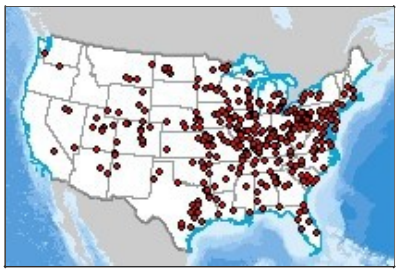
Coal Plants Suitable for Co-Firing Biomass



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 2012 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 (NOx), and sulfur dioxide (SO2); emissions in pounds for methane (CH4), nitrous oxide (N2O) and mercury (Hg); emission rates for CO2, NOx, 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 NOx 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 -158.106500 **East** -70.877200
North 47.678500 **South** 21.303400

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

Citation Contacts

RESPONSIBLE PARTY
ORGANIZATION'S NAME U.S. Environmental Protection Agency
CONTACT'S ROLE originator

Resource Details

DATASET LANGUAGES * English (UNITED STATES)

- Spatial representation type * vector
- * Processing environment Microsoft Windows 7 Version 6.1 (Build 7601) Service Pack 1; Esri ArcGIS 10.3.0.4322
- ArcGIS item properties
  - * Name coal_power_plant_suitable_co_firing_v2
  - * Location file://\\146.137.112.25\gis1\EISPC_Energy_Zones_Study\Data\Web_Mercator\Transfer_Web_Data\4__Production_Loaded\20161213-coal_power_plant_suitable_co_firing_v2_chg\data.gdb
    - * Access protocol Local Area Network

Extents

- Extent
  - Geographic extent
    - Bounding rectangle
      - Extent type Extent used for searching
      - * West longitude -158.106500
      - * East longitude -70.877200
      - * North latitude 47.678500
      - * South latitude 21.303400
      - * Extent contains the resource Yes
- Extent in the item's coordinate system
  - * West longitude -17600335.071107
  - * East longitude -7890013.812853
  - * South latitude 2428092.784057
  - * 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 -22041545.367140558
      - Y origin -33272760.666300893
      - XY scale 135368852.55357128
      - 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 8.2.6

Spatial Data Properties

- Vector
  - * Level of topology for this dataset geometry only
  - Geometric objects
    - Feature class name coal_power_plant_suitable_co_firing_v2
      - * Object type point
      - * Object count 386
- ArcGIS Feature Class Properties
  - Feature class name coal_power_plant_suitable_co_firing_v2
    - * Feature type Simple
    - * Geometry type Point
    - * Has topology FALSE
    - * Feature count 386
    - * Spatial index TRUE
    - * Linear referencing FALSE

Distribution

Distribution format

* Name File Geodatabase Feature Class

Fields

Details for object coal_power_plant_suitable_co_firing_v2

* Type Feature Class
* Row count 386

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 Plant_stat

* Alias Plant_stat
* Data type String
* Width 255
* Precision 0
* Scale 0

Field description
Plant State

Description source
U.S. EPA

Field PNAME

* Alias PNAME
* Data type String
* Width 255
* Precision 0
* Scale 0

Field description
Plant Name

Description source
U.S. EPA

Field CNTYNAME

* Alias CNTYNAME
* Data type String
* Width 255
* Precision 0
* Scale 0

Field description
County Name

Description source
U.S. EPA

Field NAMEPCAP

* Alias NAMEPCAP
* Data type Double
* Width 8
* Precision 0
* Scale 0

Field description
Plant Capacity

Description source
U.S. EPA

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_Cyclone
* Alias Sum_Cyclone
* Data type Double
* Width 8
* Precision 0
* Scale 0
Field description
Number of Cyclone Boilers
Description source
Argonne National Laboratory

Field Sum_Fluid
* Alias Sum_Fluid
* Data type Double
* Width 8
* Precision 0
* Scale 0
Field description
Number of Fluid-bed Boilers
Description source
Argonne National Laboratory

Field Sum_Wall
* Alias Sum_Wall
* Data type Double
* Width 8
* Precision 0
* Scale 0
Field description
Number of Wall-fired Boilers
Description source
Argonne National Laboratory

Field Sum_Tan
* Alias Sum_Tan
* Data type Double
* Width 8
* Precision 0
* Scale 0
Field description
Number of Tangentially-fired Boilers
Description source
Argonne National Laboratory

Field Total_Boil
* Alias Total_Boil
* Data type Double
* Width 8
* Precision 0
* Scale 0
Field description
Total Number of Boilers
Description source
Argonne National Laboratory

Metadata Details

* Metadata language English (UNITED STATES)
Scope of the data described by the metadata * dataset
Scope name * dataset
* Last update 2016-12-13
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 2016-12-13 12:38:56
Last modified in ArcGIS for the item 2016-12-13 13:20:35
Automatic updates
Have been performed Yes
Last update 2016-12-13 13:10:24