

Código:

```
# Instalar e carregar os pacotes necessários, se ainda não estiverem instalados

if (!requireNamespace("ggplot2", quietly = TRUE)) install.packages("ggplot2")

if (!requireNamespace("readxl", quietly = TRUE)) install.packages("readxl")

library(ggplot2)

library(readxl)

# Ler os dados

data <- read_xlsx("~/Documents/2ANO-UNI/Semestre_2/PE/Projeto/Exercicio3/electricity.xlsx")

# Filtrar os dados para os países de interesse e dados de energia renovável a partir de 2015

countries <- c("Italy", "Latvia", "IEA Total")

selected_data <- subset(data, PRODUCT == "Renewables" & YEAR >= 2015 & COUNTRY %in% countries)

# Converter para formato dos dados desejado

selected_data$share_percentage <- as.numeric(selected_data$share) * 100

selected_data$DATE <- as.Date(paste(selected_data$YEAR, selected_data$MONTH, "01", sep = "-"))

# Criar o gráfico

ggplot(selected_data, aes(x = DATE, y = share_percentage, color = COUNTRY)) +

  geom_line() +

  geom_point() +

  labs(x = "Date", y = "Renewables (%)", title = "Monthly Evolution of Renewable Energy Proportion") +

  scale_y_continuous(limits = c(0, 100), breaks = seq(0, 100, by = 10)) +

  scale_x_date(date_labels = "%Y %b", date_breaks = "6 months") +

  theme(

    plot.title = element_text(face = "bold", size = 14, hjust = 0.5),

    axis.title.x = element_text(face = "bold", size = 10),

    axis.title.y = element_text(face = "bold", size = 10),

    panel.border = element_rect(colour = "black", fill = NA, size = 1)

  )
```

