

Steel Industry Energy Consumption Prediction

kaggle.com/datasets/joebeachcapital/steel-industry-energy-consumption/data

Joakim Arvidsson · Updated a year ago

Data gathered is from DAEWOO Steel Co. Ltd in Gwangyang, South Korea



About Dataset

The information gathered is from the DAEWOO Steel Co. Ltd in Gwangyang, South Korea. It produces several types of coils, steel plates, and iron plates. The information on electricity consumption is held in a cloud-based system. The information on energy consumption of the industry is stored on the website of the Korea Electric Power Corporation (pccs.kepco.go.kr), and the perspectives on daily, monthly, and annual data are calculated and shown.

Variable Information

Data Variables	Type	Measurement
Industry Energy Consumption	Continuous	kWh
Lagging Current reactive power	Continuous	kVarh
Leading Current reactive power	Continuous	kVarh
tCO2(CO2)	Continuous	ppm
Lagging Current power factor	Continuous	%
Leading Current Power factor	Continuous	%
Number of Seconds from midnight	Continuous	S
Week status	Categorical	(Weekend (0) or a Weekday(1))
Day of week	Categorical	Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday
Load Type	Categorical	Light Load, Medium Load, Maximum Load

Variables Table

Variable Name	Role	Type	Demographic	Description	Units	Missing Values
date	Other	Date				no
Usage_kWh	Feature	Continuous		Industry Energy Consumption	kWh	no
Lagging_Current_Reactive.Power_kVarh	Feature	Continuous			kVarh	no
Leading_Current_Reactive_Power_kVarh	Feature	Continuous			kVarh	no
CO2(tCO2)	Feature	Continuous			ppm	no
Lagging_Current_Power_Factor	Feature	Continuous			%	no
Leading_Current_Power_Factor	Feature	Continuous			%	no
NSM	Feature	Integer			s	no
WeekStatus	Feature	Categorical		Weekend (0) or a Weekday(1)		no
Day_of_week	Feature	Categorical		Sunday, Monday, ..., Saturday		no
Load_Type	Target	Categorical		Light Load, Medium Load, Maximum Load		no

Usability

info

10.00

License

Attribution 4.0 International (CC BY 4.0)

Expected update frequency

Never

Tags

Steel_industry_data.csv(2.73 MB)

get_app

fullscreen

chevron_right

About this file

csv file

date & time

Usage in kWh

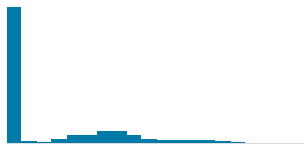


DateTime	Count
01/01/2018 - 01/18/2018	1,152
01/18/2018 - 02/04/2018	346
02/04/2018 - 02/21/2018	806
02/21/2018 - 03/11/2018	979
03/11/2018 - 03/28/2018	173
03/28/2018 - 04/14/2018	1,152
04/14/2018 - 05/02/2018	106
05/02/2018 - 05/19/2018	1,046
05/19/2018 - 06/05/2018	451
06/05/2018 - 06/22/2018	701
06/22/2018 - 07/10/2018	893
07/10/2018 - 07/27/2018	259
07/27/2018 - 08/13/2018	1,152
08/31/2018 - 09/17/2018	1,152

DateTime	Count
09/17/2018 - 10/04/2018	364
10/04/2018 - 10/22/2018	788
10/22/2018 - 11/08/2018	710
11/08/2018 - 11/25/2018	442
11/25/2018 - 12/12/2018	1,152

2017-12-31

2018-12-12

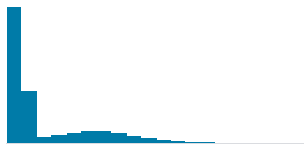


Label	Count
0.00 - 7.86	20,639
7.86 - 15.72	480
15.72 - 23.58	232
23.58 - 31.44	884
31.44 - 39.30	1,451
39.30 - 47.15	1,570
47.15 - 55.01	2,019
55.01 - 62.87	2,036
62.87 - 70.73	1,387
70.73 - 78.59	887
78.59 - 86.45	684
86.45 - 94.31	653
94.31 - 102.17	576
102.17 - 110.03	598

Label	Count
110.03 - 117.89	424
117.89 - 125.74	265
125.74 - 133.60	149
133.60 - 141.46	75
141.46 - 149.32	26
149.32 - 157.18	5

0

157

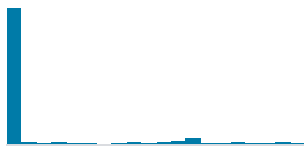


Label	Count
0.00 - 4.85	16,701
4.85 - 9.69	6,624
9.69 - 14.54	914
14.54 - 19.38	1,137
19.38 - 24.23	1,390
24.23 - 29.07	1,724
29.07 - 33.92	1,624
33.92 - 38.76	1,364
38.76 - 43.61	1,079
43.61 - 48.45	842
48.45 - 53.30	595
53.30 - 58.15	450
58.15 - 62.99	251

