



EISPC Energy Zones Mapping Tool: <http://eispctools.anl.gov>

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EISPC Energy Zones Mapping Tool Newsletter

April Webinar Demonstration:

Tuesday, April 22, at 3pm ET/2 pm CT/1 pm MT

Use the following link to attend the webinar: http://anl.adobeconnect.com/eispc_tool_demo/

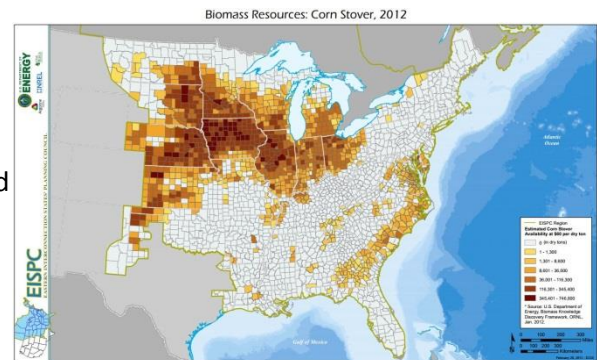
(Audio via the webinar or by phone: 1-877-685-5350, participant code: 853223).

This demonstration will highlight biomass energy data, models, and reports.

Clean Energy Technology Spotlight: Biomass

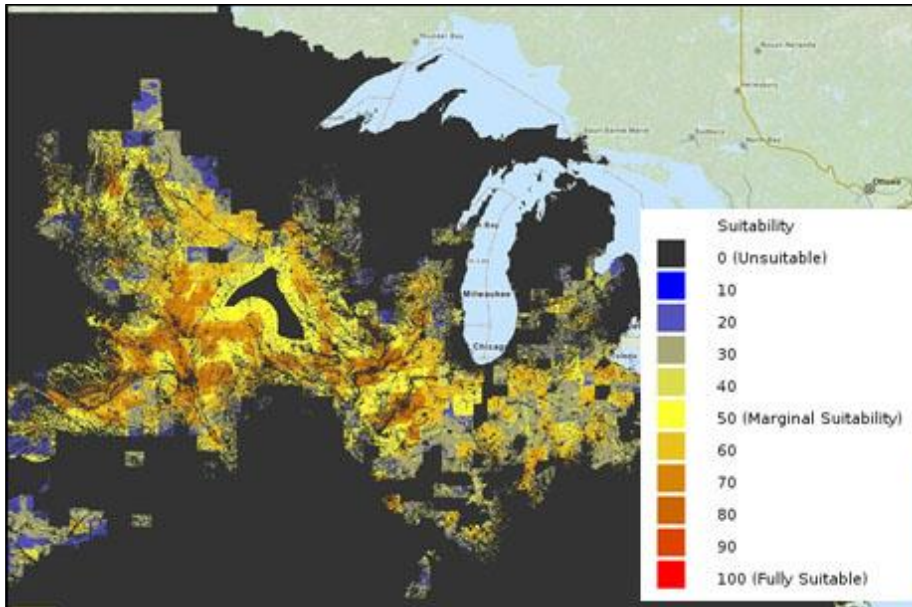
The tool includes many capabilities for understanding and analyzing biomass energy resources and technologies, including:

- [Technology Descriptions](#)
- Over 200 [policies](#) related to Biomass such as [these policies](#) in Ohio.
- Pre-made PDF maps, such as this map of [Biomass Resources: Corn Stover, 2012](#).
- Biomass [mapping layers](#), with access to downloadable GIS data, including:
 - Coal Plants Suitable for Co-Firing Biomass
 - Operational Anaerobic Digester
 - Shutdown Anaerobic Digester
 - Under Construction/Unknown Anaerobic Digester
 - Secondary Agricultural Residue 2012
 - Operational Landfill Methane Project
 - Under Construction Landfill Methane Project
 - Biomass Production: Barley Straw
 - Wastewater Treatment Facility
- Biomass Modeling layers include county-level production of:
 - Barley Straw
 - Corn Stover
 - Wheat Stover
 - Logging Thinnings



