



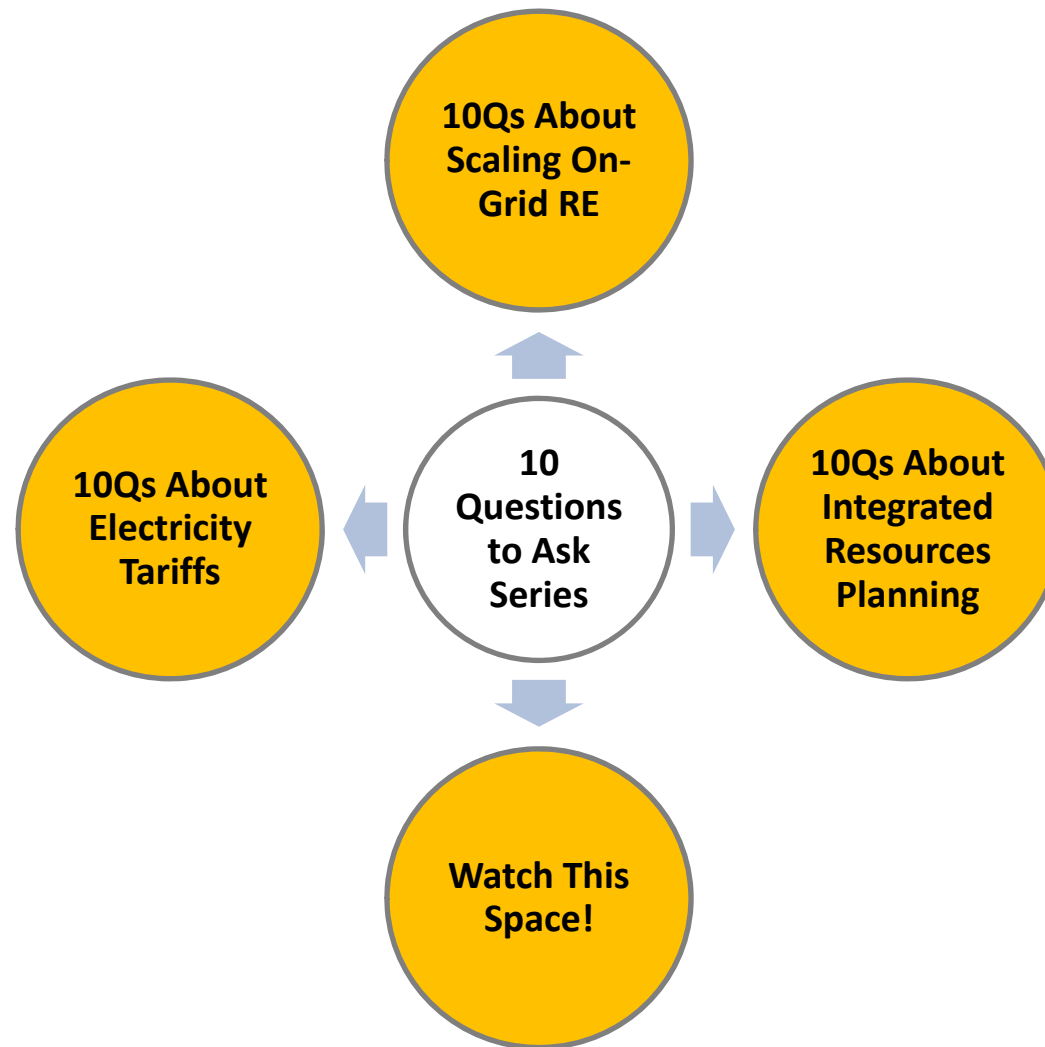
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10Qs to Ask About Scaling On-Grid RE

