How Can Utility-Scale Solar Development Benefit Rural Communities?

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Utility-Scale Solar Farms

**Definition**
These farms generate solar power to feed the utility grid for the host customers at a fixed rate for a fixed term of time.

**Meaning,**
Solar power generated does not directly supply the local community.

**Most are located in rural communities.**

Projects that lack obvious community benefits can face delayed progress or outright opposition. Integrating tangible local benefits into the project planning process can mitigate these risks.

Utility-Scale Solar Project Planning Process

**CRUCIAL PERIOD FOR COMMUNITY ENGAGEMENT**

<table>
<thead>
<tr>
<th>Pre-Development</th>
<th>Roles, Business Structure &amp; Regulations</th>
<th>Finalize Business Structure, Team &amp; Permitting</th>
<th>Project Implementation</th>
<th>Operation &amp; Maintenance</th>
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<td>development costs</td>
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<td>financial close</td>
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**Main Considerations**
- **Site:** Potential project locations
- **Resource:** Feasibility analysis
- **Off-take:** Buyer of generated power (e.g., PPA)
- **Team:** Assemble & engage those who can facilitate, approve, and champion the project - including developers, utilities, governments, and community members
- **Technology:** Analyzing bankability and reliability

**Main Considerations**
- **Policy & Regulations:** Land use, water rights, building codes, net-metering options, interconnection rules, etc.
- **Permits:** Identify permitting needs & site use conditions, including environmental reviews, state & local jurisdiction permits

**Important Questions for Community Engagement & Consensus Building**
- What is important to the local community, especially in terms of land use and future of their community?
- What is the local community worried about?
- How can the project incorporate and address these priorities and concerns?
- What initiatives, regulations, or funding exist that can help create community benefits?

* Construction of utility-scale solar offers economies of scale compared to smaller installations. Potential construction job creation is temporary and simply too little.

Utility-Scale Solar for Rural Community Benefit - Examples

**Supporting Public Education (AZ)**
Land lease payments for sites fully owned by the Arizona State Land Department go directly to AZ’s K-12 public school and teacher funding. This makes public schools direct beneficiaries of utility-scale solar projects located in these areas.

**Creating Pollinator Habitat**
Pollinators, critical for plant reproduction and our food system, need flowering plants for survival. Adding ground cover and pollinator habitats supports pollinators, stabilizes the soil, and reduces air temperature, contributing to solar performance.

**Co-Locating Agriculture**
Co-locating agriculture and solar allows for dual use of farmlands and dual income for farmers. At La Ola Solar Farm, HI, resident sheep help manage weeds and keep plants trimmed and away from solar panels.

1. https://www.osti.gov/servlets/purl/10233291