Label	Count
62.99 - 67.84	165
67.84 - 72.68	99
72.68 - 77.53	39
77.53 - 82.37	26
82.37 - 87.22	10
87.22 - 92.06	4
92.06 - 96.91	2

0

96.9



Label	Count
0.00 - 1.39	25,981
1.39 - 2.78	511
2.78 - 4.16	335
4.16 - 5.55	567
5.55 - 6.94	289
6.94 - 8.33	256
8.33 - 9.72	229
9.72 - 11.10	418
11.10 - 12.49	553
12.49 - 13.88	429
13.88 - 15.27	527
15.27 - 16.66	716

Label	Count
16.66 - 18.04	1,531
18.04 - 19.43	379
19.43 - 20.82	390
20.82 - 22.21	483
22.21 - 23.60	241
23.60 - 24.98	254
24.98 - 26.37	595
26.37 - 27.76	356

0

27.8



Label	Count
0.00 - 0.00	20,990
0.01 - 0.01	1,512
0.02 - 0.02	4,643
0.03 - 0.03	4,261
0.04 - 0.04	1,834
0.05 - 0.05	1,363
0.06 - 0.06	410
0.07 - 0.07	27

0

0.07



Label	Count
0.00 - 5.00	1
35.00 - 40.00	12
40.00 - 45.00	801
45.00 - 50.00	2,692
50.00 - 55.00	2,210
55.00 - 60.00	1,831
60.00 - 65.00	1,758
65.00 - 70.00	1,423
70.00 - 75.00	1,588
75.00 - 80.00	1,577
80.00 - 85.00	2,018
85.00 - 90.00	3,296
90.00 - 95.00	4,766
95.00 - 100.00	11,067

0

100



Label	Count
0.00 - 5.00	1
10.00 - 15.00	212
15.00 - 20.00	2,409

Label	Count
20.00 - 25.00	2,158
25.00 - 30.00	981
30.00 - 35.00	420
35.00 - 40.00	228
40.00 - 45.00	174
45.00 - 50.00	210
50.00 - 55.00	222
55.00 - 60.00	129
60.00 - 65.00	90
65.00 - 70.00	66
70.00 - 75.00	56
75.00 - 80.00	45
80.00 - 85.00	44
85.00 - 90.00	64
90.00 - 95.00	185
95.00 - 100.00	27,346

0

100



Label	Count
0.00 - 4275.00	1,825
4275.00 - 8550.00	1,825
8550.00 - 12825.00	1,825

Label	Count
12825.00 - 17100.00	1,460
17100.00 - 21375.00	1,825
21375.00 - 25650.00	1,825
25650.00 - 29925.00	1,825
29925.00 - 34200.00	1,460
34200.00 - 38475.00	1,825
38475.00 - 42750.00	1,825
42750.00 - 47025.00	1,825
47025.00 - 51300.00	1,460
51300.00 - 55575.00	1,825
55575.00 - 59850.00	1,825
59850.00 - 64125.00	1,825
64125.00 - 68400.00	1,460
68400.00 - 72675.00	1,825
72675.00 - 76950.00	1,825
76950.00 - 81225.00	1,825
81225.00 - 85500.00	1,825

0

85.5k

Weekday72%

Weekend28%

Monday15%

Tuesday14%

Other (24960)71%

01/01/2018 00:153.172.950073.21100900WeekdayMonday01/01/2018
00:3044.460066.771001800WeekdayMonday01/01/2018
00:453.243.280070.281002700WeekdayMonday01/01/2018
01:003.313.560068.091003600WeekdayMonday01/01/2018
01:153.824.50064.721004500WeekdayMonday01/01/2018
01:303.283.560067.761005400WeekdayMonday01/01/2018
01:453.64.140065.621006300WeekdayMonday01/01/2018
02:003.64.280064.371007200WeekdayMonday01/01/2018
02:153.283.640066.941008100WeekdayMonday01/01/2018
02:303.784.720062.511009000WeekdayMonday01/01/2018
02:453.464.030065.141009900WeekdayMonday01/01/2018
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04:303.564.280063.9510016200WeekdayMonday01/01/2018
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Data Explorer

(2.73 MB)

calendar_view_week

Steel_industry_data.csv

Summary

arrow_right

folder

1 file

arrow_right

calendar_view_week

11 columns

lightbulb

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What have you used this dataset for?

