



Greenhouse Gases

Predictions



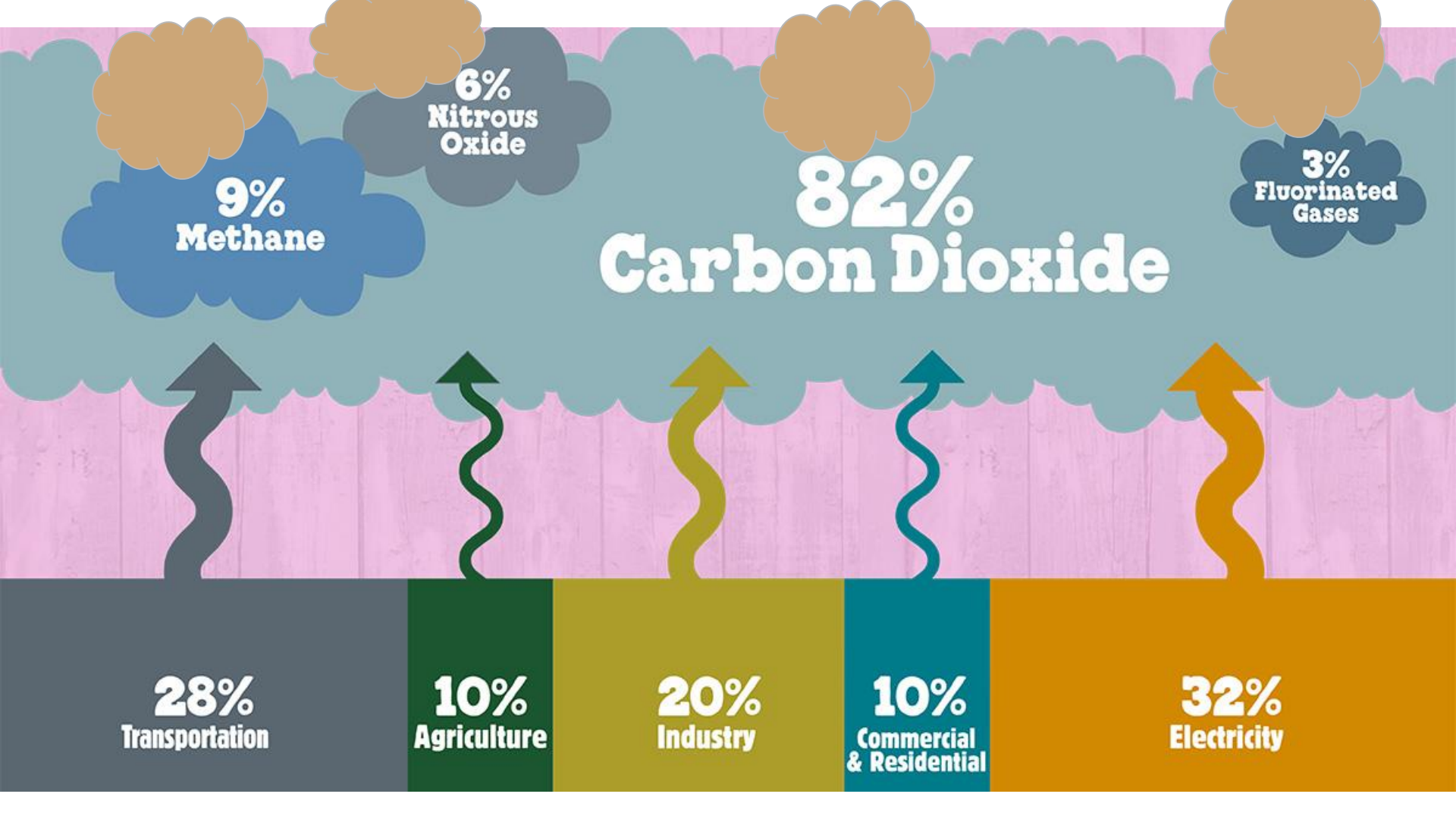
Sonia Mahop

Background:

- Greenhouse gases are naturally produced; however humans produce additional amounts of certain greenhouse gases.
- Without some greenhouse gases and the Greenhouse Effect, Earth's temperature would be close to -18°C .

