

# Promoting Renewable Energy Development on Reclaimed Mine Lands

State Implementation of the Surface Mining Control and  
Reclamation Act



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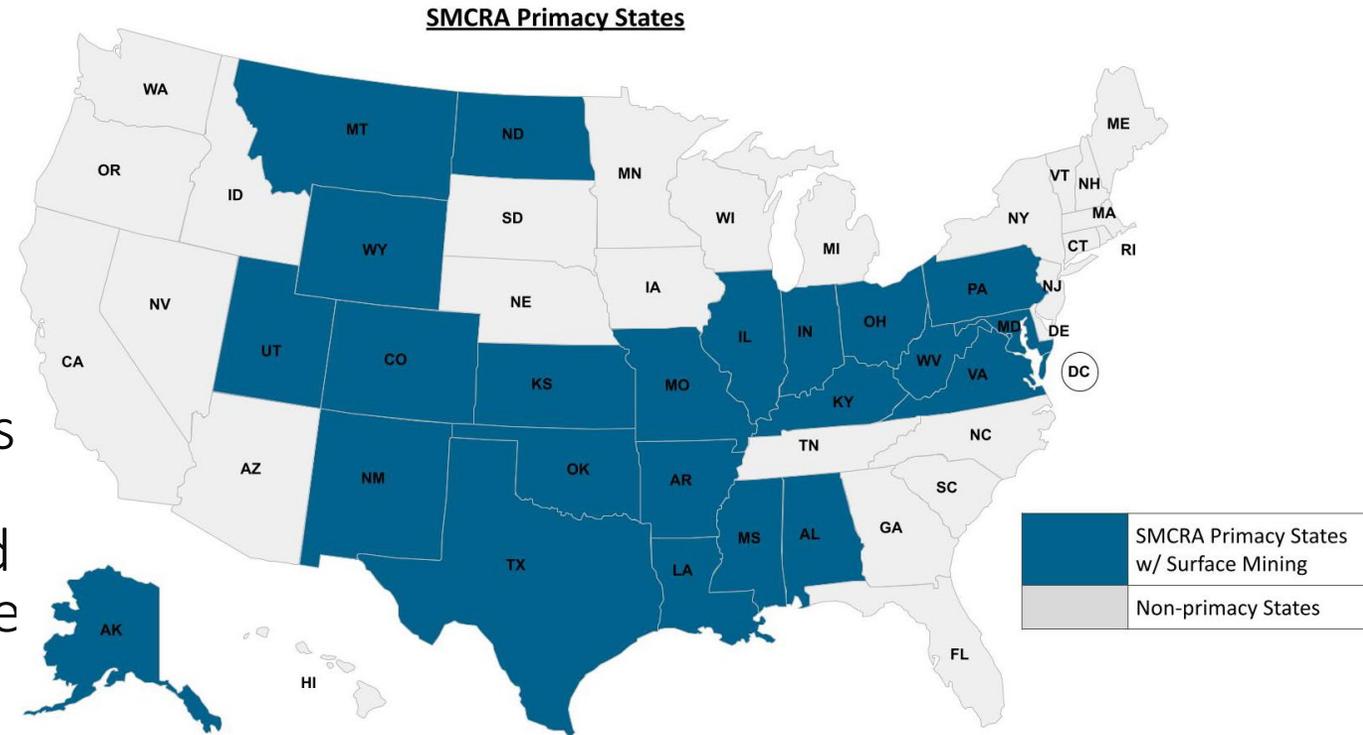
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# The Surface Mining Control and Reclamation Act (SMCRA)

- Established reclamation requirements for coal mining operations initiated after 1977.
- Reclamation plans must detail how the land within the permit area “will be returned to a land use capable of supporting the uses that it was capable of supporting prior to [the onset of] any mining operations” (Larson 2020, p. i).
- SMCRA authorizes variances when returning land to its pre-mining use is not technically possible (often the case for mountaintop removal mining).
- SMCRA authorizes experimental mining and reclamation practices to encourage advances in mining and reclamation practices.

# Project Methods

- Examined 23 states with SMCRA primacy and active surface coal mining.
- Primacy: states are authorized to implement federal law if their laws and regulations are equal to or stricter than federal standards and they have the resources to enforce those standards.
- Compared state statute and administrative code.



