* **World Energy Consumption**
* **Coal**

يعتبر الفحم من اقدام أنواع الطاقه التي عرفها الانسان والتي لاغني عنها الي وقتا هذا وهو يستخرج من جميع أنواع الأشجار

ومميزات الفحم :تكمن في رخيص الثمن وسهل النقل

وعيوبه ::انها مصاحب للتدخين الشديد الذي يلوث الهواء ويودي الي فتح في ثقب الاذون

* **Insight   
  ﻿At 9,894.67, 2011 had the highest Sum of coal\_prod\_change\_twh and was 258.23% higher than 2016, which had the lowest Sum of coal\_prod\_change\_twh at -6,253.50.﻿﻿ ﻿﻿ ﻿﻿Sum of coal\_prod\_change\_twh and total Sum of coal\_prod\_change\_pct are negatively correlated with each other.﻿﻿ ﻿﻿ ﻿﻿2011 accounted for 4.62% of Sum of coal\_prod\_change\_twh.﻿﻿ ﻿﻿ ﻿﻿Sum of coal\_prod\_change\_pct and Sum of coal\_prod\_change\_twh diverged the most when the year was 1920, when Sum of coal\_prod\_change\_pct were 37,419.78 higher than Sum of coal\_prod\_change\_twh.﻿﻿ ﻿﻿ ﻿﻿Across all 121 year, Sum of coal\_elec\_per\_capita ranged from 40690 to 142873, Sum of coal\_cons\_per\_capita ranged from 376,784.97 to 1,182,268.69, and Sum of coal\_prod\_per\_capita ranged from 233,716.14 to 677,788.64.﻿﻿**

يوضح من insight دولة افريقيا من اكثر الدوال التي تنتج الفحم بكمية رهيبة وبلخص دولتي و دولة (Zambia ,Zimbabwe )

Insight of two country Zimbabwe: **﻿At 22.10, 1961 had the highest Sum of coal\_prod\_change\_twh and was 179.83% higher than 1960, which had the lowest Sum of coal\_prod\_change\_twh at -27.68.﻿﻿ ﻿﻿ ﻿﻿Sum of coal\_prod\_change\_twh and total Sum of coal\_prod\_change\_pct are positively correlated with each other.﻿﻿ ﻿﻿ ﻿﻿1960 accounted for 8.69% of Sum of coal\_prod\_change\_twh.﻿﻿ ﻿﻿ ﻿﻿Sum of coal\_prod\_change\_pct and Sum of coal\_prod\_change\_twh diverged the most when the year was 1961, when Sum of coal\_prod\_change\_pct were 733.89 higher than Sum of coal\_prod\_change\_twh.﻿﻿ ﻿﻿ ﻿﻿Across all 120 year, Sum of coal\_elec\_per\_capita ranged from 112 to 387, Sum of coal\_cons\_per\_capita ranged from 5,684.76 to 5,684.76, and Sum of coal\_prod\_per\_capita ranged from 0 to 9,158.34.﻿﻿ ﻿﻿ ﻿**

**And Zambia**:: **﻿At 1.93, 1967 had the highest Sum of coal\_prod\_change\_twh and was 109.42% higher than 1900, which had the lowest Sum of coal\_prod\_change\_twh at -20.46.﻿﻿ ﻿﻿ ﻿﻿[]﻿﻿ ﻿﻿ ﻿﻿1900 accounted for 37.79% of Sum of coal\_prod\_change\_twh.﻿﻿ ﻿﻿ ﻿﻿Sum of coal\_prod\_change\_pct and Sum of coal\_prod\_change\_twh diverged the most when the year was 1967, when Sum of coal\_prod\_change\_pct were 236.21 higher than Sum of coal\_prod\_change\_twh.﻿﻿ ﻿﻿ ﻿﻿Across all 120 year, Sum of coal\_elec\_per\_capita ranged from 0 to 112, Sum of coal\_cons\_per\_capita ranged from 5,684.76 to 5,684.76, and Sum of coal\_prod\_per\_capita ranged from 0 to 1,475.23.﻿﻿**

* **Biofuel ﻿﻿**

يتضح من الداتا ان هذا النوع منتشر في جميع دول العالم بتساوي ولكن تتفوق دولتي اروبا وامريكيا الجنوبية واسيا

* **Insight**

**In (1900-1965) كان هذا النوع ثابت تماما بسبب عدم وجود بيانات بيها وتم اتخاذ المتوسط**

Sum of biofuel\_share\_elec and Sum of biofuel\_share\_energy diverged the most when the year was 1900, when Sum of biofuel\_share\_elec were 125 higher than Sum of biofuel\_share\_energy.

**In (1966-1969) كان هذا النوع محتفي تماما من جمبع دول العالم ومع بدابة 1970بدا الظهور في افريقيا**

Sum of biofuel\_share\_elec and Sum of biofuel\_share\_energy diverged the most when the year was 1966, when Sum of biofuel\_share\_elec were 200 higher than Sum of biofuel\_share\_energy.