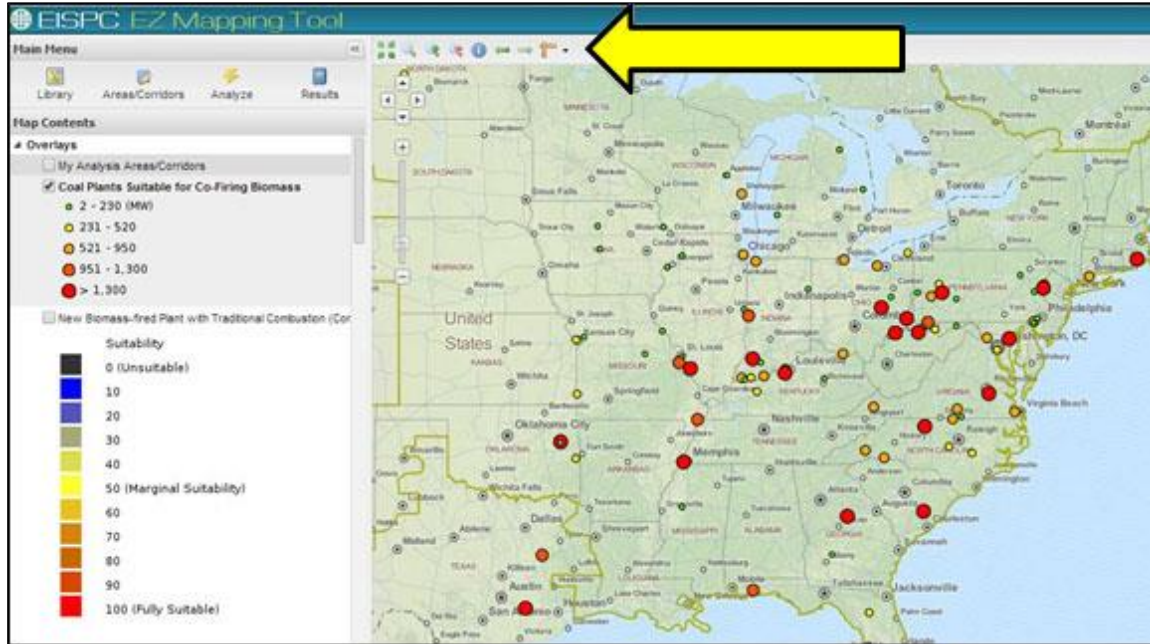
- Logged Others
- Logging Residue
- Milling Residue – Unused Primary
- Urban Wood, Construction , Demolition Debris
- Urban Wood, Municipal Solid Waste
- Coal Co-Firing Plants
- [Metadata](#) for all mapping layers describing the data sources and other details.
- User-run [reports](#) including:
 - Methane from Animal Manure Processing
 - Methane from Landfills
 - Methane from Water Treatment Plants
- User-configurable suitability [models](#) (18 total) for the following nine feedstock types for both (1) New Biomass-fired Plants with Traditional Combustion and (2) Biomass at Co-fired Existing Coal Plants:
 - Barley Straw
 - Corn Stover
 - Wheat Straw
 - Logged Others
 - Logged Residue
 - Logging Thinnings
 - Milling Residues
 - Urban Wood/Construction/Demolition Debris
 - Urban Wood/Municipal Solid Waste


Sample suitability model results for New Biomass -fired Plant with Traditional Combustion (Corn Stover) are displayed in this map.

