

Coal Plants Suitable for Co-Firing Biomass



Tags

Coal, Power, Coal Power, Plant, Facilities, Biomass, Co-Firing Biomass, eGRID, Emissions & Generation Resource Integrated Database, U.S. EPA, U.S. Environmental Protection Agency, United States of America, U.S.A.

Summary

This layer displays Coal Plants Suitable for Co-Firing Biomass in the United States.

Description

This layer was created by querying the eGRID 2019 plants database for all coal plants with cyclone, fluid-bed, tangentially-fired, and wall-fired boilers.

The Emissions & Generation Resource Integrated Database (eGRID) is a comprehensive inventory of environmental attributes of electric power systems. The preeminent source of emissions data for the electric power sector, eGRID is based on available plant-specific data for all U.S. electricity generating plants that provide power to the electric grid and report data to the U.S. government. Data reported include generation in megawatt-hour (MWh); resource mix (for renewable and nonrenewable generation); emissions in tons for carbon dioxide (CO₂), nitrogen oxides (NO_x), and sulfur dioxide (SO₂); emissions in pounds for methane (CH₄), nitrous oxide (N₂O) and mercury (Hg); emission rates for CO₂, NO_x, and SO₂ (in both pounds per megawatt-hour [lb/MWh] and pounds per million British thermal unit [lb/MMBtu]) and for CH₄, N₂O, and Hg (in pounds per gigawatt-hour [lb/GWh] and pounds per billion Btu [lb/BBtu]); heat input in MMBtu; and nameplate capacity in megawatts (MW). eGRID reports this information on an annual basis (as well as by ozone season for NO_x emissions and emission rates, generation, and heat input) at different levels of aggregation (boiler, generator, plant, companies, and grid regions of the country).

Credits

There are no credits for this item.

Use limitations

There are no access and use limitations for this item.

Extent

West -158.106528 **East** -66.149900
North 47.678500 **South** 17.947115

Scale Range

Maximum (zoomed in) 1:5,000
Minimum (zoomed out) 1:150,000,000

ArcGIS Metadata

Topics and Keywords

* CONTENT TYPE Downloadable Data

Citation

TITLE Coal Plants Suitable for Co-Firing Biomass

PRESENTATION FORMATS * digital map

Resource Details

DATASET LANGUAGES * English (UNITED STATES)

SPATIAL REPRESENTATION TYPE * vector

* PROCESSING ENVIRONMENT Version 6.2 (Build 9200) ; Esri ArcGIS 10.8.1.14362

ARCGIS ITEM PROPERTIES

* NAME coal_power_plant_suitable_co_firing_v3

* LOCATION

* ACCESS PROTOCOL Local Area Network

Extents

EXTENT

GEOGRAPHIC EXTENT

BOUNDING RECTANGLE

EXTENT TYPE Extent used for searching

* WEST LONGITUDE -158.106528

* EAST LONGITUDE -66.149900

* NORTH LATITUDE 47.678500

* SOUTH LATITUDE 17.947115

* EXTENT CONTAINS THE RESOURCE Yes

EXTENT IN THE ITEM'S COORDINATE SYSTEM

* WEST LONGITUDE -17600338.188052

* EAST LONGITUDE -7363773.184026

* SOUTH LATITUDE 2031359.375771

* NORTH LATITUDE 6053534.383024

* EXTENT CONTAINS THE RESOURCE Yes

Spatial Reference

ARCGIS COORDINATE SYSTEM

* TYPE Projected

* GEOGRAPHIC COORDINATE REFERENCE GCS_WGS_1984

* PROJECTION WGS_1984_Web_Mercator_Auxiliary_Sphere

* COORDINATE REFERENCE DETAILS

PROJECTED COORDINATE SYSTEM

WELL-KNOWN IDENTIFIER 102100

X ORIGIN -20073617.602615312

Y ORIGIN -30241100

XY SCALE 145291185.25941995

Z ORIGIN -100000

Z SCALE 10000

M ORIGIN -100000

M SCALE 10000

XY TOLERANCE 0.001

Z TOLERANCE 0.001

M TOLERANCE 0.001

HIGH PRECISION true

LATEST WELL-KNOWN IDENTIFIER 3857

WELL-KNOWN TEXT PROJCS["WGS_1984_Web_Mercator_Auxiliary_Sphere",GEOGCS

["GCS_WGS_1984",DATUM["D_WGS_1984",SPHEROID

["WGS_1984",6378137.0,298.257223563]],PRIMEM["Greenwich",0.0],UNIT

["Degree",0.0174532925199433]],PROJECTION["Mercator_Auxiliary_Sphere"],PARAMETER
["False_Easting",0.0],PARAMETER["False_Northing",0.0],PARAMETER
["Central_Meridian",0.0],PARAMETER["Standard_Parallel_1",0.0],PARAMETER
["Auxiliary_Sphere_Type",0.0],UNIT["Meter",1.0],AUTHORITY["EPSG",3857]]

