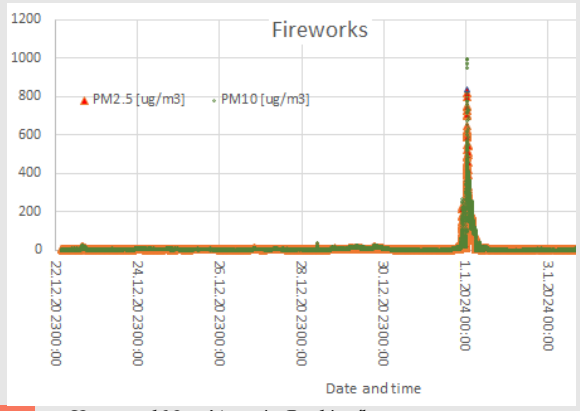
After we collected our data, we made graphs in Excel, comparing different factors and their plausible effect on air pollution.

Below you can see a graph showing the data collected from Dec 22nd 2023 till Jan 3rd 2024, showing a prominent peak at midnight on New Years Eve.



Xmas and New Years in Reykjavík

OUR RESULTS AND CONCLUSIONS

- Temperature was identified as the most influential weather factor affecting air quality in Poland, whereas wind and rain were more significant factors in Iceland.
- Pollution levels were higher in proximity to factories and roads compared to lakes and rural areas.
- Peak values of PM2.5 and PM10 were recorded around midnight in Reykjavík on New Year's Eve.
- Moss seems to work as a biofilter for air pollution.

The Air Quality Project, funded by EEA, is a year-long collaboration between Menntaskólinn í Reykjavík and II Liceum Ogólnokształcące im. ks. Jana Twardowskiego in Dębica, focusing on comprehensive air quality research

LEARN MORE ABOUT US AND THE PROJECT @

The project's homepage
https://airdust.eu/

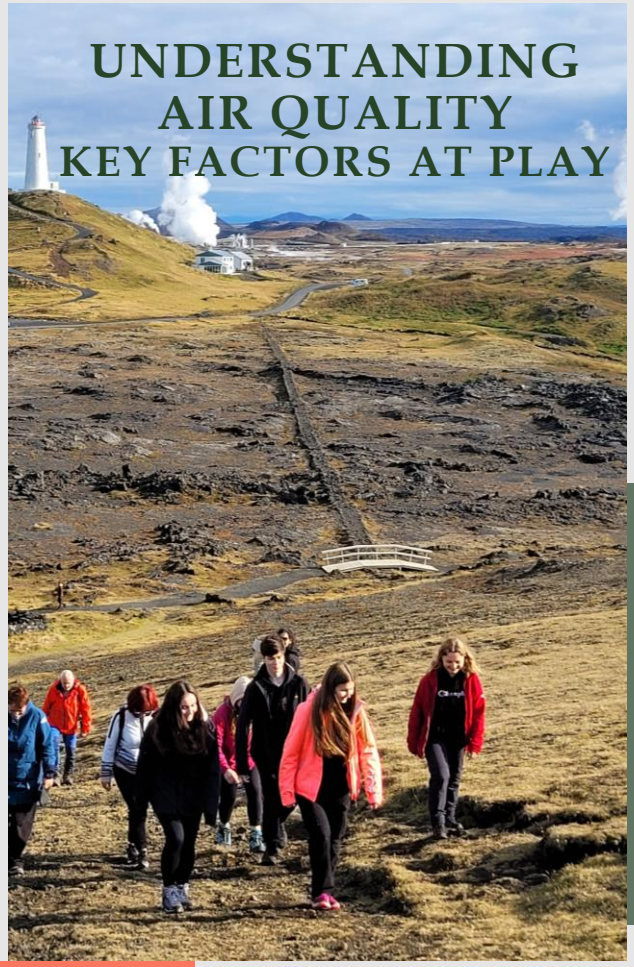
II LO im. Ks. Jana Twardowskiego homepage
https://twardowski.edu.pl/

Menntaskólinn í Reykjavík homepage
https://mr.is/

Iceland Liechtenstein Norway grants

AIR QUALITY RESEARCH - A PATH TO KNOWLEDGE -

UNDERSTANDING AIR QUALITY KEY FACTORS AT PLAY



AIR QUALITY IS INFLUENCED BY VARIOUS FACTORS:

- emissions from vehicles and industry
- agricultural practices
- natural sources like wildfires, volcanic eruptions, weather conditions, and topography.

Understanding these factors is crucial for managing and improving air quality

WHY MEASURE AIR QUALITY?

Measuring air quality is vital for understanding environmental health. It empowers us to make informed decisions, protect public health, and enact policies for a cleaner, safer future.

"Air pollution is not a problem of only one country or continent, it's a problem of humanity. Science must lead us to solutions."

- ZBIGNIEW RELIGA

HOW DID WE MEASURE POLLUTION?

We gathered PM10 and PM2.5 data using a dust particle monitor connected to a microcomputer, enabling precise measurement and analysis of particulate matter for comprehensive air quality assessment.

WHICH FACTORS DID WE STUDY?

•**Weather**: Variances in temperature, wind speed, and atmospheric pressure affect the dispersion and concentration of pollutants.

•**Humidity**: Higher humidity levels can contribute to the formation of particulate matter and exacerbate air pollution.

•**Proximity to Factories**: Industrial emissions significantly impact local air quality, especially in close vicinity to factories.

•**Fireworks on New Year's Eve**: The combustion of fireworks releases pollutants such as sulfur dioxide and particulate matter, causing temporary spikes in air pollution levels.

•**Traffic**: Vehicle emissions contribute to urban air pollution, particularly in areas with high traffic density.

•**Moss as a Biofilter**: Moss can absorb pollutants from the air, acting as a natural biofilter and mitigating local air pollution levels.