**ولكن سرعا ما اختفي تمام الي عام1979**

**وبد في الظهور مع 1980 ومازال مستمرا في جميع انحاء العالم**

**وبحلول 2020 ظهر في قارة اروبا بكثرة**

﻿Sum of biofuel\_share\_elec and Sum of biofuel\_share\_energy diverged the most when the year was 2020, when Sum of biofuel\_share\_elec were 262 higher than Sum of biofuel\_share\_energy.

* **Carbon**

يتضح من الداتا ان هذ ا لنوع منتشر جدا في جميع انحاء العالم وفي الغالب تتفوقي اربع دوله وهما Austria ,North quire ,Yemen, Colombia

* Insight

﻿At 3,854.44, 2016 had the highest Sum of low\_carbon\_share\_energy and was 195.49% higher than 2020, which had the lowest Sum of low\_carbon\_share\_energy at 1,304.41.﻿﻿ ﻿﻿ ﻿﻿Sum of low\_carbon\_share\_energy and total Sum of low\_carbon\_energy\_per\_capita are negatively correlated with each other.﻿﻿ ﻿﻿ ﻿﻿2016 accounted for 1.40% of Sum of low\_carbon\_share\_energy.﻿﻿ ﻿﻿ ﻿﻿Sum of low\_carbon\_energy\_per\_capita and Sum of low\_carbon\_share\_energy diverged the most when the year was 2016, when Sum of low\_carbon\_energy\_per\_capita were 1,692,105.74 higher than Sum of low\_carbon\_share\_energy.﻿﻿ ﻿﻿ ﻿﻿Across all 121 year, Sum of low\_carbon\_electricity ranged from 11,551.73 to 36,876.02, Sum of low\_carbon\_share\_elec ranged from 3,254.62 to 8,620.65, and Sum of low\_carbon\_elec\_per\_capita ranged from 202,978.92 to 422,741.83.﻿﻿ ﻿﻿ ﻿﻿[]﻿﻿ ﻿﻿ ﻿

**Austria**: ﻿Across all 121 year, Sum of low\_carbon\_electricity ranged from 14.08 to 3,577.19, Sum of low\_carbon\_share\_elec ranged from 7.87 to 28.19, and Sum of low\_carbon\_elec\_per\_capita ranged from 848.93 to 2,451.13.

**North quire:** ﻿﻿Across all 120 year, Sum of low\_carbon\_electricity ranged from 9.91 to 2,217.56, Sum of low\_carbon\_share\_elec ranged from 40.87 to 86.64, and Sum of low\_carbon\_elec\_per\_capita ranged from 393.56 to 6,048.97.﻿﻿ ﻿

**Yemen:** ﻿Across all 50 year, Sum of low\_carbon\_electricity ranged from 0 to 10,109.12, Sum of low\_carbon\_share\_elec ranged from 0 to 39.11, and Sum of low\_carbon\_elec\_per\_capita ranged from 0 to 1,296.91.

**Colombia:**   
﻿At 33.58, 2005 had the highest Sum of low\_carbon\_share\_energy and was 201.11% higher than 1965, which had the lowest Sum of low\_carbon\_share\_energy at 11.15.﻿﻿ ﻿﻿ ﻿﻿Sum of low\_carbon\_share\_energy and total Sum of low\_carbon\_energy\_per\_capita are negatively correlated with each other.﻿﻿ ﻿﻿ ﻿﻿2005 accounted for 1.44% of Sum of low\_carbon\_share\_energy.﻿﻿ ﻿﻿ ﻿﻿[]﻿﻿ ﻿﻿ ﻿﻿Across all 121 year, Sum of low\_carbon\_electricity ranged from 18.71 to 2,578.74, Sum of low\_carbon\_share\_elec ranged from 33.83 to 84.68, and Sum of low\_carbon\_elec\_per\_capita ranged from 624.61 to 1,791.63.﻿﻿ ﻿﻿

* **Fossil**

A **fossil fuel** is a [hydrocarbon](https://en.wikipedia.org/wiki/Hydrocarbon)-containing material formed naturally in the [Earth's crust](https://en.wikipedia.org/wiki/Earth%27s_crust) from the remains of dead plants and animals that is extracted and [burned](https://en.wikipedia.org/wiki/Combustion) as a [fuel](https://en.wikipedia.org/wiki/Fuel). The main fossil fuels are [coal](https://en.wikipedia.org/wiki/Coal), [oil](https://en.wikipedia.org/wiki/Petroleum), and [natural gas](https://en.wikipedia.org/wiki/Natural_gas).[[2]](https://en.wikipedia.org/wiki/Fossil_fuel#cite_note-3) Fossil fuels may be burned to provide heat for use directly (such as for cooking or heating), to power engines (such as [internal combustion engines](https://en.wikipedia.org/wiki/Internal_combustion_engine) in motor vehicles), or to [generate electricity](https://en.wikipedia.org/wiki/Electricity_generation).[[3]](https://en.wikipedia.org/wiki/Fossil_fuel#cite_note-4) Some fossil fuels are refined into derivatives such as [kerosene](https://en.wikipedia.org/wiki/Kerosene), [gasoline](https://en.wikipedia.org/wiki/Gasoline) and [propane](https://en.wikipedia.org/wiki/Propane) before burning. The origin of fossil fuels is the [anaerobic decomposition](https://en.wikipedia.org/wiki/Anaerobic_decomposition) of buried dead [organisms](https://en.wikipedia.org/wiki/Organism), containing [organic molecules](https://en.wikipedia.org/wiki/Organic_molecules) created by [photosynthesis](https://en.wikipedia.org/wiki/Photosynthesis).[[4]](https://en.wikipedia.org/wiki/Fossil_fuel#cite_note-thermochemistry_of_formation-5) The conversion from these materials to high-carbon fossil fuels typically require a geological process of millions of years.