How would you describe this dataset?

text_snippet

Metadata

Collaborators

Authors

Coverage

DOI Citation

Provenance

License

Expected Update Frequency

insights

Activity Overview

visibility

Views



date	Views
Feb 15, 2025	3
Feb 16, 2025	6
Feb 17, 2025	10
Feb 18, 2025	7
Feb 20, 2025	5
Feb 21, 2025	3
Feb 22, 2025	2
Feb 23, 2025	9
Feb 24, 2025	5
Feb 26, 2025	4
Feb 27, 2025	8

date	Views
Feb 28, 2025	2
Mar 1, 2025	5
Mar 2, 2025	4
Mar 3, 2025	1
Mar 4, 2025	5
Mar 5, 2025	8
Mar 6, 2025	6
Mar 7, 2025	2
Mar 8, 2025	5
Mar 9, 2025	3
Mar 10, 2025	2
Mar 11, 2025	5
Mar 12, 2025	8
Mar 13, 2025	9
Mar 14, 2025	3
Mar 15, 2025	8

trending_up138in the last 30 days

download

Downloads

588



date	Downloads
Feb 16, 2025	1
Feb 17, 2025	3
Feb 18, 2025	2

date	Downloads
Feb 19, 2025	1
Feb 20, 2025	2
Feb 22, 2025	1
Feb 23, 2025	1
Feb 27, 2025	2
Feb 28, 2025	1
Mar 2, 2025	2
Mar 3, 2025	1
Mar 5, 2025	1
Mar 11, 2025	3
Mar 15, 2025	3

trending_up24in the last 30 days

downloading

Engagement

0.13816

downloads per view

forum

Comments

1

posted

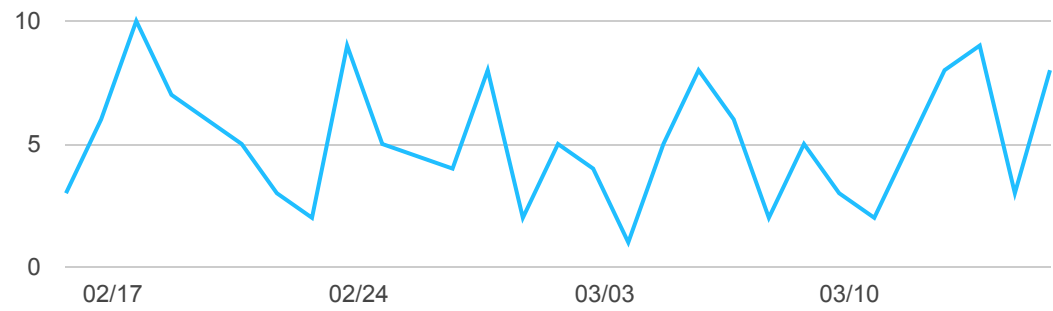
person

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Detail View

Views

Last month

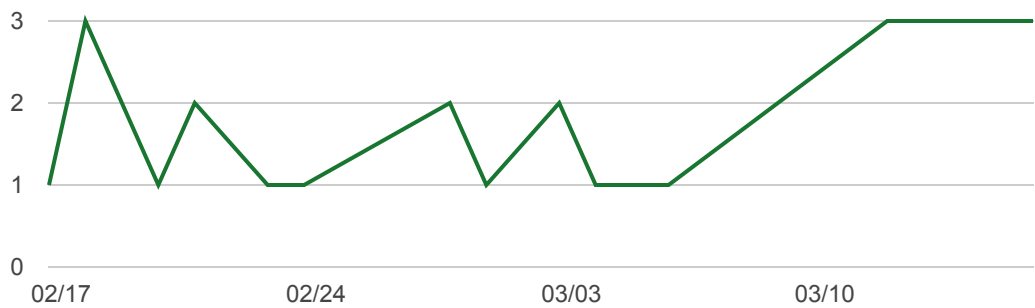


date	Views
Feb 15, 2025	3
Feb 16, 2025	6
Feb 17, 2025	10
Feb 18, 2025	7
Feb 20, 2025	5
Feb 21, 2025	3
Feb 22, 2025	2
Feb 23, 2025	9
Feb 24, 2025	5
Feb 26, 2025	4
Feb 27, 2025	8
Feb 28, 2025	2
Mar 1, 2025	5
Mar 2, 2025	4
Mar 3, 2025	1
Mar 4, 2025	5
Mar 5, 2025	8

date	Views
Mar 6, 2025	6
Mar 7, 2025	2
Mar 8, 2025	5
Mar 9, 2025	3
Mar 10, 2025	2
Mar 11, 2025	5
Mar 12, 2025	8
Mar 13, 2025	9
Mar 14, 2025	3
Mar 15, 2025	8

Downloads

Last month



date	Downloads
Feb 16, 2025	1
Feb 17, 2025	3
Feb 18, 2025	2
Feb 19, 2025	1
Feb 20, 2025	2

date	Downloads
Feb 22, 2025	1
Feb 23, 2025	1
Feb 27, 2025	2
Feb 28, 2025	1
Mar 2, 2025	2
Mar 3, 2025	1
Mar 5, 2025	1
Mar 11, 2025	3
Mar 15, 2025	3