

# PROJECT TEAM 1

FARHEEN AKRAM, RATIBA ZAID, GIACOMO  
ANNONI, JULIAN VAN BIJLERT AND  
ENOCK NGAKANI



# Project context

- The goal is to visualize the effects of low and zero emission zones regarding air pollution
- To determine whether the regulations set in place will be met

# Stakeholder

The Minister is responsible for the following  
(Ministerie van Algemene Zaken, 2025) :

- Coordinating the climate policies
- Monitoring the emissions

***Minister of climate and Green  
growth***



# Critical succes factors

- 1** | Air pollution rates NO<sub>2</sub>, PM<sub>2.5</sub>, PM<sub>10</sub>, ( $\mu\text{g}/\text{m}^3$ ) per province
- 2** | Effectiveness low emission zones
- 3** | Predict emissions per region in 2030 scenarios of low emission zones

# Luchtmeetnet API

- Showcases hourly updated data from measuringstations and regions
- Luchtmeetnet API
- Feature engineering
- Dictionary
- Stored in Pandas Dataframe

1

| Goal of this code

2

| Explanation

3

| Link to CSF

# NDW location file

- Show the air quality rates before and after the implementation of these low emission zones
- Retrieve XML file from opendata.ndw
- Data cleaning
- Store results in different files

1

| Goal of this code

2

| Explanation

3

| Link to CSF

# Historic pollutant data

- Predict air quality levels
- Retrieve csv files from RIVM luchtmeetdataset
- Feature engineering
- Results stored in a csv file

1

| Goal of this code

2

| Explanation

3

| Link to CSF

**Running  
application  
and  
implemented  
components**



**Thank you  
very much!**