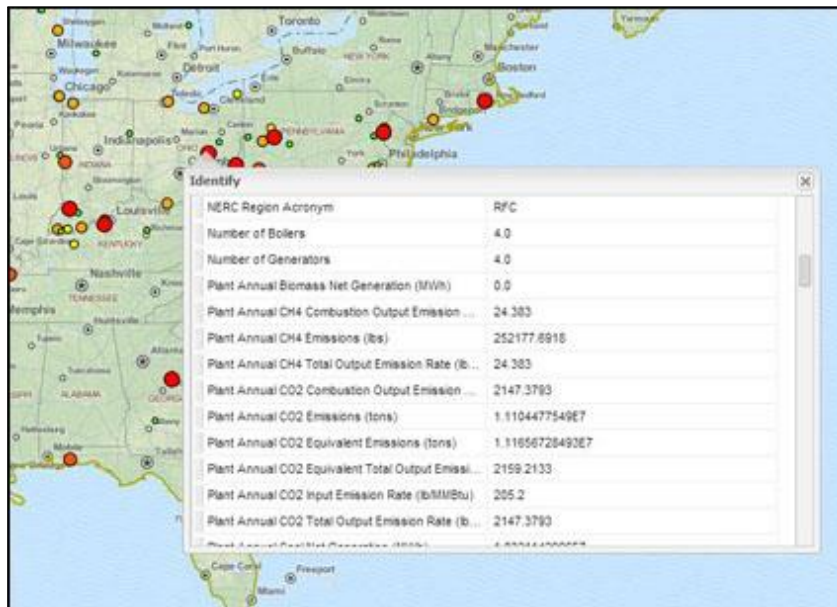



April Mapping Tool Tips and Tricks

The map tools are located at the top of the screen and allow the user to navigate the map.



The identify tool  allows the user to retrieve more information about a specific item on the map by clicking on it. For example, clicking on one of the circles for **Coal Plants Suitable for Co-Firing Biomass** on the map, generates a table that lists information about that specific coal plant. Click the Identify tool again to turn it off when finished.



The measure tool  is used to measure length or area. To measure the area of a polygon, click the dropdown menu next to the tool on the toolbar and select Measure Area. Then left-click on the map click once to draw a shape, and double-click to complete it. The area is shown with a message on the map. Close the message and repeat the process to measure another area, or click the measure tool in the toolbar to stop measuring. Length is measured the same way using the Measure Length tool.

See the tool [Help Manual](#) or help videos such as [Using the Map Tools](#) for more details in using the tool. These are available at the top right of the [Home Page](#).

Analysis Highlight: Demand-Side Resource Forecast

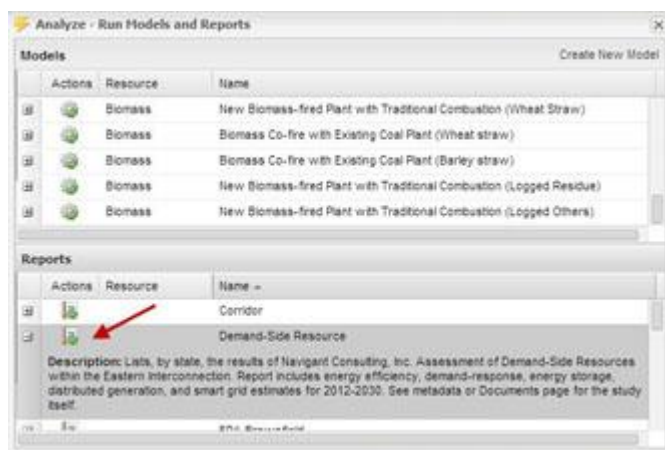
A [recent study](#) from the National Association of Regulatory Utility Commissioners (NARUC) and Navigant Consulting, Inc. found that the expected deployment of demand-side resources may result in a nearly 20% reduction in peak demand and a 13% reduction in annual electricity consumption within the Eastern Interconnection by 2030. To better understand how this may impact future transmission planning, the EZ Mapping Tool includes the capability to run state-level reports on the existing and forecasted deployments of demand-side resources throughout the Eastern Interconnection from 2012 to 2030. The report provides information on resource capacity, annual electricity impact, and peak load impact for each state and each of the following demand-side resource types:

- Distributed Generation – Fossil Fuel & Renewables
- Demand Response – Conventional & Smart Grid-Enabled*
- Energy Efficiency
- Energy Storage
- Smart Grid – Conservation Voltage Reduction (CVR)