* **Insight :**

**﻿At 19,661.09, 2007 had the highest Sum of fossil\_share\_elec and was 439.33% higher than 2020, which had the lowest Sum of fossil\_share\_elec at 3,645.44.﻿﻿ ﻿﻿ ﻿﻿Sum of fossil\_share\_elec and total Sum of fossil\_share\_energy are negatively correlated with each other.﻿﻿ ﻿﻿ ﻿﻿2007 accounted for 1.49% of Sum of fossil\_share\_elec.﻿﻿ ﻿﻿ ﻿﻿Sum of fossil\_share\_energy and Sum of fossil\_share\_elec diverged the most when the year was 2020, when Sum of fossil\_share\_energy were 1,930.96 higher than Sum of fossil\_share\_elec.﻿﻿ ﻿﻿ ﻿﻿Zimbabwe and Zambia tied for highest Sum of fossil\_cons\_change\_twh at 114,524.40, followed by Yugoslavia. North Korea had the lowest Sum of fossil\_cons\_change\_twh at -44,965.20.﻿﻿ ﻿﻿ ﻿﻿Across all 242 country, Sum of fossil\_cons\_change\_twh ranged from -44,965.20 to 114,524.40.﻿﻿ ﻿﻿ ﻿**

**توضح الإحصائيات ان هذا الوقود يستخدم منذ قدم الزمن ومازال في كل القارات ولكن بحلول 2020بدا ينخفض قي افريقيا ويزيد في اروبا**

**In 2020: when Sum of fossil\_share\_energy were 1,930.96 higher than Sum of fossil\_share\_elec.﻿﻿ ﻿﻿ ﻿﻿Sum of fossil\_cons\_change\_twh was highest for China at 1,123.78, followed by World and Vietnam.﻿﻿ ﻿﻿ ﻿﻿Across all 69 country, Sum of fossil\_cons\_change\_twh ranged from -305.37 to 1,123.78.﻿﻿ ﻿﻿ ﻿**

* **Gas**

**Fuel gas** is any one of a number of [fuels](https://en.wikipedia.org/wiki/Fuel) that under ordinary conditions are [gaseous](https://en.wikipedia.org/wiki/Gas). Most fuel gases are composed of [hydrocarbons](https://en.wikipedia.org/wiki/Hydrocarbon) (such as [methane](https://en.wikipedia.org/wiki/Methane) or [propane](https://en.wikipedia.org/wiki/Propane)), [hydrogen](https://en.wikipedia.org/wiki/Hydrogen), [carbon monoxide](https://en.wikipedia.org/wiki/Carbon_monoxide), or mixtures thereof. Such gases are sources [energy](https://en.wikipedia.org/wiki/Energy) that can be readily transmitted and distributed through pipes.

* **Insight**
* **﻿At 7,385.49, 1999 had the highest Sum of gas\_share\_elec and was 298.28% higher than 2020, which had the lowest Sum of gas\_share\_elec at 1,854.36.﻿**﻿ ﻿**﻿ ﻿﻿Sum of gas\_share\_elec and total Sum of gas\_share\_energy are negatively correlated with each other.﻿﻿ ﻿**﻿ ﻿**﻿1999 accounted for 1.61% of Sum of gas\_share\_elec.﻿**﻿ ﻿﻿ ﻿**﻿Sum of gas\_share\_elec and Sum of gas\_share\_energy diverged the most when the year was 1965, when Sum of gas\_share\_elec were 1,848.12 higher than Sum of gas\_share\_energy.﻿**
* **﻿Across all 121 year, Sum of gas\_elec\_per\_capita ranged from 80,363.65 to 296,574.33, Sum of gas\_energy\_per\_capita ranged from 780,941.09 to 3,541,926.13, and Sum of gas\_prod\_per\_capita ranged from 323,870.26 to 5,091,405.14.﻿**﻿ ﻿﻿ ﻿
* **توضح الإحصائيات ان هذا الوقود يستخدم منذ قدم الزمن ومازال في كل القارات ولكن بحلول 2020بدا ينخفض قي افريقيا واسيا وامريكا الشمالية ويزيد في اروبا**

**.﻿﻿ ﻿**﻿ ﻿**﻿[]﻿**﻿ ﻿﻿ ﻿**﻿Sum of gas\_share\_elec and Sum of gas\_share\_energy diverged the most when the year was 2020, when Sum of gas\_share\_elec were 37.75 higher than Sum of gas\_share\_energy.﻿**

* **﻿2020 had 80,363.65 Sum of gas\_elec\_per\_capita, 780,941.09 Sum of gas\_energy\_per\_capita, and 633,495.58 Sum of gas\_prod\_per\_capita.﻿**﻿ ﻿﻿ ﻿
* **Hydro**

Hydrogen is a clean fuel that, when consumed in a fuel cell, produces only water. Hydrogen can be produced from a variety of domestic resources, such as natural gas, nuclear power, biomass, and renewable power like solar and wind. These qualities make it an attractive fuel option for transportation and electricity generation applications. It can be used in cars, in houses, for portable power, and in many more applications.

