

Renewable Energy: developing solutions to deliver low-carbon investment

**Special Report on Renewable Energy Sources and
Climate Change Mitigation (SRREN)**

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The World Economic Forum



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To meet the challenges of delivering renewables at scale new public-private models are required

Climate change mitigation costs

- The incremental cost of financing climate mitigation over the next 20 years could be at **\$500bn p.a**; the Green Climate Fund pledges amount to **\$100bn p.a.**

Need for rapid impact on infrastructure growth

- The ADB estimate that infrastructure investment needs in Asia alone will reach **US\$8 trillion** over the next 10 years; meanwhile, carbon-intensive technologies are being locked in

Fiscal austerity in developed economies

- Climate financing needs are likely to be well beyond public resources and the budgets of conventional overseas development assistance



Effective public-private models that drive low carbon investment

- Tremendous growth in RE sector last 10 years shows private sector will respond when policies are favorable
- To accelerate investment, limited public resources must be structured to “crowd in” private investors
- More in-country efforts needed to educate financiers about RE technology, address grid integration, and design projects of sufficient scale to attract private investors.



A number of renewables initiatives being tested

Category	Initiatives
Emerging market initiatives needing international partners and finance	<ul style="list-style-type: none"> <li>▪ South Africa <li>▪ India <li>▪ Morocco <ul style="list-style-type: none"> <li>▪ Progress towards deployment of large scale renewables and the evolution of SARi <li>▪ Progress towards delivering the National Solar Mission and scaling up off and on-grid investment in solar <li>▪ Delivering large scale solar parks and building technical capacity funded by domestic and international sources
Major initiatives not requiring international public finance	<ul style="list-style-type: none"> <li>▪ China <li>▪ Toronto <ul style="list-style-type: none"> <li>▪ Delivery of the 12th Five Year Plans seven low carbon 'Strategic Emerging Industries' <li>▪ Municipal strategy to scale up renewables and create energy export capacity
Moving toward adaptive policies	<ul style="list-style-type: none"> <li>▪ Germany <li>▪ Spain <ul style="list-style-type: none"> <li>▪ When these and other countries set long-term policy frameworks, the private sector has responded ; but need to prevent a 'bubble' as countries roll back support.

Recommendations for policymakers

- Policies need to adapt to a technology's market performance and phase out when support is no longer needed. Avoid risk and stranded investments arise when governments change strategies often or reduce funding support unexpectedly.
- Work with the private sector to develop partnerships along the full RD&D cycle. Governments should target basic research and large-scale demonstration, which have higher risk and need for public coordination.
- To achieve green growth in emerging economies, target limited public funds to draw in private investment.
- Leverage existing initiatives—such as the Clean Energy Ministerial, the International Renewable Energy Agency and the International Energy Agency's technology roadmaps. Use forums like the G20 to build on these efforts to track and report on progress.

Questions?



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