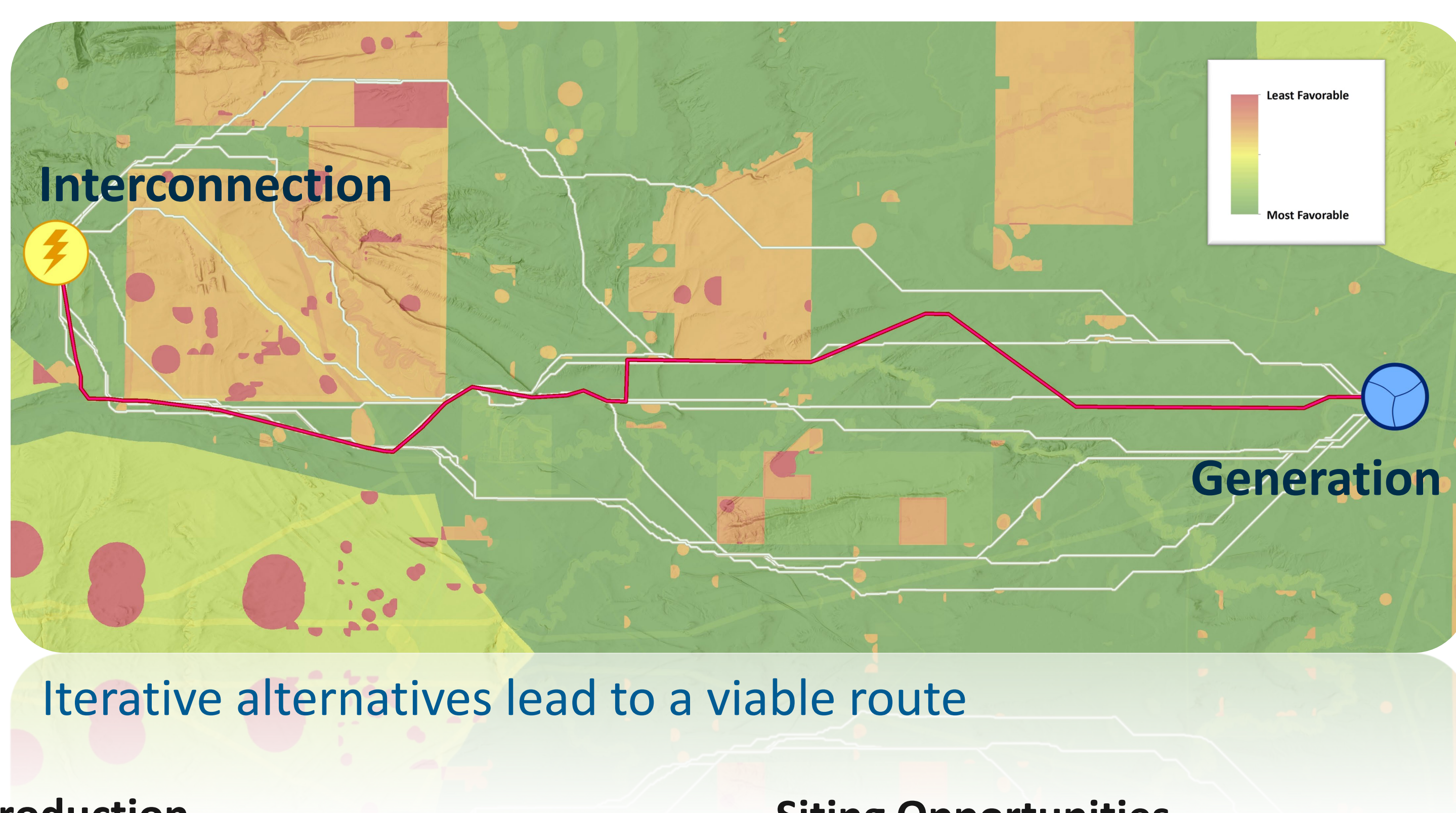


Use **GIS** modeling to **SITE** your **RENEWABLE ENERGY** projects.