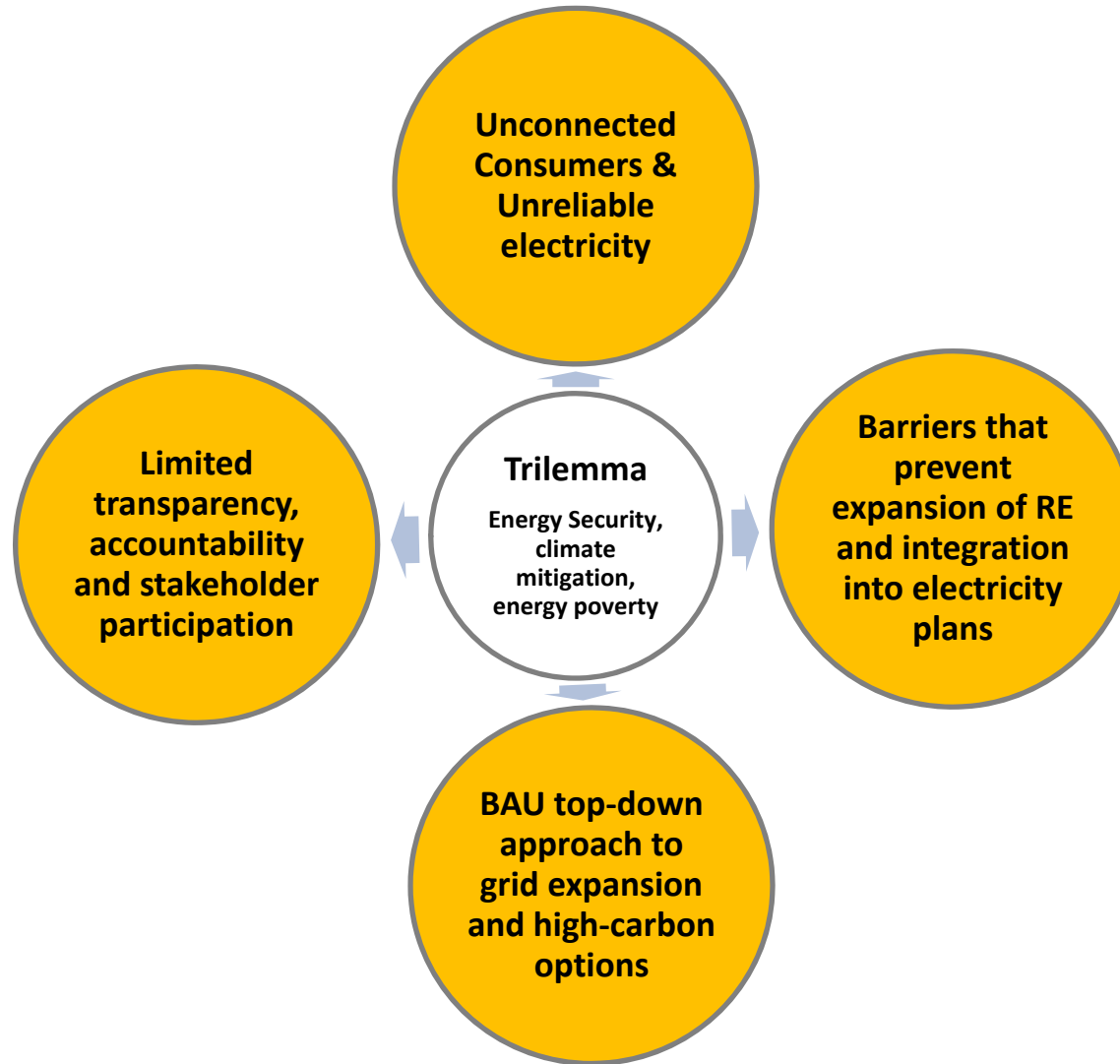
Clean Energy Solutions Center Webinar, May 20, 2014