Goal:

- predict daily greenhouse gases like carbon dioxide, methane, and nitrous oxide

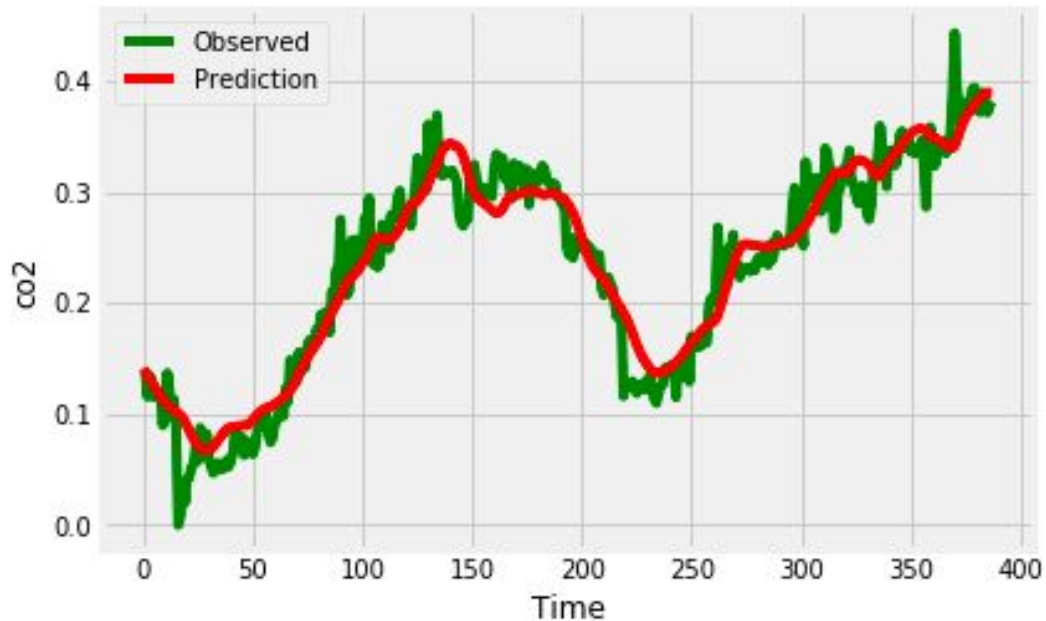


Data Sources:

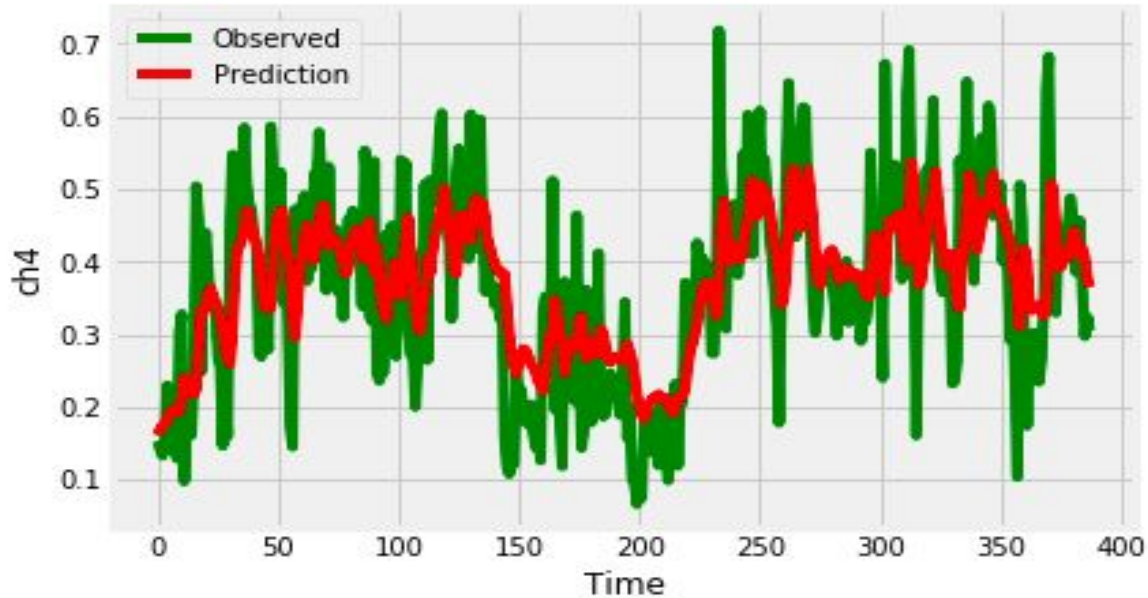
Earth System Research Laboratory from Mauna Loa Site in Hawaii from July 1999 to January 2009:

- Carbon dioxide-CO₂
- Methane-CH₄
- Nitrous oxide-N₂O

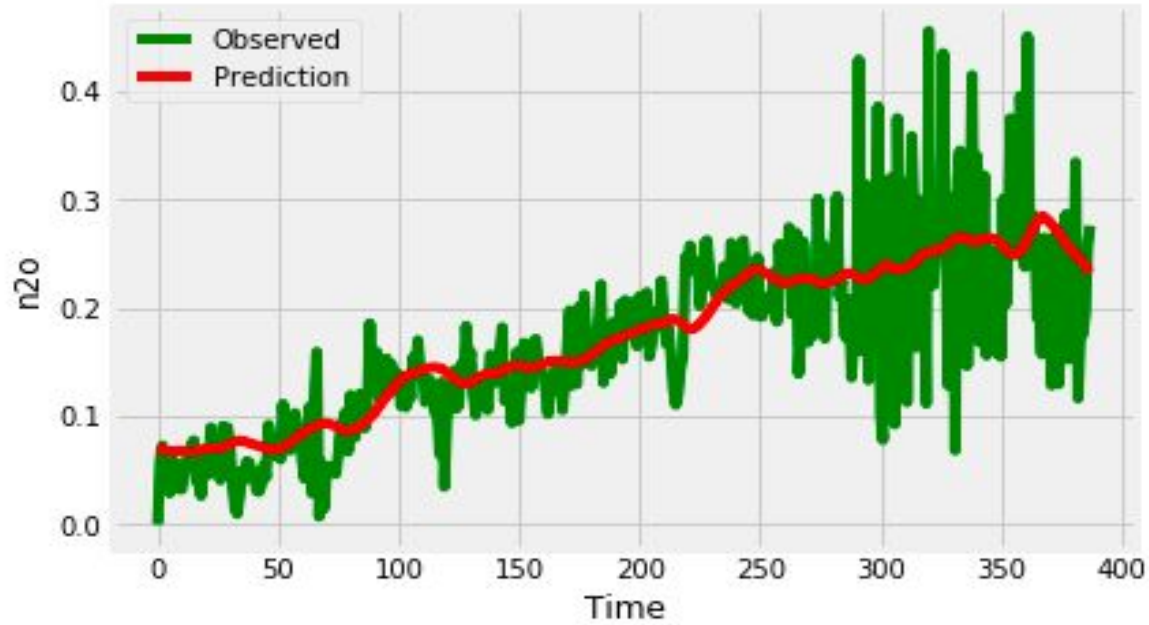
Result: Prediction of CO_2 using CH_4



Result: Prediction of CH_4 using N_2O



Result: Prediction of N_2O using of CO_2



Take Away

- GreenHouses are interchangeably causing each others
- Reduce your consumption of electricity, use of personal transportation, etc

Future

- Use multiple features to predict target
- Use exogenous features to predict target
- Forecast future values with hypothetical features to check our model

Thanks!