* **Insight**

**﻿At 90,392.05, 2016 had the highest Sum of hydro\_consumption and was 337.90% higher than 2020, which had the lowest Sum of hydro\_consumption at 20,642.19.﻿**﻿ ﻿﻿ ﻿**﻿Sum of hydro\_consumption and total Sum of hydro\_electricity are negatively correlated with each other.﻿**﻿ ﻿﻿ ﻿**﻿2016 accounted for 1.29% of Sum of hydro\_consumption.﻿**﻿ ﻿﻿ ﻿**﻿Sum of hydro\_consumption and Sum of hydro\_electricity diverged the most when the year was 2013, when Sum of hydro\_consumption were 77,320.28 higher than Sum of hydro\_electricity.﻿**﻿ ﻿﻿ ﻿**﻿Across all 121 year, Sum of hydro\_share\_energy ranged from 539.22 to 1,783.02 and Sum of hydro\_share\_elec ranged from 1,422.72 to 6,942.37.﻿**﻿ ﻿﻿ ﻿**﻿Colombia had the highest Sum of hydro\_cons\_change\_twh at 10,948.29. North Korea had the lowest Sum of hydro\_cons\_change\_twh at -9,976.08.﻿**﻿ ﻿﻿ ﻿

يوضح الإحصائيات ان هذا الوقود منتشر في كل دول العالم من سنة 1900-2019 تقريبا بلتساول في كل قارات العالم ولكن تتفوق اسيا واوربا وافريقيا ولكن بحلول 2020كدا ان يكون منعدم ماعدا ثلاث دول في افريقيا ولكن ثابت في اروبا وقل في اسيا برضو بنسبه كبيره ولكن بدا في التزيد في أمريكا الجنوبيه

* **Low\_crbon :** A **low-carbon fuel standard** (**LCFS**) is an [emissions trading](https://en.wikipedia.org/wiki/Emissions_trading) rule designed to reduce the average [carbon intensity](https://en.wikipedia.org/wiki/Carbon_intensity) of transportation fuels in a given jurisdiction, as compared to conventional [petroleum fuels](https://en.wikipedia.org/wiki/Petroleum_fuel), such as [gasoline](https://en.wikipedia.org/wiki/Gasoline) and [diesel](https://en.wikipedia.org/wiki/Diesel_fuel). The most common methods for reducing transportation carbon emissions are supplying electricity to [electric vehicles](https://en.wikipedia.org/wiki/Electric_vehicles), supplying [hydrogen fuel](https://en.wikipedia.org/wiki/Hydrogen_fuel) to [fuel cell vehicles](https://en.wikipedia.org/wiki/Fuel_cell_vehicles) and blending [biofuels](https://en.wikipedia.org/wiki/Biofuels), such as [ethanol](https://en.wikipedia.org/wiki/Ethanol), [biodiesel](https://en.wikipedia.org/wiki/Biodiesel), [renewable diesel](https://en.wikipedia.org/wiki/Renewable_diesel), and [renewable natural gas](https://en.wikipedia.org/wiki/Renewable_natural_gas) into fossil fuels.
* **Insight**

**﻿At 8,620.65, 2016 had the highest Sum of low\_carbon\_share\_elec and was 164.87% higher than 2020, which had the lowest Sum of low\_carbon\_share\_elec at 3,254.62.﻿**﻿ ﻿﻿ ﻿**﻿Sum of low\_carbon\_share\_elec and total Sum of low\_carbon\_share\_energy are negatively correlated with each other.﻿**﻿ ﻿﻿ ﻿**﻿2016 accounted for 1.33% of Sum of low\_carbon\_share\_elec.﻿**﻿ ﻿﻿ ﻿**﻿Sum of low\_carbon\_share\_elec and Sum of low\_carbon\_share\_energy diverged the most when the year was 1980, when Sum of low\_carbon\_share\_elec were 5,137.12 higher than Sum of low\_carbon\_share\_energy.﻿**﻿ ﻿﻿ ﻿**﻿Across all 121 year, Sum of low\_carbon\_electricity ranged from 11,551.73 to 36,876.02 and Sum of low\_carbon\_consumption ranged from 54,504.46 to 236,572.24.﻿**﻿ ﻿﻿ ﻿**﻿Zimbabwe and Zambia tied for highest Sum of low\_carbon\_cons\_change\_twh at 140,963.52, followed by Yugoslavia. Gabon had the lowest Sum of low\_carbon\_cons\_change\_twh at -3,916.56.﻿**﻿ ﻿﻿ ﻿

كان يوجود ثابت من 1900الي 1970 ولكن بسبب عدا مادخال بيانات ف هذا بيانات افتراضيه وبد التغير في قارة افريقيا وبحلول عام 1980بدا التزيد في جميع دول العالم وخاصة افريقيا و اروبا وفي عام 2018 بد التزيد في اسيا وبحلول عام2019 بدا افريقيا في التناقص الشديد

