

Activity: Setting a Vision Statement for the Renewable Energy Zone (REZ) Transmission Planning Process – Defining the Scope

In this activity you will draft a vision statement for the REZ process that is applicable for your country or region. The goal is to understand the importance and the components of a vision statement.

This activity focuses on Step 1 of the REZ Process shown in Figure 1 below. The activity is aimed at the [Lead Entity or the Technical Advisory Committee of a REZ process](#).¹

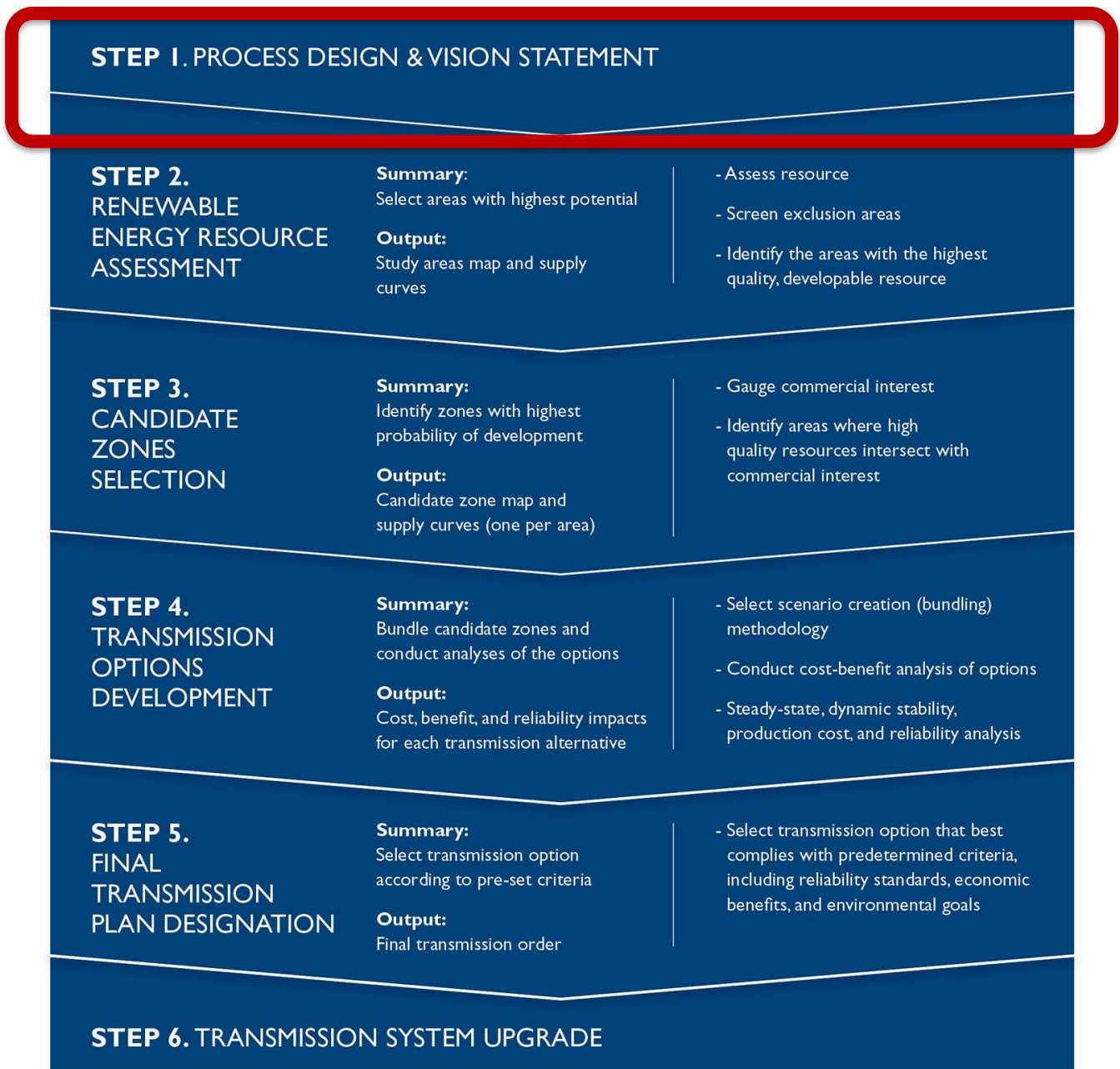


Figure 1. Renewable energy zones transmission planning process outline

¹ See <https://greeningthegrid.org/Renewable-Energy-Zones-Toolkit/guidebook/the-rez-process-organizational-structure> for more information.

