

Less than one-third of public and private energy investment today targets grid and storage solutions. Resources allocated to planning, constructing and modernising grids for the future energy system must dramatically step up within this decade. Development of secure, smart and flexible grids must keep pace with ever-larger shares of renewable energy on the system. This will require coordination among system operators, regulators, utilities and industry to conduct long-term forward-planning on grid expansion and reinforcement, electrification of transport and other sectors, creation of regional markets for power export and trading and ensuring cyber security.

Grid planning and regulation should allow for innovative models for buildout, including multi-linked wind "hubs" and offshore wind "energy islands" connected to several markets or price zones. Grid planning and market mechanisms such as auctions should also account for storage solutions, such as pumped hydro, utility-scale batteries and larger Power-to-X facilities, which can minimise grid congestion and support balancing. Actions that can be taken in the short-term include reviewing the lead times for grid connection decisions and ensuring long-term, stable and investment-friendly frameworks for grid and flexibility services are in place to allow adequate and anticipatory investment from the public and private sector and multilateral institutions. Other business models may further ease grid congestion, such as the co-location of end-users with renewable developments.



Evolve energy markets for the future.

In many countries, electricity markets struggle to send meaningful and timely investment signals in line with net zero ambitions. Once the current energy crisis eases, the merit order effect in more liberalised markets will mean that wholesale market revenues for renewable energy are cannibalised as wind and solar deployment increases. This price pressure will only intensify with limited volumes of project capacity available, increasing interest rates and rising demand for transition-related commodities and critical minerals. In some countries, auction design has encouraged "negative bidding," which has been particularly unhelpful and undermines the viability of a renewables supply chain to replace fossil fuels.

Power markets must evolve to incentivise investment in renewable generation and power infrastructure, if we are to shift to a future energy system which is flexible, responsive to demand, reliable and dependent on a majority (if not 100%) share of renewable energy. Procurement should be supported by a simple and transparent price mechanism which stabilises revenue and shares risk between offtakers and generators. In some countries, this requires revising auction schemes to ensure stable, continuous and planned timelines with large contract volumes that can spur a business case for supply chain investment, and shifting procurement from a "lowest cost" basis to a "highest value for money" approach.







Avoid long-term lock-in of fossil fuel-based generation in the current energy security crisis.

Governments across the world face difficult choices in balancing energy security needs amid volatile fossil fuel prices and climate goals. But policymakers must be clear-eyed in their response packages and strategies: The speed of constructing new grid-scale renewable energy projects should be recognised and prioritised over investment in new fossil fuel infrastructure where possible. Wind energy is already set to displace fossil fuel generation in countries worldwide, offering affordable, scalable, zero-carbon power at huge capacity factors. This trend should be accelerated in the current crisis; any short-term energy security concerns must be carefully managed to avoid slowing down renewables expansion or creating stranded assets in the long-term. Government and financial actors should stick to their commitments to phase down coal and phase out subsidies for upstream/downstream fossil fuels, while rapidly scaling up clean power generation. Accelerating energy efficiency and energy conservation efforts in the near term can also ease the current energy crisis.



Develop cohesive and inclusive policies to enact a just and equitable energy transition.

A 1.5°C-compliant energy transition results in net-positive socioeconomic effects compared to current policies, according to IRENA, including more jobs created through investment in large-scale renewable energy deployment, grid enhancement and energy efficiency. Global North-South cooperation and trust will be vital to ensuring the dividends of the energy transition are equitably distributed to everyone. Wind energy already promotes sustainable development in communities around the world and can play a key role in creating decent work and quality jobs, while enhancing financial flows towards climate-resilient growth in developing economies. Stronger alignment of national energy, climate, trade and industrial development policies can support fair, sustainable and local value creation as the transition advances. Through public-private programmes on reskilling and workforce transition, the growing wind sector offers green job opportunities for workers displaced by the energy transition, such as those in fossil fuels and ancillary sectors.