REFERENCE SYSTEM IDENTIFIER

- * VALUE 3857
- * CODESPACE EPSG
- * VERSION 8.8(9.3.1.2)

Spatial Data Properties

VECTOR

- * LEVEL OF TOPOLOGY FOR THIS DATASET geometry only

GEOMETRIC OBJECTS

- FEATURE CLASS NAME coal_power_plant_suitable_co_firing_v3
- * OBJECT TYPE point
- * OBJECT COUNT 257

ARCGIS FEATURE CLASS PROPERTIES

- FEATURE CLASS NAME coal_power_plant_suitable_co_firing_v3
- * FEATURE TYPE Simple
- * GEOMETRY TYPE Point
- * HAS TOPOLOGY FALSE
- * FEATURE COUNT 257
- * SPATIAL INDEX TRUE
- * LINEAR REFERENCING FALSE

Distribution

DISTRIBUTION FORMAT

- * NAME File Geodatabase Feature Class

Fields

DETAILS FOR OBJECT coal_power_plant_suitable_co_firing_v3

- * TYPE Feature Class
- * ROW COUNT 257

FIELD OBJECTID

- * ALIAS OBJECTID
- * DATA TYPE OID
- * WIDTH 4
- * PRECISION 0
- * SCALE 0
- * FIELD DESCRIPTION
Internal feature number.

- * DESCRIPTION SOURCE
Esri

- * DESCRIPTION OF VALUES
Sequential unique whole numbers that are automatically generated.

FIELD PNAME

- * ALIAS Plant Name
- * DATA TYPE String
- * WIDTH 8000
- * PRECISION 0
- * SCALE 0

FIELD ORISPL

- * ALIAS ORISPL
- * DATA TYPE Integer
- * WIDTH 4
- * PRECISION 0
- * SCALE 0

FIELD CNTYNAME

- * ALIAS County Name
- * DATA TYPE String
- * WIDTH 8000
- * PRECISION 0
- * SCALE 0

FIELD LAT

- * ALIAS LAT
- * DATA TYPE Double
- * WIDTH 8
- * PRECISION 0
- * SCALE 0

FIELD LON

- * ALIAS LON
- * DATA TYPE Double
- * WIDTH 8
- * PRECISION 0
- * SCALE 0

FIELD NAMEPCAP

- * ALIAS Plant Nameplate Capacity (MW)
- * DATA TYPE Double
- * WIDTH 8
- * PRECISION 0
- * SCALE 0

FIELD Shape

- * ALIAS Shape
- * DATA TYPE Geometry
- * WIDTH 0
- * PRECISION 0
- * SCALE 0
- * FIELD DESCRIPTION
Feature geometry.
- * DESCRIPTION SOURCE
Esri
- * DESCRIPTION OF VALUES
Coordinates defining the features.

FIELD Sum_of_Cyclone

- * ALIAS Number of Cyclone Boilers
- * DATA TYPE Integer
- * WIDTH 4
- * PRECISION 0
- * SCALE 0

FIELD Sum_of_Fluid

- * ALIAS Number of Fluid-bed Boilers
- * DATA TYPE Integer
- * WIDTH 4

* PRECISION 0
* SCALE 0

FIELD Sum_of_Wall

* ALIAS Number of Wall-fired Boilers
* DATA TYPE Integer
* WIDTH 4
* PRECISION 0
* SCALE 0

FIELD Sum_of_Tan

* ALIAS Number of Tangentially-fired Boilers
* DATA TYPE Integer
* WIDTH 4
* PRECISION 0
* SCALE 0

FIELD Total_Boilers

* ALIAS Total Number of Boilers
* DATA TYPE Integer
* WIDTH 4
* PRECISION 0
* SCALE 0

Metadata Details

* METADATA LANGUAGE English (UNITED STATES)
* METADATA CHARACTER SET utf8 - 8 bit UCS Transfer Format

SCOPE OF THE DATA DESCRIBED BY THE METADATA * dataset
SCOPE NAME * dataset

* LAST UPDATE 2021-10-06

ARCGIS METADATA PROPERTIES

METADATA FORMAT ArcGIS 1.0
METADATA STYLE FGDC CSDGM Metadata
STANDARD OR PROFILE USED TO EDIT METADATA FGDC

CREATED IN ARCGIS FOR THE ITEM 2021-10-06 09:13:01
LAST MODIFIED IN ARCGIS FOR THE ITEM 2021-10-06 10:40:43

AUTOMATIC UPDATES

HAVE BEEN PERFORMED Yes
LAST UPDATE 2021-10-06 10:39:49