# Project Findings

- Most states' statutes adopt the federal language nearly verbatim.
- Found four areas where language could be amended to encourage the development of renewable energy and transmission infrastructure on reclaimed coal mines.
- Because all 23 states share the same or very similar language, they also share all four policy opportunities.

# Four Areas of Shared Opportunity

1. Amend land use definitions to include renewable energy and transmission.
2. Amend reclamation plan requirements to include renewable energy and transmission.
3. Authorize renewable energy and transmission development as an experimental practice.
4. Authorize renewable energy and transmission development as a proposed use that can qualify operators for receiving a variance under original contour requirements for mountaintop removal and steep slope mining operations.

# Opportunity 1: Amend land use definitions to include renewable energy and transmission.

## Example

- Alabama Administrative Code [880-X-2A-.06.87\(f\)](#): "Industrial or commercial" means land used for "extraction or transformation of materials for fabrication of products, wholesaling of products, or long-term storage of products. This includes all heavy and light manufacturing facilities..."
- New Mexico Administrative Code [19.8.36.24C](#) categorizes land uses into several groups which include:
  - Heavy industry. "Manufacturing facilities, **powerplants**, airports or similar facilities."
  - Public services. "...**major transmission lines**, major pipelines, highways, underground and surface utilities and other servicing structures and appurtenances."

## Opportunity 2: Amend reclamation plan requirements to include renewable energy and transmission.

Reclamation plans are required by state and federal authorities to include “a discussion of the utility and capacity of the reclaimed land to support a variety of alternative uses.”

Postmining alternative uses are defined in federal statute and by most states as agricultural, industrial/commercial, recreational, and residential uses.

# Opportunity 2: Amend reclamation plan requirements to include renewable energy and transmission.

## Example

- West Virginia Code [§22-3-10\(a\)\(3\)](#) explicitly adds renewable energy to the list, and includes it first:
  - Each reclamation plan shall include a statement of “the use which is proposed to be made of the land following reclamation, including a discussion of the utility and capacity of the reclaimed land to support a variety of alternative uses, **including, but not limited to, renewable and alternative energy uses**, residential uses, highway uses, industrial uses, commercial uses...”

## Opportunity 3: Authorize renewable energy and transmission development as an experimental practice.

SMCRA section 1301 authorizes experimental mining and reclamation practices to “encourage advances in mining and reclamation practices or to allow post-mining land use for industrial, commercial, residential, or public use.”

States might explicitly include renewable energy development and transmission as an approved land use that can allow the use of experimental practices, or as discussed earlier, amend their definition of industrial land use to include renewable energy and transmission.

# Opportunity 3: Authorize renewable energy and transmission development as an experimental practice.

## Example

- While not explicitly defined as an experimental reclamation practice, Kentucky provides an exemption from the requirement that the reclamation plan include a plan to “permanently remove” everything (poles, wires, etc.) related to electric distribution in the permit area when the distribution infrastructure will support an approved post-mining land use ([Kentucky Revised Statutes §350.090](#)).

## Opportunity 4: Include renewable energy and transmission development as uses that can qualify operators for a variance from original contour requirements.

SMCRA and state implementing authorities authorize variances from the requirement to return lands to their original contour if the reclamation will render the land “suitable for an industrial, commercial, residential, or public use” and “the potential use of the affected land is deemed to constitute an equal or better economic or public use.”

States might amend their definitions of “industrial land use,” “better economic or public use” and / or “higher and better public use” to include renewable energy and transmission development.

# Opportunity 4: Include renewable energy and transmission development as uses that can qualify operators for a variance from original contour requirements.

## Example

- West Virginia authorizes variances from the requirement to return lands to the original contour if the reclamation will render the land capable of supporting “bio-fuel cropland”:
  - **“A change in post mining land use to bio-fuel cropland constitutes an equal or better use** of the affected land, as compared with pre-mining use for purposes of W. Va. Code §22- 3-13(c) in the determination of variances of approximate original contour for mountaintop removal operations subject to §38-2-7.8 of this rule” ([West Virginia Code §37-2-7.3.d](#)).

