

# Lessons learned from the bilateral project Supporting Macedonia in EU Accession Process in the environmental field 2019-2021

**Aneta Stefanovska**, Head of air quality monitoring unit

Ministry of environment and physical planning



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# Bilateral project with SwEPA and SHMI



## Supporting Macedonia in EU Accession Process in the environmental field 2019-2021

**Donor:** Swedish international development cooperation agency

**Duration of the project:** 4 years, May 2019-December 2023

**Project objective:** The aim of the project is to strengthen the MoEPP's capacity in preparation for EU accession in the field of environment

**Components:** A. Nature Protection

B. Air Quality

C. EU Accession

**Budget:** Total 1.055.267,27 €

Air quality component: 734.371,58 €




# Bilateral project with SwEPA and SHMI



## Supporting Macedonia in EU Accession Process in the environmental field 2019-2021

### Results for air quality component:

- Preparation of the Report on the state of air quality monitoring in Macedonia with recommendations for system improvement
  - Investments in new instruments for air quality monitoring and / or instrument repair.
  - Increased capacity of air quality experts in Macedonia to manage air quality data
  - Upgraded data management and reporting system
- 

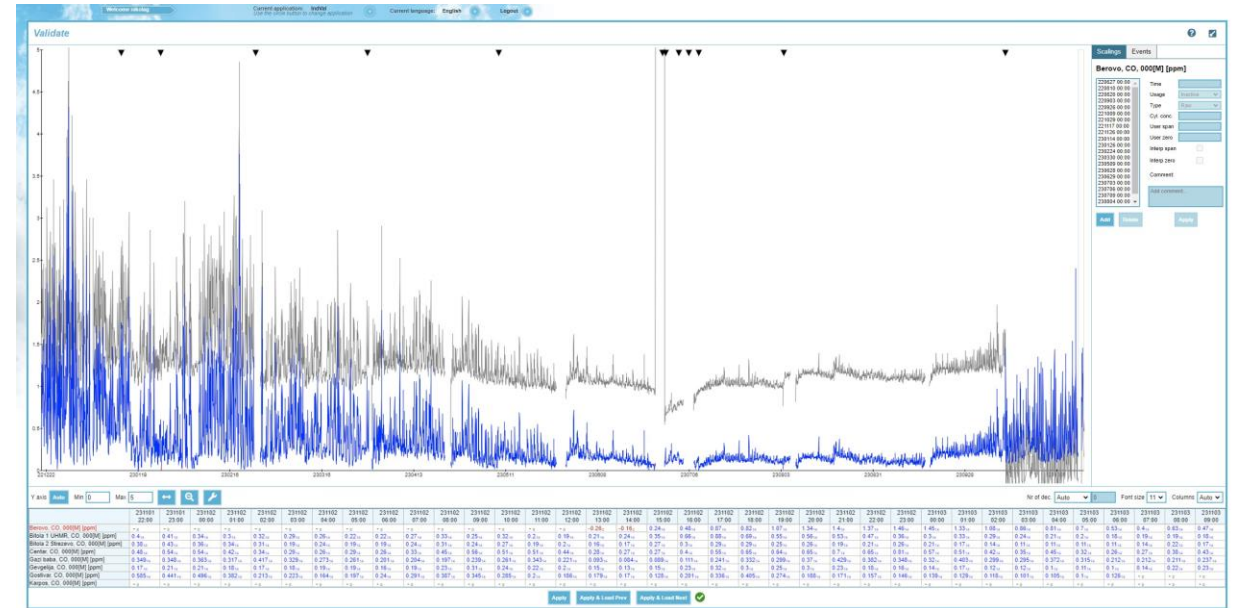
# Activity 1. Procurement of AQ monitoring instruments

- **Assessment study** of the current air quality monitoring system, based on the provided measurement data for the period 2013-2018 with recommendation for further improvement of the state air quality monitoring system
- **Procurement of the following instruments:**
  - 4 instruments for PM10 (Rektorat, Miladinovci, Kocani, Strumica)
  - 8 instruments for nitrogen oxides (Rektorat, Miladinovci, Kocani, Strumica, Veles, Kavadarci, Kicevo, Gostivar)
  - 8 instruments for PM2.5 (Rektorat, Miladinovci, Kocani, Strumica, Veles, Kavadarci, Kicevo, Gostivar)
  - 2 instruments for ozone (miladinovci, Strumica)
  - 4 data loggers (Rektorat, Miladinovci, Kocani, Strumica)