**In 2020 ::**﻿﻿ ﻿ ﻿﻿ ﻿**﻿Sum of low\_carbon\_share\_elec and Sum of low\_carbon\_share\_energy diverged the most when the year was 2020, when Sum of low\_carbon\_share\_elec were 1,950.21 higher than Sum of low\_carbon\_share\_energy.﻿**﻿ ﻿﻿ ﻿**﻿2020 had 19,653.38 Sum of low\_carbon\_electricity and 54,504.46 Sum of low\_carbon\_consumption.﻿**﻿ ﻿﻿ ﻿**﻿World had the highest Sum of low\_carbon\_cons\_change\_twh at 1,174.70, followed by China and India. Vietnam had the lowest Sum of low\_carbon\_cons\_change\_twh at -37.12.﻿**﻿ ﻿﻿ ﻿

* **Nuclear**

**Nuclear fuel** is material used in nuclear power stations to produce heat to power [turbines](https://en.wikipedia.org/wiki/Turbine). Heat is created when nuclear fuel undergoes [nuclear fission](https://en.wikipedia.org/wiki/Nuclear_fission)

* **Insight**

**﻿At 1116, 2002 had the highest Sum of nuclear\_share\_energy and was 366.95% higher than 1965, which had the lowest Sum of nuclear\_share\_energy at 239.﻿**﻿ ﻿﻿ ﻿**﻿Sum of nuclear\_share\_energy and total Sum of nuclear\_share\_elec are negatively correlated with each other.﻿**﻿ ﻿﻿ ﻿**﻿2002 accounted for 1.62% of Sum of nuclear\_share\_energy.﻿**﻿ ﻿﻿ ﻿**﻿Sum of nuclear\_share\_elec and Sum of nuclear\_share\_energy diverged the most when the year was 1990, when Sum of nuclear\_share\_elec were 383 higher than Sum of nuclear\_share\_energy.﻿**﻿ ﻿﻿ ﻿**﻿Across all 121 year, Sum of nuclear\_energy\_per\_capita ranged from 101056 to 531947 and Sum of nuclear\_elec\_per\_capita ranged from 15207 to 112976.﻿**﻿ ﻿﻿ ﻿**﻿Zimbabwe and Zambia tied for highest Sum of nuclear\_cons\_change\_twh at 25440, followed by Yugoslavia. Gabon had the lowest Sum of nuclear\_cons\_change\_twh at -4680.﻿**﻿ ﻿﻿ ﻿

In (1900-1970)كان يوجود ثابت بسبب عدم وجود ف هذا توفع مننا

ولكن بحلول عام بد في التغيير 1971 وفي عام 2020

* **In 2020**

﻿**﻿Sum of nuclear\_share\_elec and Sum of nuclear\_share\_energy diverged the most when the year was 2020, when Sum of nuclear\_share\_elec were 337 higher than Sum of nuclear\_share\_energy.﻿**﻿ ﻿﻿ ﻿**﻿2020 had 163516 Sum of nuclear\_energy\_per\_capita and 50300 Sum of nuclear\_elec\_per\_capita.﻿**﻿ ﻿﻿ ﻿**﻿World had the highest Sum of nuclear\_cons\_change\_twh at 212, followed by China and Japan. France had the lowest Sum of nuclear\_cons\_change\_twh at -39.﻿**﻿ ﻿﻿ ﻿

* **Oil: Fuel oil** is any of various [fractions](https://en.wikipedia.org/wiki/Fractional_distillation) obtained from the [distillation](https://en.wikipedia.org/wiki/Distillation) of [petroleum](https://en.wikipedia.org/wiki/Petroleum) (crude oil). Such oils include [distillates](https://en.wikipedia.org/wiki/Distillate) (the lighter fractions) and [residues](https://en.wikipedia.org/wiki/Residue_(chemistry)) (the heavier fractions). Fuel oils include **heavy fuel oil**, **marine fuel oil** (**MFO**), **bunker fuel**, **furnace oil** (**FO**), **gas oil** (**gasoil**), [heating oils](https://en.wikipedia.org/wiki/Heating_oil) (such as home heating oil), [diesel fuel](https://en.wikipedia.org/wiki/Diesel_fuel) and others.
* **Insight :   
  ﻿At 506,945.74, 2016 had the highest Sum of oil\_consumption and was 332.75% higher than 2020, which had the lowest Sum of oil\_consumption at 117,146.30.﻿**﻿ ﻿﻿ ﻿**﻿Sum of oil\_consumption and total Sum of oil\_electricity are negatively correlated with each other.﻿**﻿ ﻿﻿ ﻿**﻿2016 accounted for 1.26% of Sum of oil\_consumption.﻿**﻿ ﻿﻿ ﻿**﻿Across all 121 year, Sum of oil\_consumption ranged from 117,146.30 to 506,945.74, Sum of oil\_electricity ranged from 1063 to 7311, and Sum of oil\_production ranged from 32,566.39 to 353,219.73.﻿**﻿ ﻿﻿ ﻿**﻿Sum of oil\_share\_energy and Sum of oil\_share\_elec diverged the most when the year was 2020, when Sum of oil\_share\_energy were 2200 higher than Sum of oil\_share\_elec.﻿**﻿ ﻿﻿ ﻿**﻿Zimbabwe and Zambia tied for highest Sum of oil\_cons\_change\_twh at 52656, followed by Yugoslavia. North Korea had the lowest Sum of oil\_cons\_change\_twh at -13,393.68.﻿**﻿ ﻿﻿ ﻿
* **In 1970:   
  ﻿[]﻿**﻿ ﻿﻿ ﻿**﻿Sum of oil\_consumption and total Sum of oil\_electricity are negatively correlated with each other.﻿**﻿ ﻿﻿ ﻿**﻿[]﻿**﻿ ﻿﻿ ﻿**﻿1970 had 329,328.24 Sum of oil\_consumption, 2883 Sum of oil\_electricity, and 187,228.18 Sum of oil\_production.﻿**﻿ ﻿﻿ ﻿**﻿Sum of oil\_share\_energy and Sum of oil\_share\_elec diverged the most when the year was 1970, when Sum of oil\_share\_energy were 1856 higher than Sum of oil\_share\_elec.﻿**﻿ ﻿﻿ ﻿**﻿World had the highest Sum of oil\_cons\_change\_twh at 2,131.18, followed by Europe and Zimbabwe. North Korea had the lowest Sum of oil\_cons\_change\_twh at -111.61.﻿**﻿ ﻿﻿ ﻿

