

Pergunta 3

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```
library(ggplot2)
```

```
dados <- readxl::read_excel("IST/PE/Projeto/Pergunta 3/electricity.xlsx")
```

```
filtered_data <- subset(dados, PRODUCT == "Renewables" & YEAR >= 2015 & COUNTRY %in% c("IEA Total", "Italy", "Latvia"))
```

```
filtered_data$share <- as.numeric(filtered_data$share) * 100
```

```
filtered_data$date <- as.Date(paste("1", filtered_data$MONTH, filtered_data$YEAR, sep = "/"), "%d/%m/%Y")
```

```
plot <- ggplot(filtered_data) +  
  geom_line(aes(x = date, y = share, color = COUNTRY)) +  
  geom_point(aes(x = date, y = share, color = COUNTRY)) +  
  labs(  
    title = "Monthly Proportion of Renewable Electricity Production (2015-2022)",  
    x = "Date",  
    y = "Renewables Percentage",  
    color = "Country")
```

```
ggsave("IST/PE/Projeto/Pergunta 3/renewables_proportion.pdf", plot, width = 10, height = 6)
```