Step 1. Process Design & Vision Statement



Exercise 1: Goal for the REZ process

REZ transmission planning is a process to plan, approve, and build transmission infrastructure that connect REZs to the power system. The REZ process helps to increase the share of renewable energy resources in the power system while maintaining reliability and economics.

The REZ process is helpful where transmission expansion or upgrades are required that promote the development of REZs. The REZ process may not be applicable if transmission already has capacity to accommodate new renewable energy. Other constraints, such as congestion on existing lines that leads to curtailment, can be addressed through traditional transmission planning activities and do not require the REZ process.

First, consider the following questions:

- A. What is the current and future demand for renewable energy-based generation in your country?

- B. What drives this demand (such as laws, renewable portfolio standards, planning documents and/or other regulations)?

- C. What are the current challenges to scaling up renewables in your power system in relation to transmission system planning?

- D. Could the REZ process help to overcome these challenges? If so, how?

Exercise 2: Applicable laws, regulations, and planning activities

An effective REZ process is firmly rooted in applicable laws, regulations, and planning activities. This ensures that decision makers have the authority to approve and direct transmission investment and guarantees that the designation of REZ has relevant legal ramifications.

Discussion Questions

- A. What applicable laws and regulations should be considered for the development of a REZ process in your country?

- Would each of these facilitate, or impede, a potential REZ process?
- B. Are there power development plans, transmission development plans, integrated resource plans, or other planning activities that the REZ process must be integrated into to ensure implementation? If so what are these planning activities?
- What is the timeline for update of these planning activities (such as every 1, 3, 5 years)?
- C. Who is the regulatory agency or ministry that is charged with approving transmission expansion plans (should be involved in the REZ process)?
- What steps and criteria are necessary to show justification for power sector investments (for example the common *used and useful* test by regulators)?
 - How can these steps and criteria be addressed in the REZ process to ensure implementation?

Exercise 3: Scope of the REZ process

The scope defines the geographic boundaries and the renewable energy resources included in the REZ process.

- The geographic area being considered in the REZ process defines the boundary of application. A clear boundary of application is important because it focuses the scope of the REZ process.
- The criteria for selecting the renewable energy resources considered in the REZ process may include government priorities and/or availability of spatially linked resource data. The focus is typically on large-scale wind and solar development because other renewable energy resources (such as geothermal or mini-hydropower) are seldom found in sufficient concentration to warrant consideration as a REZ. However, when located within a REZ, these supplemental renewable energy resources may provide additional value.

Discussion Questions

- A. What is the geographic area being considered in the REZ process? Is it the entire country or a multi-country region? Are there any islands that would have to be considered?
- B. Which renewable energy resource(s) should be included in the REZ process (due to government priority, resource availability, or other criteria)?
- Principal renewable energy resources to be considered (warrant transmission expansion):
 - Supplemental renewable energy resources to be considered (provide additional value to zones with principal renewable energy resources):

- C. Are high-quality maps or spatial data available for the renewable energy resources identified above in question B? What is the source for these maps and data?
- Source (or Institution) for each of the *principal* renewable energy resources above:

 - Source (or Institution) for each of the *supplementary* renewable energy resources above:

Exercise 4: Develop a vision statement

The vision statement has two practical purposes:

1. To establish the goal of the REZ process—for example, to build new transmission infrastructure and make improvements that cost-effectively and fully use the best renewable resources in the region.
2. To clearly state the scope of the REZ process. A clear scope sharpens the focus of the process and manages stakeholder requests and expectations. This may include the boundary of application and the renewable energy resources considered.

Use your answers to the previous exercises to make concise first draft of a vision statement with:

- The goal,
- The most applicable laws, regulations, and/or planning activities, and
- The scope of the REZ process in your country.

Drafting a final vision statement will likely take many additional discussions and revisions.

Vision Statement – First Draft