In 2020: ﻿ ﻿**﻿2020 had 117,146.30 Sum of oil\_consumption, 1821 Sum of oil\_electricity, and 103,213.40 Sum of oil\_production.﻿**﻿ ﻿﻿ ﻿**﻿Sum of oil\_share\_energy and Sum of oil\_share\_elec diverged the most when the year was 2020, when Sum of oil\_share\_energy were 2200 higher than Sum of oil\_share\_elec.﻿**﻿ ﻿﻿ ﻿**﻿Sum of oil\_cons\_change\_twh was highest for World at 438.80, followed by China and Iran.﻿**﻿ ﻿

* **Renewables**

**Renewable Fuels** are [fuels](https://en.wikipedia.org/wiki/Fuel) produced from renewable resources. Examples include: [biofuels](https://en.wikipedia.org/wiki/Biofuels) (e.g. [Vegetable oil used as fuel](https://en.wikipedia.org/wiki/Vegetable_oil_used_as_fuel), [ethanol](https://en.wikipedia.org/wiki/Ethanol), [methanol](https://en.wikipedia.org/wiki/Methanol_fuel) from [clean energy and carbon dioxide](https://en.wikipedia.org/wiki/Carbon_Recycling_International)[[1]](https://en.wikipedia.org/wiki/Renewable_fuels#cite_note-1) or biomass, and biodiesel), [Hydrogen fuel](https://en.wikipedia.org/wiki/Hydrogen_fuel) (when produced with renewable processes), and fully synthetic fuel (also known as [electrofuel](https://en.wikipedia.org/wiki/Electrofuel" \o "Electrofuel)) produced from ambient [carbon dioxide](https://en.wikipedia.org/wiki/Carbon_dioxide) and water. This is in contrast to [non-renewable](https://en.wikipedia.org/wiki/Non-renewable_resource) fuels such as [natural gas](https://en.wikipedia.org/wiki/Natural_gas), [LPG](https://en.wikipedia.org/wiki/Liquified_petroleum_gas) ([propane](https://en.wikipedia.org/wiki/Propane)), [petroleum](https://en.wikipedia.org/wiki/Petroleum) and other [fossil fuels](https://en.wikipedia.org/wiki/Fossil_fuels) and [nuclear energy](https://en.wikipedia.org/wiki/Nuclear_power).

* **Insight**

**﻿At 7,746.06, 2016 had the highest Sum of renewables\_share\_elec and was 202.36% higher than 2020, which had the lowest Sum of renewables\_share\_elec at 2,561.88.﻿﻿ ﻿﻿ ﻿﻿Sum of renewables\_share\_elec and total Sum of renewables\_share\_energy are negatively correlated with each other.﻿﻿ ﻿﻿ ﻿﻿2016 accounted for 1.32% of Sum of renewables\_share\_elec.﻿﻿ ﻿﻿ ﻿﻿Sum of renewables\_share\_elec and Sum of renewables\_share\_energy diverged the most when the year was 1980, when Sum of renewables\_share\_elec were 5,178.46 higher than Sum of renewables\_share\_energy.﻿﻿ ﻿﻿ ﻿﻿Across all 121 year, Sum of renewables\_consumption ranged from 38,228.72 to 159,940.66 and Sum of renewables\_electricity ranged from 9,262.79 to 23,629.45.﻿﻿ ﻿﻿ ﻿﻿Zimbabwe and Zambia tied for highest Sum of renewables\_cons\_change\_twh at 115,529.40, followed by Yugoslavia. OPEC had the lowest Sum of renewables\_cons\_change\_twh at -3,627.23.﻿﻿ ﻿﻿ ﻿**