David Wood, Senior Associate and Sarah Martin, Research Analyst

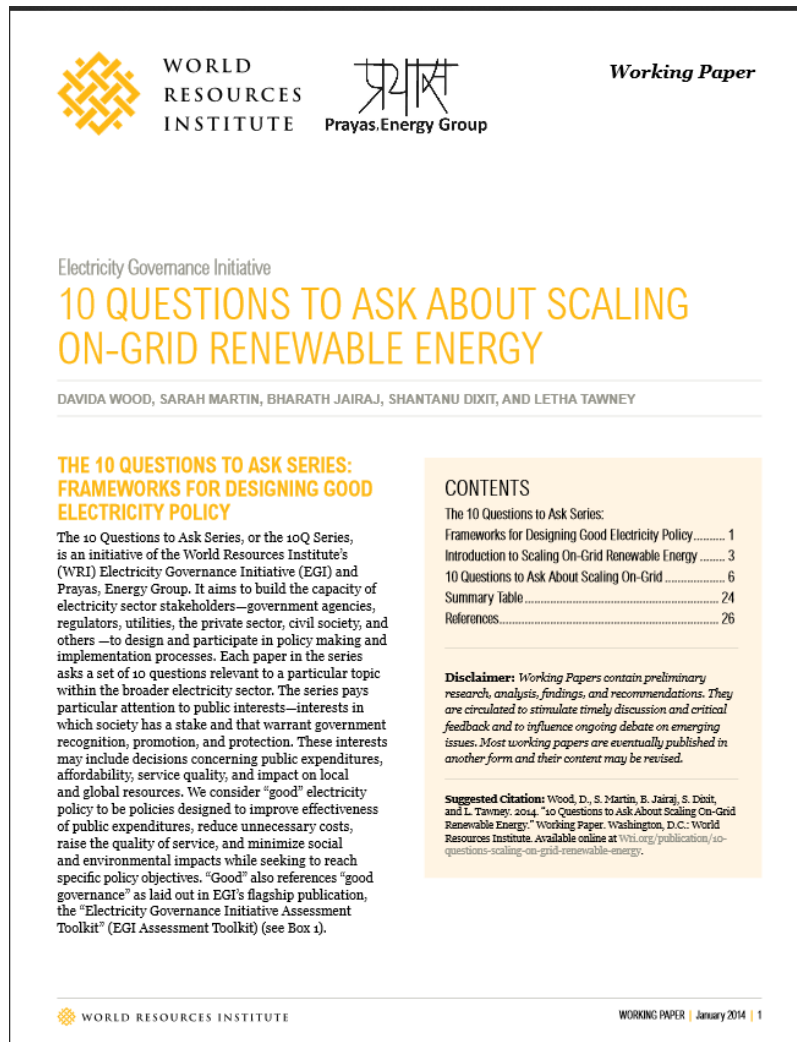
Frameworks for Designing Good Electricity Policy



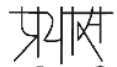
Why is there a need for the 10Qs?



The 10Qs Framework



The image shows the cover of a working paper titled "10 Questions to Ask About Scaling On-Grid Renewable Energy". The cover features the logos of the World Resources Institute and Prayas Energy Group. The title is prominently displayed in orange and black text. Below the title, the authors' names are listed: Davida Wood, Sarah Martin, Bharath Jairaj, Shantanu Dixit, and Letha Tawney. The cover also includes a brief description of the 10 Questions to Ask Series, a table of contents, a disclaimer, and a suggested citation.

WORLD RESOURCES INSTITUTE  **Prayas Energy Group** *Working Paper*

Electricity Governance Initiative
10 QUESTIONS TO ASK ABOUT SCALING ON-GRID RENEWABLE ENERGY

DAVIDA WOOD, SARAH MARTIN, BHARATH JAIRAJ, SHANTANU DIXIT, AND LETHA TAWNEY

THE 10 QUESTIONS TO ASK SERIES: FRAMEWORKS FOR DESIGNING GOOD ELECTRICITY POLICY


The 10 Questions to Ask Series, or the 10Q Series, is an initiative of the World Resources Institute's (WRI) Electricity Governance Initiative (EGI) and Prayas, Energy Group. It aims to build the capacity of electricity sector stakeholders—government agencies, regulators, utilities, the private sector, civil society, and others—to design and participate in policy making and implementation processes. Each paper in the series asks a set of 10 questions relevant to a particular topic within the broader electricity sector. The series pays particular attention to public interests—interests in which society has a stake and that warrant government recognition, promotion, and protection. These interests may include decisions concerning public expenditures, affordability, service quality, and impact on local and global resources. We consider “good” electricity policy to be policies designed to improve effectiveness of public expenditures, reduce unnecessary costs, raise the quality of service, and minimize social and environmental impacts while seeking to reach specific policy objectives. “Good” also references “good governance” as laid out in EGI’s flagship publication, the “Electricity Governance Initiative Assessment Toolkit” (EGI Assessment Toolkit) (see Box 1).

