Capturing economic opportunities from wind power in developing economies



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Foreword

The window of opportunity to accelerate wind energy for a more resilient and sustainable future is closing fast. We now less than seven years from 2030, a key moment on the energy transition journey. Three years ago, as widespread lockdowns caused a dramatic reduction in carbon emissions, the wind industry joined climate scientists and concerned civil society groups to warn governments that without decisive action to phase out fossil fuels, emissions would quickly rebound to pre-pandemic levels.

Post pandemic, in February 2022 the Russian invasion of Ukraine added another layer to the energy challenge, forcing energy security to the front of policymakers' minds. The twin crises of climate change and energy security were now joined together by their shared solution.

As we enter 2023, we are seeing coal powered generation reaching a record peak, natural gas prices at all-time highs and—as predicted— emissions rebounding alongside economic recovery. This comes at a time when wind energy has never been more price competitive.

There are reasons to be optimistic however, as the policy environment evolves to enable the development in both emerged and emerging economies. This report looks at five countries where a strong policy environment can deliver enormous benefits for the local economy as well as delivering tangible benefits for local communities.

Wind energy delivers wide-ranging benefits, from job creations to saving water. That makes wind energy particularly beneficial for developing economies addressing the phase out of fossil fuels alongside economic growth, a growing demand for electricity and the challenge of energy security.

Wind projects have shown a significant cost reduction in established markets over the past twenty years. This report shows how support from government, through policy certainty and government commitment, can help new industries avoid the risk of higher potential costs. Wind energy also has the benefit of being predictable, as there are no fuel costs once installed so governments can benefit from that stability.

This report looks at five countries – Argentina, Colombia, Egypt, Indonesia, and Morocco – that have significant and largely untapped wind resource potential. The report aims to demonstrate the huge socioeconomic benefits that wind energy development can deliver alongside the positive environmental outcomes. This report identifies three common hurdles for policymakers trying to accelerate the deployment of wind energy and outlines how to overcome those challenges.

The wind industry has demonstrated its pivotal role in supporting thriving local economies through skilled jobs creation and the maintaining of critical infrastructure while dramatically contributing to reducing carbon emissions and delivering clean, affordable and secure energy. GWEC will continue to collaborate with governments to ensure that the world is well equipped to harness the full socioeconomic benefits of the energy transition.

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Glossary

ABEE ólica	Associação Brasileira de Energia Eólica	GVA	Gross value added
ANEEL	National Electric Energy Agency (Brazil)	GWEC	Global Wind Energy Council
BAU	Business as usual	IEA	International Energy Agency
BNDES	National Bank for Economic and Social Development	IPP	Independent power producer
	(Brazil)	IRENA	International Renewable Energy Agency
COP26	26th Conference of the Parties	MME	Ministry of Mines and Energy (Brazil)
CO ₂ e	Carbon dioxide equivalent	NDC	Nationally determined contribution
СРРА	Corporate power purchase agreement	NERSA	National Energy Regulator of South Africa
EPE	Energy Research Office (Brazil)	PDE	Ten-Year Energy Expansion Plan (Brazil)
ESKOM	Electricity Supply Commission (South Africa)	PPA	Power purchase agreement
EVOSS	Energy virtual one stop shop	PROINFA	Incentive Program for Alternative Sources of Electric
FTE	Full time equivalent		Energy (Brazil)
GDP	Gross domestic product	SAWEA	South African Wind Energy Association
GHG	Greenhouse gases	UNFCCC	United Nations Framework Convention on Climate Change
GRS	Green recovery scenario		