# Enhanced Geothermal System (EGS) Potential



**Tags**

There are no tags for this item.

## Summary

To show relative EGS potential.

## Description

This dataset is a qualitative assessment of geothermal potential (Enhanced Geothermal System EGS) for the US based on Levelized Cost of Electricity, with CLASS 1 being most favorable, and CLASS 5 being least favorable. This datset does not include shallow EGS resources located near hydrothermal sites or USGS assessment of undiscovered hydrothermal resources. The source data for deep EGS includes temperature at depth from 3 to 10 km provided by Southern Methodist University Geothermal Laboratory (Blackwell & Richards, 2009) and analyses (for regions with temperatures ≥150°C) performed by NREL (2009). CLASS 999 regions have temperatures less than 150°C at 10 km depth and were not assessed for deep EGS potential. Temperature at depth data for deep EGS in Alaska and Hawaii not available.

## Credits

There are no credits for this item.

## Use limitations

For internal use by NREL only.

## Extent

| | | | |
|---|---|---|---|
| **West** | -124.668758 | **East** | -66.998706 |
| **North** | 49.417080 | **South** | 25.166606 |

## 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 Enhanced Geothermal System (EGS) Potential

PRESENTATION FORMATS * digital map

## 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 geothermal_egs_potential_v2

## Extents

EXTENT
GEOGRAPHIC EXTENT
BOUNDING RECTANGLE
EXTENT TYPE Extent used for searching
* WEST LONGITUDE -124.668758
* EAST LONGITUDE -66.998706
* NORTH LATITUDE 49.417080
* SOUTH LATITUDE 25.166606
* EXTENT CONTAINS THE RESOURCE Yes

EXTENT IN THE ITEM'S COORDINATE SYSTEM
* WEST LONGITUDE -13878062.630522
* EAST LONGITUDE -7458261.830745
* SOUTH LATITUDE 2896222.290594
* NORTH LATITUDE 6345929.739444
* EXTENT CONTAINS THE RESOURCE Yes

## Resource Constraints

CONSTRAINTS
LIMITATIONS OF USE
For internal use by NREL only.

## 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
* CODESPACE EPSG
* VERSION 8.2.6

## Spatial Data Properties

VECTOR
* LEVEL OF TOPOLOGY FOR THIS DATASET geometry only

GEOMETRIC OBJECTS
FEATURE CLASS NAME geothermal_egs_potential_v2
* OBJECT TYPE composite
* OBJECT COUNT 1007

ARCGIS FEATURE CLASS PROPERTIES
FEATURE CLASS NAME geothermal_egs_potential_v2
* FEATURE TYPE Simple
* GEOMETRY TYPE Polygon
* HAS TOPOLOGY FALSE
* FEATURE COUNT 1007
* SPATIAL INDEX TRUE
* LINEAR REFERENCING FALSE

## Distribution

DISTRIBUTION FORMAT
* NAME File Geodatabase Feature Class

## Fields

DETAILS FOR OBJECT geothermal_egs_potential_v2
* TYPE Feature Class
* ROW COUNT 1007

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 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 CLASS
* Alias CLASS
* Data type SmallInteger
* Width 2
* Precision 0
* Scale 0
Field description
  Relative favorability of resource. 1 = most favorable, 5 = least favorable and 9999 = area not assessed because sufficient temperatures are too deep.

Field Shape_Length
* Alias Shape_Length
* Data type Double
* Width 8
* Precision 0
* Scale 0
* Field description
  Length of feature in internal units.

* Description source
  ESRI

* Description of values
  Positive real numbers that are automatically generated.

Field Shape_Area
* Alias Shape_Area
* Data type Double
* Width 8
* Precision 0
* Scale 0
* Field description
  Area of feature in internal units squared.

* Description source
  ESRI

* Description of values
  Positive real numbers that are automatically generated.

## Metadata Details

* Metadata language English (UNITED STATES)

Scope of the data described by the metadata * dataset
Scope name * dataset

* Last update 2016-08-29

ArcGIS metadata properties
  Metadata format ArcGIS 1.0

Standard or profile used to edit metadata FGDC
Metadata style FGDC CSDGM Metadata

Created in ArcGIS for the item 2016-08-05 13:33:05
Last modified in ArcGIS for the item 2016-08-29 90:40:80

Automatic updates
Have been performed Yes
Last update 2016-08-29 09:03:24