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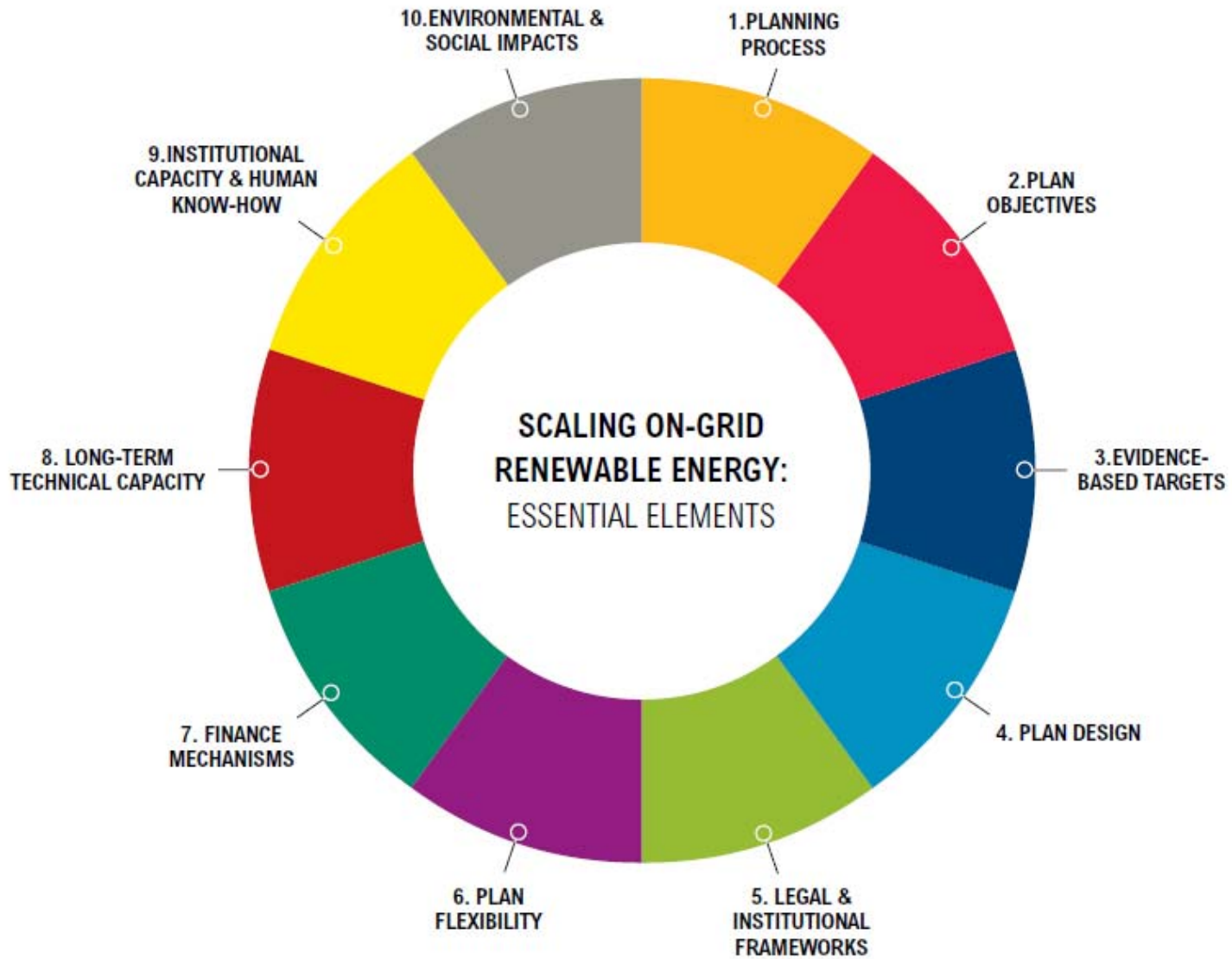
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Disclaimer: Working Papers contain preliminary research, analysis, findings, and recommendations. They are circulated to stimulate timely discussion and critical feedback and to influence ongoing debate on emerging issues. Most working papers are eventually published in another form and their content may be revised.

Suggested Citation: Wood, D., S. Martin, B. Jairaj, S. Dixit, and L. Tawney. 2014. “10 Questions to Ask About Scaling On-Grid Renewable Energy.” Working Paper. Washington, D.C.: World Resources Institute. Available online at wri.org/publication/10-questions-scaling-on-grid-renewable-energy.

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- Aims to create an enabling environment for scaling on-grid RE through capacity building and enhancing engagement
- Not 10 Questions to Answer!
- Identifies key ingredients; not prescriptive



10 Questions to Ask About Scaling On-Grid RE

Q1. WHAT IS THE PROCESS FOR ESTABLISHING THE RENEWABLE ENERGY PLAN?

Q2. WHAT ARE THE OBJECTIVES OF THE RE PLAN?

Q3. WHAT IS THE EVIDENCE BASE FOR SETTING RE TARGETS?

Q4. HOW IS THE RE PLAN DESIGNED TO ACHIEVE THE STATED OBJECTIVES?

Q5. WHAT LEGAL AND INSTITUTIONAL FRAMEWORKS ARE IN PLACE TO HELP ACHIEVE RE OBJECTIVES?

Q6. HOW FLEXIBLE IS THE RE PLAN TO CHANGING CONDITIONS?

Q7. HOW ARE INVESTMENTS FOR RE FINANCED?

