Hello, everyone. My name is Yerin Lee, and Today, I'm going to talk about whether mandatory EV adoption is the right decision or premature at this stage.

As countries push for EV adoption to address climate change, some question whether mandatory EV policies are practical and effective. In this presentation, I will emphasize that mandating EVs is premature due to issues with charging infrastructure, economic burdens, and environmental concerns related to battery production and disposal.

Let’s begin by exploring the issue of inadequate charging infrastructure.

EV charging stations are limited compared to gas stations, making long-distance travel inconvenient.

Charging is also slow—4-5 hours compared to minutes for refueling.

Not only that, the high cost of installing charging stations deters both private and public investment.

The currently insufficient charging infrastructure supports that mandating electric vehicles is premature.

Now, let’s discuss the economic challenges of adopting electric vehicles.

A key barrier is the high upfront cost of EVs compared to traditional vehicles.

Additionally, the cost of replacing EV batteries can add an additional financial burden, often amounting to thousands of dollars.

While government subsidies help, they are only a temporary solution and put pressure on public resources.

Moving on, let’s move on to the environmental challenges of electric vehicles.

First, mining raw materials like lithium and cobalt for EV batteries leads to habitat destruction and water pollution.

Second, the production of EV batteries requires a lot of energy, often from fossil fuels.

Lastly, the disposal of batteries causes soil pollution due to chemicals and heavy metals. And battery recycling technology is still inadequate.

Some people argue that we should rush to mandate electric vehicles in order to reduce carbon emissions.

However, it’s important to recognize that the current state of EV technology and infrastructure presents significant limitations. According to the journal Hidden Effects and Externalities of Electric Vehicles, over 63% of global electricity is still generated from fossil fuels, meaning that EV cannot fully resolve environmental issues.

In conlcusion, inadequate charging infrastructure, economic burdens, and environmental challenges make it clear that we are not yet ready to implement mandatory EV adoption. Policymakers should focus on expanding charging networks, investing in renewable energy, and developing recycling systems. A phased and sustainable approach will ensure the long-term success of EV adoption.

This is a reference list.

And Thank you for listening to my presentation.