* **other\_renewables**
* **insight :   
  ﻿At 162,770.15, 2019 had the highest Sum of other\_renewables\_energy\_per\_capita and was 421.81% higher than 1967, which had the lowest Sum of other\_renewables\_energy\_per\_capita at 31,193.31.﻿﻿ ﻿﻿ ﻿﻿Sum of other\_renewables\_energy\_per\_capita and total Sum of other\_renewables\_elec\_per\_capita are negatively correlated with each other.﻿﻿ ﻿﻿ ﻿﻿2019 accounted for 1.40% of Sum of other\_renewables\_energy\_per\_capita.﻿﻿ ﻿﻿ ﻿﻿Sum of other\_renewables\_energy\_per\_capita and Sum of other\_renewables\_elec\_per\_capita diverged the most when the year was 2019, when Sum of other\_renewables\_energy\_per\_capita were 121,826.15 higher than Sum of other\_renewables\_elec\_per\_capita.﻿﻿ ﻿﻿ ﻿﻿Across all 121 year, Sum of other\_renewables\_share\_energy ranged from 81.01 to 335.74 and Sum of other\_renewables\_share\_elec ranged from 266 to 725.﻿﻿ ﻿﻿ ﻿﻿Zimbabwe and Zambia tied for highest Sum of other\_renewables\_cons\_change\_twh at 10,250.64, followed by Yugoslavia. North Korea had the lowest Sum of other\_renewables\_cons\_change\_twh at -716.88.﻿﻿ ﻿﻿ ﻿**
* **in 2005 :   
  ﻿[]﻿﻿ ﻿﻿ ﻿﻿Sum of other\_renewables\_energy\_per\_capita and total Sum of other\_renewables\_elec\_per\_capita are negatively correlated with each other.﻿﻿ ﻿﻿ ﻿﻿[]﻿﻿ ﻿﻿ ﻿﻿Sum of other\_renewables\_energy\_per\_capita and Sum of other\_renewables\_elec\_per\_capita diverged the most when the year was 2005, when Sum of other\_renewables\_energy\_per\_capita were 97,808.33 higher than Sum of other\_renewables\_elec\_per\_capita.﻿﻿ ﻿﻿ ﻿﻿2005 had 274.60 Sum of other\_renewables\_share\_energy and 442 Sum of other\_renewables\_share\_elec.﻿﻿ ﻿﻿ ﻿﻿The top 4 country all had Sum of other\_renewables\_cons\_change\_twh of 85.42.﻿﻿ ﻿﻿ ﻿**
* **in 2020:   
  ﻿[]﻿﻿ ﻿﻿ ﻿﻿Sum of other\_renewables\_energy\_per\_capita and total Sum of other\_renewables\_elec\_per\_capita are negatively correlated with each other.﻿﻿ ﻿﻿ ﻿﻿[]﻿﻿ ﻿﻿ ﻿﻿Sum of other\_renewables\_energy\_per\_capita and Sum of other\_renewables\_elec\_per\_capita diverged the most when the year was 2020, when Sum of other\_renewables\_energy\_per\_capita were 32,196.33 higher than Sum of other\_renewables\_elec\_per\_capita.﻿﻿ ﻿﻿ ﻿﻿2020 had 127.80 Sum of other\_renewables\_share\_energy and 353 Sum of other\_renewables\_share\_elec.﻿﻿ ﻿﻿ ﻿﻿Sum of other\_renewables\_cons\_change\_twh was highest for World at 85.42, followed by Japan and China.﻿﻿ ﻿﻿ ﻿**
* **Solar :**

**Solar fuels** are fuels made from common substances like water and carbon dioxide using the energy of sunlight. There is vast energy in sunlight striking the earth, but it is time-varying and dispersed, making it challenging to harness sunlight for practical use. We have successfully tapped solar energy to make electricity but aren’t yet able to efficiently make liquid fuels from it. Solar fuels could be an abundant supply of sustainable, storable, and portable energy

* **Insight :   
  ﻿[]﻿﻿ ﻿﻿ ﻿﻿Sum of solar\_electricity and total Sum of solar\_consumption are negatively correlated with each other.﻿﻿ ﻿﻿ ﻿﻿[]﻿﻿ ﻿﻿ ﻿﻿Sum of solar\_consumption and Sum of solar\_electricity diverged the most when the year was 2016, when Sum of solar\_consumption were 12,188.72 higher than Sum of solar\_electricity.﻿﻿ ﻿﻿ ﻿﻿Across all 121 year, Sum of solar\_energy\_per\_capita ranged from 14425 to 69816 and Sum of solar\_elec\_per\_capita ranged from 2,580.08 to 17,753.52.﻿﻿ ﻿﻿ ﻿﻿Zimbabwe and Zambia tied for highest Sum of solar\_cons\_change\_twh at 41400, followed by Yugoslavia.﻿﻿ ﻿﻿ ﻿**

**In (1900-1970) كان يوجود ثابت بسبب عدم ادخال البيانات وبدا التغير الملحوظ من سنه 1970 بوجود هذا الوقود في جنوب افريقيا واليمين وبحلول عام 1980 بدا الظهور في اسيا وامريكا الجنوبيه وبحلول 2019 بدات اروبا في الظهور الشديد**