Spatial Modeling for Renewable Prospecting and Siting

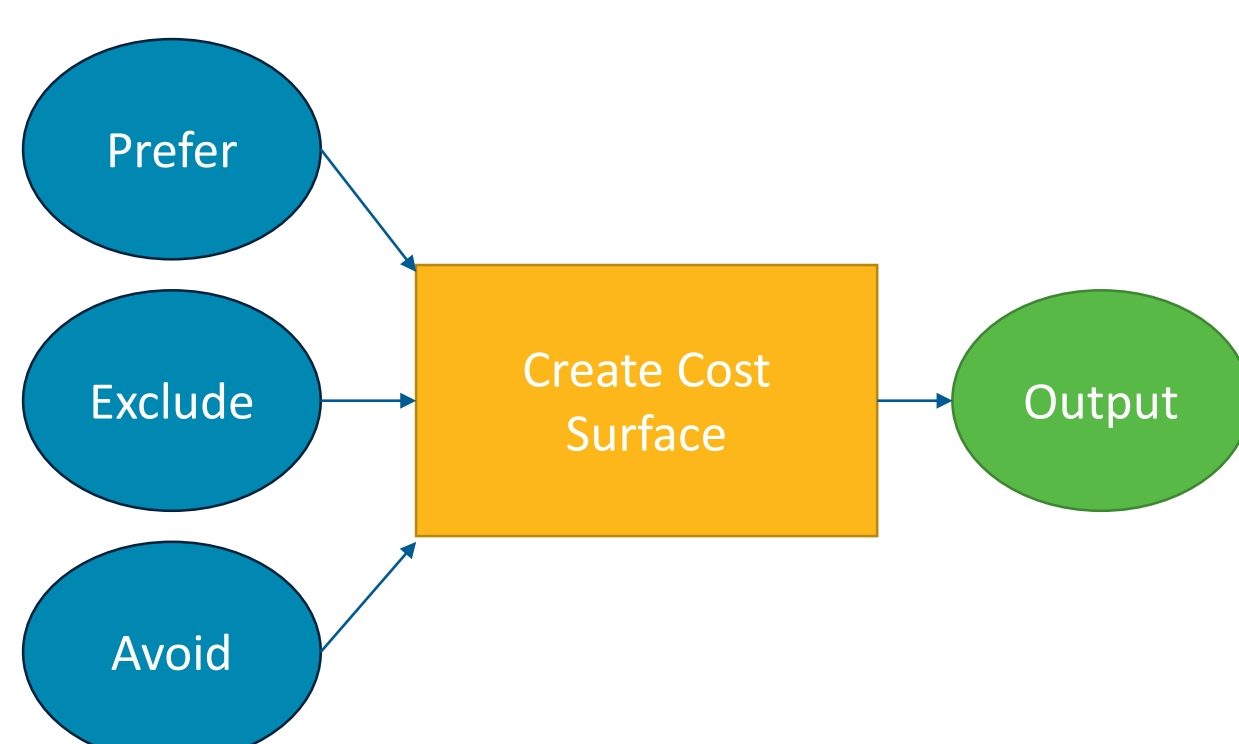


Introduction

GIS analysis is essential to siting and routing planning for renewable development projects and associated infrastructure. GIS modeling and tools can provide unique insights to assessing the viability of wind, solar, hydrogen, transmission lines and other project components at local, regional, and national levels.

Objective

Industry faces the task of finding lands with the best opportunity for renewable development.



Siting Opportunities

- High quality energy resources
- Jurisdiction/land use
- Topography
- Existing infrastructure

Siting Exclusions/Avoidance

- Infrastructure
- Jurisdiction/land use
- Natural resources
- Historic and cultural resources

Applications

- Wind/Solar/Green hydrogen/Battery storage project siting
- Transmission, pipeline, linear feature routing
- Other land use project siting (parks, facilities, etc.)