Ensure national and regional finance adhere to robust benchmarks and guardrails for a net zero, 1.5°C-compliant pathway.

There is no shortage of capital for wind energy where an enabling investment environment exists. But to collectively accelerate renewable energy to new heights, financing in the energy sector – whether export finance, flows from state treasuries or private capital – must be decided under "Do No Significant Harm" principles that address social and environmental impacts, and avoid the risk of stranded fossil fuel assets. Climate targets should be mainstreamed across financial ministries, development banks and export credit agencies (ECAs) to align public spending with renewable energy and development goals. More organisations should commit to the pledge made by 39 entities at COP26 to align international public support towards the clean energy transition and out of unabated fossil fuels.

Climate finance should be deployed at project level in emerging economies and Least Developed Countries (LDCs), together with de-risking instruments and guarantees such as those from development banks or ECAs. Governments should also consider channelling post-COVID recovery funding towards wind infrastructure. Capacity-building and technical assistance from multilaterals, public bodies and philanthropy should incorporate industry perspectives to ensure greater effectiveness in enhancing bankable renewable energy project pipelines.



Progress the implementation of the global rulebook on carbon pricing, particularly Articles 6.2 and 6.4 of the Paris Agreement.

Effective and credible market approaches to carbon pricing can send strong market signals to drive investment in low-carbon technologies. COP26 and the Bonn conference of 2022 saw progress on the rules for international transfer of carbon credits and the Sustainable Development Mechanism for trading, but further work is needed to operationalise these to effectively recognise the economic and societal costs of emissions. Good practices for these mechanisms include determent of emissions at source and clear measurement and verification rules for the global carbon market.



We, the undersigned, call on governments and relevant bodies to recognise the current climate and energy dilemmas, and take decisive and collective action at COP27 to rapidly accelerate renewable energy. Ahead of the Global Stocktake which concludes in COP28 next year, it is already clear that there is great opportunity, potential and need to accelerate wind energy around the world. This is vital not only to decarbonise energy systems, but improve energy access in emerging economies without locking in long-term fossil fuel investments.

The global wind energy industry stands ready to provide our full support to governments, public institutions and non-state actors alike to secure wind energy's central role in a clean and resilient energy system, and create a just and equitable energy transition for all.

Dated 22 September 2022 List of signatories:







































































































































































































Association canadienne de l'énergie renouvelable











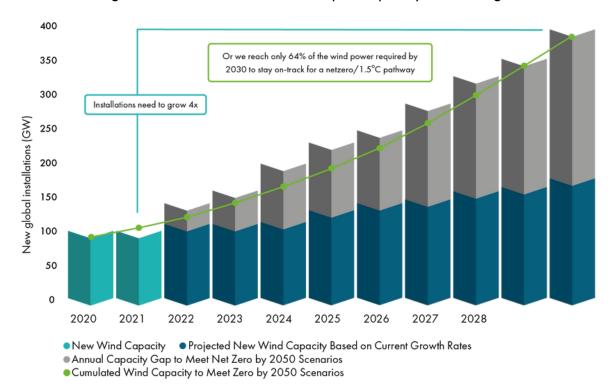






Annex

Annual global wind installations must quadruple by 2030 to get on-track for net zero



Source: GWEC Market Intelligence; IEA Net Zero by 2050 Roadmap (2021). Projected new wind capacity from 2026-2030 assumes a ~6.6-7.0% CAGR, based on GWEC's projected CAGR from 2021-2026. It also accounts for ~34 GW in global decommissioned capacity from 2026-2030 based on 25-year turbine lifetime. Capacity gap figures are estimations based on the IEA Roadmap milestone for 2030. Cumulative global installations for wind energy are roughly in alignment with the IRENA World Energy Transitions Outlook: 1.5°C Pathway (2021). This data represents new capacity, cumulative capacity and decommissioned capacity, and does not include an estimate of repowering installations to replace the ~34 GW in decommissioned turbines globally.