Land Use Conflicts Between Solar Energy Development and Agriculture

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Land Use Conflicts Between Wind and Solar Renewable Energy and Agricultural Uses

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Paper and webinar recording available at:
https://nationalaglawcenter.org/webinars/windsolarlandconflicts/
The Solar Energy Land Use Conflict

• What is driving opposition to large-scale solar energy facility construction in agricultural areas?
• How are state and local governments responding to the conflict?
Drivers of the conflict

- Land Consumption
- Local Opposition
- State-Local Tensions
- Competing Policies
1. Land Consumption

- Wind and solar land footprint
  - Initial physical footprint
  - Lower power density
  - Time to land use equivalency
- Farmland protection
  - Farmland loss
  - Prime soils
  - Agri-voltaics/dual-use?
- Competition for farmland

### Project Status

<table>
<thead>
<tr>
<th>Status</th>
<th>Certificated Projects Total:</th>
<th>Non-Certificated Projects Total:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operational</td>
<td>(5,053.2 MW) (51,273 Acres)</td>
<td>(4,493.6 MW) (40,368 Acres)</td>
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<tr>
<td>Under Construction</td>
<td>(450.0 MW) (4,002 Acres)</td>
<td>(3,693.6 MW) (34,308 Acres)</td>
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<tr>
<td>Preconstruction</td>
<td>(1,602.0 MW) (15,582 Acres)</td>
<td>(800.0 MW) (6,060 Acres)</td>
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<tr>
<td>Pending</td>
<td></td>
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<tr>
<td>Pre-Application</td>
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2. Local Opposition

- NIMBYism
- Proximity
- Environmental Impacts
- Economic Impacts
3. Competing Policies

- Renewable portfolio standards
- Farmland protection laws
4. State-Local Tension

• Who should have regulatory authority?
• “Public utilities” or not?
• Lack of standards
How are governments responding?

• New local control to reject solar developments.
• Clarify state control over solar developments.
• Developers must “consider agriculture.”
• Required consultation with state department of agriculture.
• Impact mitigation agreements or environmental assessments.
  • Economic impact on agriculture in assessments.
• Technical assistance
  • Agrivoltaics
Recommended Best Practices

• State-local collaboration
• Involve agricultural leaders in renewable decision-making
• Protection of prime soils
• Siting to lessen the “footprint”
• Planning through mapping
• Planning for decommissioning
• Opportunities for agrivoltaics
Visit The Farm Office for current information on agricultural law and farm management in Ohio.