# Locating Definitions, Postmining Land Uses, Experimental Practices, and Variances from Original Contour Requirements

SMCRA Primacy State <sup>9</sup>	Definitions: Land Uses	Reclamation Plans: Postmining Land Uses	Experimental Mining and Reclamation	Mountaintop Removal – Variances from Original Contour	Steep Slope Mining – Variances from Original Contour
<a href="#">Alabama</a>	Code: <a href="#">880-X-2A-.06</a> Statute: n/a	Code: <a href="#">880-X-8F-.10</a> Statute: <a href="#">9-16-84</a>	Code: <a href="#">880-X-8J-.04</a> Statute: <a href="#">9-16-98</a>	Code: <a href="#">880-X-8J-.05</a> Statute: <a href="#">9-16-90(c)</a>	Code: <a href="#">880-X-8J-.06</a> Statute: <a href="#">9-16-90(c)</a>
<a href="#">Alaska</a>	Code: <a href="#">11 AAC 90.911</a> <a href="#">Statute</a> directs the Department of Natural Resources to develop regulations consistent with federal SMCRA requirements.	Code: <a href="#">11 AAC 90.087</a>	Code: <a href="#">11 AAC 90.153</a>	Code: <a href="#">11 AAC 90.141</a>	Code: <a href="#">11 AAC 90.145</a>
<a href="#">Arkansas</a>	Code: n/a <a href="#">Statute</a> directs the DEQ to develop regulations consistent with federal SMCRA requirements.	Code: <a href="#">R20 - 780.23</a>	Code: <a href="#">R20 - 785.13</a>	Code: <a href="#">R20 - 785.14</a>	Code: <a href="#">R20 - 785.16</a>
<a href="#">Colorado</a>	Code: <a href="#">2 CCR 407-2.1.04(71)</a> Statute: n/a	Code: <a href="#">2 CCR 407-2.05.5</a> Statute: <a href="#">34-33-111(1)(c)</a>	Code: <a href="#">2 CCR 407-2.06.2</a> Statute: <a href="#">34-33-134</a>	Code: <a href="#">2 CCR 407-2.06.3</a> Statute: <a href="#">34-33-120(3)</a>	Code: <a href="#">2 CCR 407-2.06.4</a> Statute: <a href="#">34-33-120(4)</a>
<a href="#">Illinois</a>	Code: <a href="#">62-1701</a> Statute: n/a	Code: <a href="#">62-1780.23(b)</a> Statute: <a href="#">225 ILCS 715/5(e)(14)</a>	Code: <a href="#">1785.13</a> Statute: n/a	Code: <a href="#">1785.14(c)</a> Statute: n/a	Code: <a href="#">1785.16</a> Statute: n/a
<a href="#">Indiana</a>	Code: <a href="#">312 IAC 25-1</a> Statute: n/a	Code: <a href="#">312 IAC 25-4-48</a> Statute: <a href="#">14-34-3-12</a>	Code: <a href="#">312 IAC 25-4-99</a> Statute: <a href="#">14-34-3-13</a>	Code: n/a Statute: <a href="#">14-34-10-5</a>	Code: <a href="#">312 IAC 25-4-101</a> Statute: <a href="#">14-34-10-5</a>
<a href="#">Kansas</a>	Code adopts federal rules by reference. <a href="#">Statute</a> directs the Department of Health and Environment to draft regulations consistent with federal SMCRA requirements.				
<a href="#">Kentucky</a> <sup>10</sup>	Code: <a href="#">405 KAR 8.001</a> Statute: n/a	Code: <a href="#">405 KAR 16.210</a> Statute: <a href="#">KRS 350.405</a>	Code: <a href="#">405 KAR 7.060</a> Statute: n/a	Code: <a href="#">405 KAR 20.050</a> Statute: <a href="#">KRS 350.450</a>	Code: <a href="#">405 KAR 20.060</a> Statute: n/a
<a href="#">Louisiana</a>	Code: <a href="#">43-105</a> Statute: n/a	Code: <a href="#">43-2723</a> Statute: <a href="#">908(A)(3)</a>	Code: <a href="#">43-2901</a> Statute: <a href="#">929</a>	Code: n/a Statute: <a href="#">915(C)</a>	Code: <a href="#">43-2905</a> Statute: <a href="#">915(C)</a>

