Untitled

Shouvik

2022-12-08

```
fossil_fuel <- read_csv("fossil-fuel-primary-energy.csv")
```

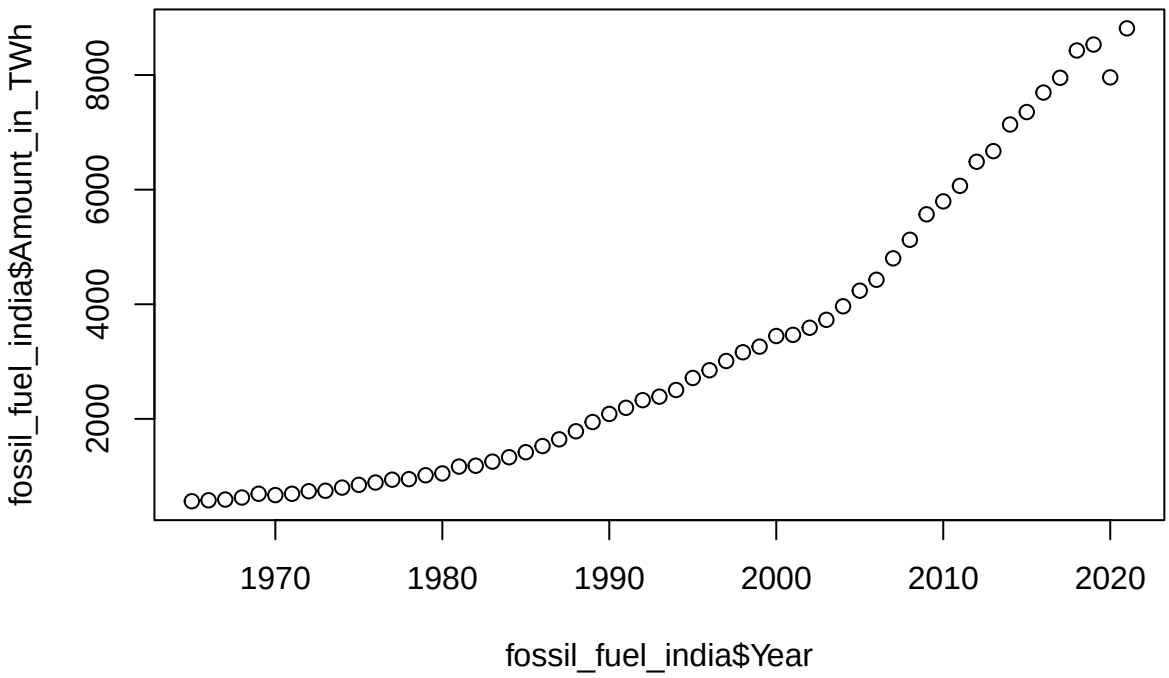
```
## New names:
## Rows: 5187 Columns: 5
## -- Column specification
## -------------------------------------------------------- Delimiter: "," chr
## (2): Entity, Code dbl (3): ...1, Year, Fossil fuels (TWh)
## i Use `spec()` to retrieve the full column specification for this data. i
## Specify the column types or set `show_col_types = FALSE` to quiet this message.
## * `` -> `...1`
```

```
colnames(fossil_fuel) <- c('ID','Country','Code','Year','Amount_in_TWh')

fossil_fuel_india <- fossil_fuel %>% filter(Country %in% c("India")) %>% select(,c('Year','Amount_in_TW
head(fossil_fuel_india)
```