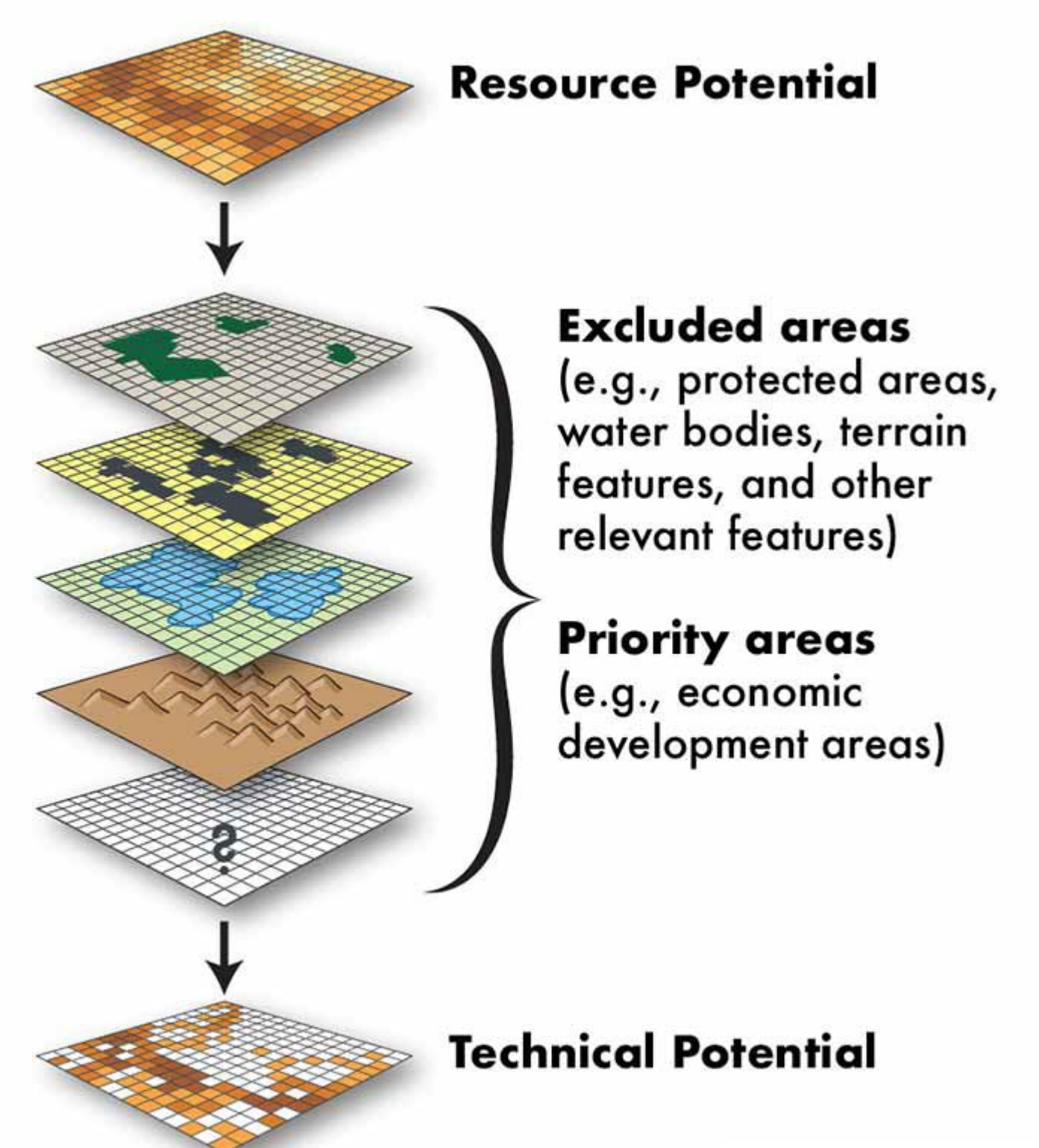
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GIS Modeling Approach

1. Identify **GOALS**
2. Gather data
3. Identify opportunities/exclusions/avoidance
4. **BUILD** GIS Model
5. Resource **WEIGHTING**
6. Iterative refinement
7. Generates **ALTERNATIVES**

Siting models are **CUSTOMIZABLE** to individual project and client needs.

Determining Suitable Locations



NREL 2019