# 2020 - 2021 Legislation to Promote Renewable Energy and Transmission Development on Reclaimed Lands

State	Bill Number	Summary
Illinois	<a href="#">SB 21-2408</a>	Omnibus bill. Declares redevelopment of the sites of former coal-fired electric generating units with renewable energy generation and energy storage is in the public interest. Directs the Illinois Power Agency to procure at least 3% of the 45 million RECs it is required to procure by 2030 come from brownfield site solar projects, which include projects located on reclaimed mine lands.
Maryland	<a href="#">SB 20-281</a>	Waives certain application fees for the Voluntary Cleanup Program if the eligible property will be used to generate clean or renewable energy and creates a tax credit to incentivize public-private partnerships that develop clean and renewable energy projects on certain locations including rooftops, reclaimed mines, and superfund sites.
Virginia	<a href="#">HB 20-1133</a>	Declares that the construction or purchase by a public utility prior to January 1, 2024, of one or more solar or wind generation facilities located on a previously developed project site (including brownfields, parcels previously used for R/C/I purpose, parking lots, mines/quarries) in the Commonwealth having in the aggregate a rated capacity that does not exceed 200 megawatts, or the purchase by a public utility of energy, capacity, and environmental attributes from such solar facilities owned by persons other than a public utility, is in the public interest.
West Virginia	<a href="#">SB 20-583</a>	Allows utilities to construct or purchase and sell the output of renewable energy and energy storage facilities built at “eligible sites” to residential, commercial, or industrial customers through a renewable energy contract or tariff. Defines “eligible site” as a site that has previously been used for “electric generation, industrial, manufacturing or mining operations, including, but not limited to, brownfields, closed landfills, hazardous waste sites, former industrial sites, and former mining sites.”