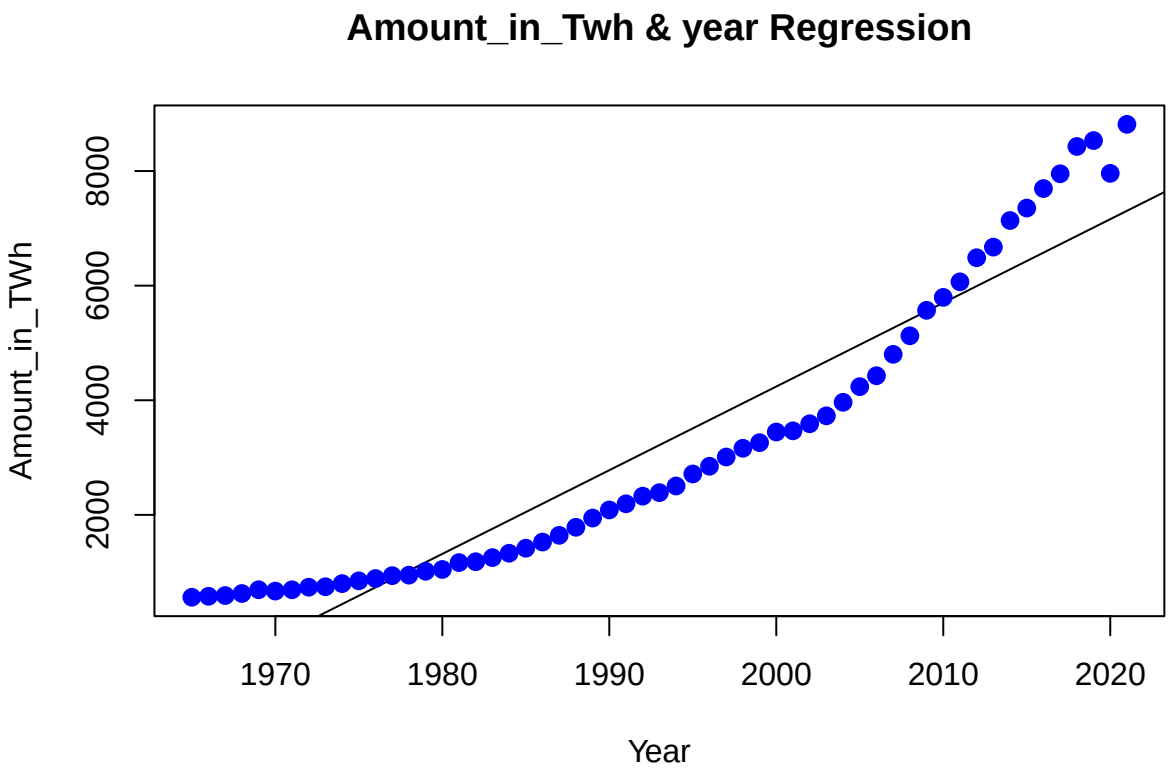
```
## # A tibble: 6 x 2
##    Year Amount_in_TWh
##   <dbl>         <dbl>
## 1  1965          563.
## 2  1966          579.
## 3  1967          592.
## 4  1968          628.
## 5  1969          694.
## 6  1970          670.
```

```
plot(fossil_fuel_india$Year,fossil_fuel_india$Amount_in_TWh)
```




```
x <- fossil_fuel_india$Amount_in_TWh
y <- fossil_fuel_india$Year
relation <- lm(y~x)


# Plot the chart.
plot(y,x,col = "blue",main = "Amount_in_Twh & year Regression",
abline(lm(x~y)),cex = 1.3,pch = 16,xlab = "Year",ylab = "Amount_in_TWh")
```




```
summary(relation)
```

```
##
## Call:
## lm(formula = y ~ x)
##
## Residuals:
##     Min      1Q  Median      3Q     Max
## -11.636  -4.102   1.107   4.490   6.849
##
## Coefficients:
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept) 1.973e+03  1.133e+00 1740.88   <2e-16 ***
## x           6.165e-03  2.768e-04   22.27   <2e-16 ***
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 5.292 on 55 degrees of freedom
## Multiple R-squared:  0.9002, Adjusted R-squared:  0.8983
## F-statistic: 495.9 on 1 and 55 DF,  p-value: < 2.2e-16
```