**Intro Slide**

* Our group chose to analyze global electricity statistics from a dataset that contains yearly data from 1980 to 2021.

**Overview Slide**

* Here’s an overview of the information we plan on sharing tonight
* First, I will discuss the importance of energy consumption at a high-level
* Next, Joaquin is going to discuss the trend in global electricity consumption over time.
* Then, Leo is going to dive deeper into a more granular view of electrical consumption by region and then country to identify trends.
* Then, I will share countries with the highest imports/exports for electrical energy.
* Finally, Seth will share information about electrical distribution losses and we will tie everything together with our conclusion

**Introduction**

* So to begin, energy is the ultimate form of currency
* We use money as a medium to try and quantify the exchange of value between goods in services, but in its most basic form we are just exchanging energy
* For example, we use energy from food to go to work and earn a living, and we use the money that we earn to buy more food and pay our electricity bills
* Therefore, our entire species are key stakeholders with this problem of energy consumption.
* Energy consumption is an economic indicator: the more buildings you have, the more electrical energy is needed to power those buildings.
* Currently, most of our energy is derived from fossil fuels which are scarce resources.
* As these assets begin to deplete over time, we must transition to other sources of energy to meet our current demand
* If not, countries will have to lower their standard of living (no one wants to do this) and will likely go to war over the remaining resources
* Finally, climate change policies also play a huge role in this discussion: if we are to outright ban fossil fuels, then the economies of countries with high energy consumption will take a huge hit, requiring its citizens to adjust their current standard of living since we do not have the renewable energy infrastructure in place to meet current demand

**Imports/Exports**

* I’m going to show 2 views of the top 10 importers and exporters of electrical energy for the total time-period of our dataset, but we are going to mainly focus on China and the United States
* If you are an energy importer, that means you consume more energy than you produce and have to rely on the supply of external parties to meet your energy demands.
* Here we can see that the United States is the second biggest importer of energy which amazes me that countries still want to help us considering how our leaders like to go to war and pillage the earth
* Now if we look at the top 10 exporters, we will see that China ranks number 7, which means over the last 40 years China has been able to meet its current energy demand and provide its excess energy to external parties
* As an American, seeing these two views sets off red flags because if countries no longer want to export resources to us we are going to have to lower our standard of living
* China is better positioned than us