Q8. HOW DOES THE RE PLAN ACCOUNT FOR LONG-TERM TECHNICAL NEEDS?

Q9. WHAT INSTITUTIONAL CAPACITY AND HUMAN KNOW-HOW IS NEEDED FOR A SUCCESSFUL RE PLAN?

Q10. HOW ARE ENVIRONMENTAL AND SOCIAL IMPACTS CONSIDERED IN RE PLANNING?

Q4. HOW IS THE RE PLAN DESIGNED TO ACHIEVE THE STATED OBJECTIVES?

Objectives are supported by policies and targets that incorporate “SMART” and flexible design, and link with other sector policies. Suitable policies vary according to the objectives. For example, to increase installed RE capacities, policymakers can design “demand-pull” policies (policies that increase demand for RE by reducing market barriers), such as feed-in tariffs or other incentives. If the objective is to increase job creation, policymakers can design “supply-push” policies (policies that increase incentives for firms to generate new knowledge and, therefore, new RE technologies or improve existing ones), such as investing in research and development (R&D).³ Of course, these objectives and policies can be interrelated. Supply-push and demand-pull policies are often used in conjunction with each other and other policies that encourage innovation and training to achieve a country’s objectives. Some policies can present unwanted trade-offs. Policies are most effective when clearly designed to achieve stated objectives and manage potential trade-offs.

Plans should incorporate SMART targets: targets that are specific, measurable, achievable, realistic, and time-bound. For example, to increase deployment of renewable energy, a plan should include quantitative electricity generation goals (i.e., megawatts by a specific date) and the target should be rooted in technical and economic assessments of a particular technology within a specific geographic region (see Q3). SMART targets rooted in reliable data are credible; unrealistic targets can reduce credibility. In Indonesia, for example, regularly changing RE targets based on unreliable data has caused uncertainty in the RE policy framework. RE targets were initially set in 2006 at 25 percent by 2025, then revised in 2008 to 10 percent by 2010, and revised again in 2012 to 25 percent by 2025.⁴

Plans should also include clear provisions for techno-economic and governance issues such as curtailment (e.g., should wind generators be required to reduce their generation output when there is excess electricity production?); RE grid connectivity (who is responsible for connecting RE projects to the grid?); and grid access (should RE have mandatory and priority access to the grid?). Providing clarity on such issues helps minimize project risk and instills investor confidence. German, Spanish, and Chinese legal frameworks for RE include provisions necessary for RE development and deployment, including clear expectations for who is responsible for grid connectivity.

Well-thought-out plans often go beyond RE plans and cross sectors (e.g., manufacturing, infrastructure, finance, employment, and R&D). Policies and regulations can be most effective when designed in coordination with affected and relevant sectors, and in a way that integrates and considers pre-existing policies and regulations. For example, growth in RE requires both upstream (manufacturing) and downstream (deployment) industries and ancillary services to provide equipment and expertise. Existing industrial capacity can establish a stable foundation, although specialized industries often develop as the RE sector grows. China’s sizable manufacturing sector contributed greatly to the success of the country’s wind industry.⁵ Construction companies and technical service providers can contribute valuable infrastructure, products, and services that make the RE industry more competitive. Engaging other sectors in RE planning can be advantageous for all industries involved.

Q4. Analysis Highlights - RE Plan Design

LOOK FOR:

- Appropriate policies for achieving objectives
 - Identified pull policies
 - Identified push policies
- SMART and flexible targets
- Coordination with relevant industries and sectors

Additional Resources

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Delivering on the Clean Energy Economy: The Role of Policy in Developing Successful Domestic Solar and Wind Industries	1-15
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Q4. How is the RE Plan Designed to achieve stated objectives?

Analysis Highlights- Look for:

- Appropriate policies for achieving objectives
 - Identified pull policies
 - Identified push policies
- SMART and flexible targets
- Coordination with relevant industries

How can the 10Qs be used?

To enhance stakeholder engagement:

- Intra-agency, regulators
 - To assess / evaluate existing RE plans
 - To use as a basis for strengthening existing plans
 - To inform and develop new RE plans
- With stakeholders, including investors, SMEs and CSOs
 - To build / strengthen capacity on RE planning
 - To engage with / evaluate existing plans
 - To input in development of new plans

Special attention to public interests

Grid-scale RE affects several public interest issues

- National objectives (energy security, access, climate change)
- Public expenditure
- Tariff/affordability
- Technical performance/quality of service
- Social and environmental impacts
- RE investors and developers



Thank you!

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