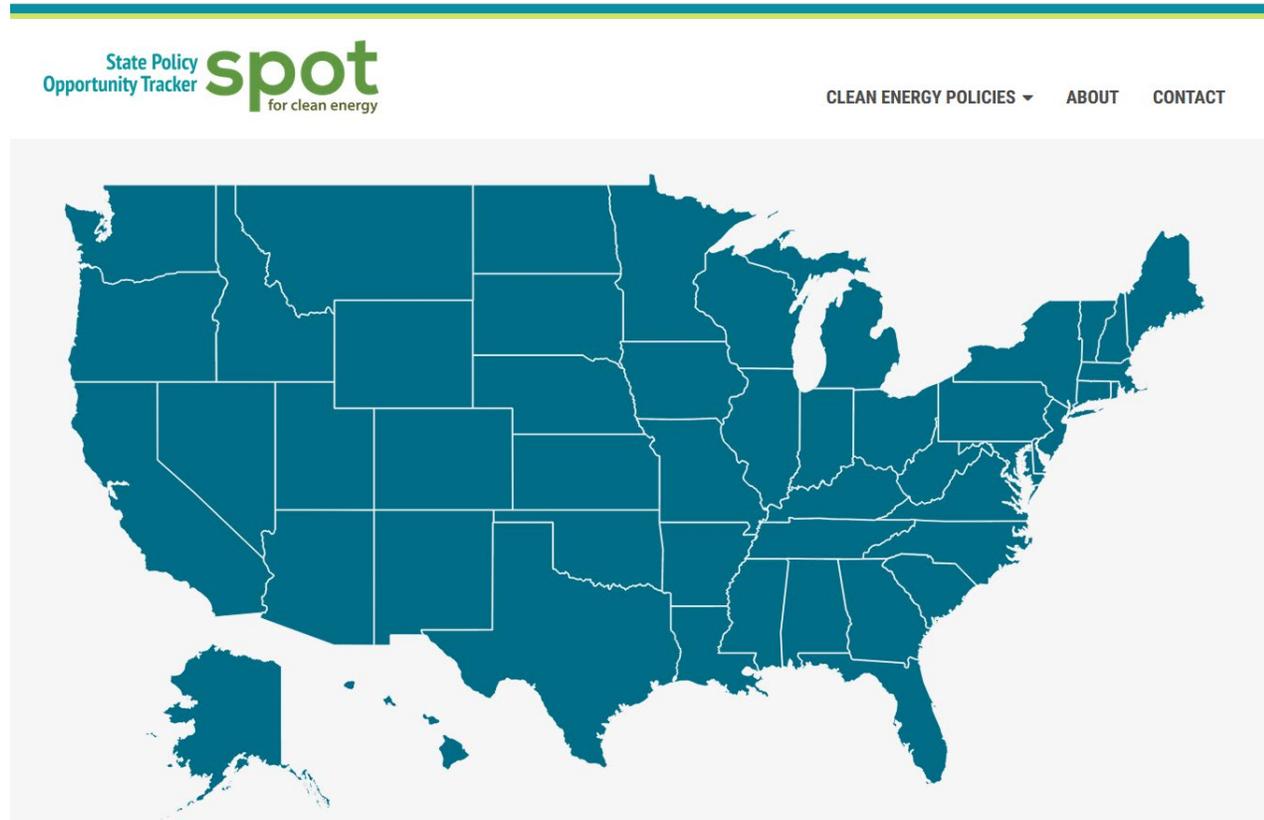
# Conclusion

- States with SMCRA primacy can encourage renewable energy development as a post-mining land use.
- Four areas of SMCRA provide opportunities for states to encourage renewable energy and transmission development through changes to statute and code.
- States have developed other policies to encourage renewable energy and transmission development on reclaimed mine lands.

# Resources on Existing State Policy

- CNEE Report – Promoting Renewable Energy Development on Reclaimed Mine Lands: State Implementation of the Surface Mining Control and Reclamation Act  
<https://tnc.box.com/s/xsof0alm2ssi2ago78v56niwdmgurgfq>
- State Policy Opportunity Tracker (SPOT) for Clean Energy  
<https://spotforcleanenergy.org/>
- Advanced Energy Legislation (AEL) Tracker  
<https://www.aeltracker.org/>

# SPOT for Clean Energy



## Users can:

- Search all 50 states or 36 energy policies.
- Identify policy gaps and opportunities.
- Review key policy components.
- Download policy briefs and the 50-state gap analysis.

<https://spotforcleanenergy.org/>

# AEL Tracker

## Users can:

- Refine searches by state, policy category, year introduced, bill status, and key words.
- Interact with maps and graphs.
- View bill details and text.
- Create a free MyTracker account to receive email updates on a personalized list of bills.

<https://www.aeltracker.org/>

The screenshot displays the AEL Tracker website interface. At the top, a green navigation bar contains the text "SEARCH TRACKER", "MAPS & GRAPHS", "TRENDS & ANALYSIS", "ABOUT", "FAQS", and "CONTACT". On the right side of the bar, it says "ADVANCED ENERGY LEGISLATION tracker". Below the navigation bar, the main heading is "Search Advanced Energy Legislation" in green, followed by "2021 Legislative Schedules" in a smaller green font. A sub-heading reads "Sign up for [MyTracker](#) to create a personalized list of bills to track."

The interface is divided into five numbered filter sections:

- 1 STATES:** A green box with a map of the United States icon. It contains a list of 50 states and the District of Columbia, arranged in three columns. A "SELECT ALL STATES" button is at the bottom.
- 2 POLICIES:** A blue box with a capitol dome icon. It contains a grid of 10 policy categories, each with an icon: Economic Development, Infrastructure, Electricity Generation, Natural Gas Development, Emissions, Other Energy, Energy Efficiency, Regulatory, Financing and Financial Incentives, and Transportation. A "SELECT ALL POLICIES" button is at the bottom.
- 3 YEAR INTRODUCED:** A dark blue box with a calendar icon. It contains a dropdown menu labeled "1 selected" and a "SELECT ALL STATES" button.
- 4 BILL STATUS:** An orange box with a document icon. It contains a grid of 6 bill status options, each with an icon: Introduced (I), Passed One Chamber (P1), Passed Both Chambers (P2), Enacted (E), Failed (F), and Vetoed (V). A "SELECT ALL STATES" button is at the bottom.
- 5 KEYWORDS:** A purple box with a speech bubble icon containing the letter 'K'. It contains a search bar labeled "SEARCH FOR BILL NUMBER, SPONSOR NAME, ETC." and "ENTER KEYWORDS".

At the bottom right, there is a green button labeled "DISPLAY MY RESULTS" with a right-pointing arrow.

# Questions?

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