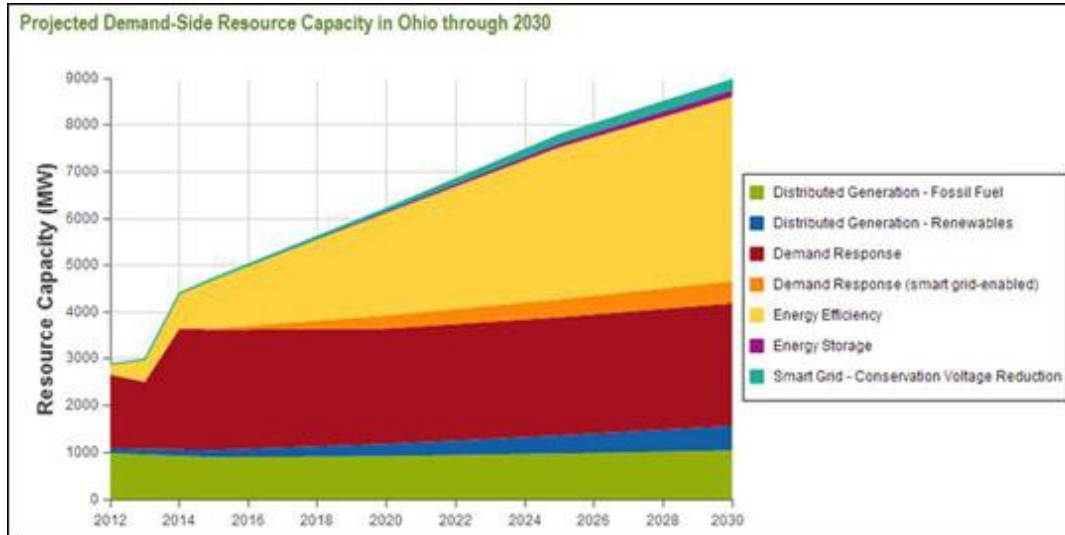
*Smart Grid-Enabled Demand Response includes time-based rate programs that require AMI meters with two-way communication capability.

To access these state-level reports:

- Click **Analyze**, then select the report for “Demand-Side Resource” under the Reports section, then click **Run this report** to open up the Report Run Launcher.
- Select a Region and click **Launch Report**. (Note: If “Analysis Area” or “County” are selected, statewide results are provided for each of the states overlapping the selected area.) After the report has been launched, exit out of the Report Run Launcher.
- Click **Results** in the main menu window, then find your report (titled “Demand-Side Resource Report” by default), then click the **Display the generated report** action.



The report will open in a new browser tab, with resource capacity, annual energy impact, and peak load impact shown in tabular format for each state and resource type. The resource capacity projections are also displayed graphically for all demand-side resource types, similar to this one for Ohio. The graph displayed in the generated report is interactive, allowing the user to click on and view the graphic projections for one or more of the resources simultaneously.



The final study posted on the EZ Mapping Tool’s Documents page ([Assessment of Demand Side Resources within EISPC](#)) contains further in-depth discussions, including: key assumptions; analysis approach and results for each of the demand-side resource types; scenarios exploring different policy and market drivers; and Navigant’s recommendations for future work for industry stakeholders.

Recent EZ Mapping Tool Updates

Updated Platts data as well as the following data layers:

- Airport
- Airport Runway
- Alternative Fuel Station
- Atlantic OCS Wind Energy Area
- Coastal Barrier Resources System
- County Boundary
- Ecoregional Portfolio
- Environmental Hazard Site
- FWS Specially Designated Area
- Indian Reservation
- Major Road
- Marine Port
- National Conservation Easement Database
- National Park Service Boundary
- Navigable Waterway Network
- Potential Retrofitted Pulverized Coal Plant

- Railroad
- Scenic Byway
- State Boundary
- U.S. Populated Place
- Urban Area
- Watershed
- Wilderness Area
- Wind Turbine Site

Added the following documents:

- Assessment of the Nuclear Power Industry - Final Report
- Co-optimization of Transmission and Other Supply Resources
- Current State and Future Direction of Coal-fired Power in the Eastern Interconnection Final Study Report
- Current State and Future Direction of Coal-fired Power in the Eastern Interconnection White Paper
- Transmission Planning White Paper