* **In 2020**

**﻿﻿ ﻿﻿Sum of solar\_consumption and Sum of solar\_electricity diverged the most when the year was 2020, when Sum of solar\_consumption were 2,175.27 higher than Sum of solar\_electricity.﻿﻿ ﻿﻿ ﻿﻿2020 had 24304 Sum of solar\_energy\_per\_capita and 10,419.75 Sum of solar\_elec\_per\_capita.﻿﻿ ﻿﻿ ﻿﻿World had the highest Sum of solar\_cons\_change\_twh at 345, followed by China and Uruguay. United Kingdom had the lowest Sum of solar\_cons\_change\_twh at -1.﻿﻿ ﻿﻿ ﻿بدا الانخفاض في افريقيا نهاىيا وزياده في اروبا**

* **Wind**

Wind is used to produce electricity by converting the kinetic energy of air in motion into electricity. In modern wind turbines, wind rotates the rotor blades, which convert kinetic energy into rotational energy. This rotational energy is transferred by a shaft which to the generator, thereby producing electrical energy.من اهم الطافات الموجوده في العلم الحديث والتي لاغني عنها مستقبليا

* **Insight :   
  ﻿At 31219, 2016 had the highest Sum of wind\_consumption and was 296.48% higher than 2020, which had the lowest Sum of wind\_consumption at 7874.﻿﻿ ﻿﻿ ﻿﻿Sum of wind\_consumption and total Sum of wind\_electricity are negatively correlated with each other.﻿﻿ ﻿﻿ ﻿﻿2016 accounted for 1.39% of Sum of wind\_consumption.﻿﻿ ﻿﻿ ﻿﻿Sum of wind\_consumption and Sum of wind\_electricity diverged the most when the year was 2016, when Sum of wind\_consumption were 27948 higher than Sum of wind\_electricity.﻿﻿ ﻿﻿ ﻿﻿Across all 121 year, Sum of wind\_share\_energy ranged from 118 to 522 and Sum of wind\_share\_elec ranged from 96.73 to 851.84.﻿﻿ ﻿﻿ ﻿﻿Zimbabwe and Zambia tied for highest Sum of wind\_cons\_change\_twh at 45960, followed by Yugoslavia.﻿﻿ ﻿﻿ ﻿**
* بدت هذه الطاقه في جنوب افريقيا
* **In 2020:   
  ﻿﻿ ﻿﻿Sum of wind\_consumption and Sum of wind\_electricity diverged the most when the year was 2020, when Sum of wind\_consumption were 4720 higher than Sum of wind\_electricity.﻿﻿ ﻿﻿ ﻿﻿2020 had 182 Sum of wind\_share\_energy and 584.23 Sum of wind\_share\_elec.﻿﻿ ﻿﻿ ﻿﻿Sum of wind\_cons\_change\_twh was highest for World at 383, followed by China and Uruguay.﻿﻿ ﻿﻿ ﻿**
* **electricity** energy production. The other two are transport and heating.

As we see in more detail in this article, the breakdown of sources – coal, oil, gas, nuclear and renewables – is different in the electricity versus the energy mix. Generally, low-carbon sources (nuclear and renewables) account for a larger share in our electricity mix than our total energy mix.

* **Insight :**   
  ﻿[]﻿﻿ ﻿﻿ ﻿﻿Sum of nuclear\_electricity and total Sum of other\_renewable\_electricity are negatively correlated with each other.﻿﻿ ﻿﻿ ﻿﻿1999 accounted for 2.22% of Sum of nuclear\_electricity.﻿﻿ ﻿﻿ ﻿﻿Across all 121 year, Sum of nuclear\_electricity ranged from 2289 to 14176, Sum of other\_renewable\_electricity ranged from 719 to 2144, and Sum of oil\_electricity ranged from 1063 to 7311.﻿﻿ ﻿﻿ ﻿
* **In (1900-1969) ثابتوا بسبب عدم وجود البيانات**
* **In(1970-2000)**   
  ﻿[]﻿﻿ ﻿﻿ ﻿﻿Sum of nuclear\_electricity and total Sum of other\_renewable\_electricity are negatively correlated with each other.﻿﻿ ﻿﻿ ﻿﻿[]﻿﻿ ﻿﻿ ﻿﻿2000 had 8488 Sum of nuclear\_electricity, 722 Sum of other\_renewable\_electricity, and 4453 Sum of oil\_electricity.﻿﻿ ﻿﻿ ﻿
* **In (2001-2020)** ﻿2019 had 8238 Sum of nuclear\_electricity, 2036 Sum of other\_renewable\_electricity, and 3754 Sum of oil\_electricity
* **Gdp&population**
* **Insight**

﻿**At 278353140971328, 2016 had the highest Sum of gdp and was 1,253.98% higher than 1921, which had the lowest Sum of gdp at 20558196827648.﻿﻿ ﻿﻿ ﻿﻿2016 had the highest Sum of gdp at 278353140971328, followed by 2015 and 2014. 1921 had the lowest Sum of gdp at 20558196827648.﻿﻿ ﻿﻿ ﻿﻿2016 accounted for 2.69% of Sum of gdp.﻿﻿ ﻿﻿ ﻿﻿Across all 121 year, Sum of gdp ranged from 20558196827648 to 278353140971328.﻿﻿ ﻿﻿ ﻿**