# Activity 2. Upgrade of Airviro database and installation of Raven

- Upgrade of Airviro database (Air quality data management system)
- Installation of RAVEN software for reporting of air quality data to the EEA including migration the meta data from the old reporting system
- Successful realization of the reporting the air quality data towards EEA in September 2022
- Training for Airviro and RAVEN (two expert's missions (January and September 2022))



The screenshot displays the Raven software interface, showing a table of sampling points. The table has columns for ID, Name, Date, Measurement Point, Status, Assessment Type, Station Description, Location, Non-Station Source, Traffic Distance, Heating Distance, Industrial Distance, Distance Source, Change the Station, Reg. Project, Data Format, and Layer ID. The table contains multiple rows of data, including information about sampling points for various locations and dates.

| ID | Name           | Date       | Measurement Point    | Status | Assessment Type  | Station Description  | Location             | Non-Station Source   | Traffic Distance     | Heating Distance     | Industrial Distance  | Distance Source      | Change the Station   | Reg. Project         | Data Format          | Layer ID             |
|----|----------------|------------|----------------------|--------|------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| 1  | 17760-00000-00 | 2018-01-01 | Public Point Station | Yes    | Point Assessment | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station |
| 2  | 17760-00000-00 | 2018-01-01 | Public Point Station | Yes    | Point Assessment | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station |
| 3  | 17760-00000-00 | 2018-01-01 | Public Point Station | Yes    | Point Assessment | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station |
| 4  | 17760-00000-00 | 2018-01-01 | Public Point Station | Yes    | Point Assessment | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station |
| 5  | 17760-00000-00 | 2018-01-01 | Public Point Station | Yes    | Point Assessment | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station |
| 6  | 17760-00000-00 | 2018-01-01 | Public Point Station | Yes    | Point Assessment | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station |
| 7  | 17760-00000-00 | 2018-01-01 | Public Point Station | Yes    | Point Assessment | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station |
| 8  | 17760-00000-00 | 2018-01-01 | Public Point Station | Yes    | Point Assessment | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station |
| 9  | 17760-00000-00 | 2018-01-01 | Public Point Station | Yes    | Point Assessment | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station |
| 10 | 17760-00000-00 | 2018-01-01 | Public Point Station | Yes    | Point Assessment | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station |
| 11 | 17760-00000-00 | 2018-01-01 | Public Point Station | Yes    | Point Assessment | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station |
| 12 | 17760-00000-00 | 2018-01-01 | Public Point Station | Yes    | Point Assessment | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station |
| 13 | 17760-00000-00 | 2018-01-01 | Public Point Station | Yes    | Point Assessment | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station |
| 14 | 17760-00000-00 | 2018-01-01 | Public Point Station | Yes    | Point Assessment | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station |
| 15 | 17760-00000-00 | 2018-01-01 | Public Point Station | Yes    | Point Assessment | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station |
| 16 | 17760-00000-00 | 2018-01-01 | Public Point Station | Yes    | Point Assessment | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station |
| 17 | 17760-00000-00 | 2018-01-01 | Public Point Station | Yes    | Point Assessment | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station |
| 18 | 17760-00000-00 | 2018-01-01 | Public Point Station | Yes    | Point Assessment | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station |
| 19 | 17760-00000-00 | 2018-01-01 | Public Point Station | Yes    | Point Assessment | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station |
| 20 | 17760-00000-00 | 2018-01-01 | Public Point Station | Yes    | Point Assessment | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station | Public Point Station |



## Activity 3. Communication and awareness raising

**Launch event** for the upgraded air quality monitoring stations in March 2022



## Activity 3. Communication and awareness raising

**Short film** about the upgrade of the stations, with the focus of highlighting the project's progress as well as directing public attention to the general problem of air pollution.




[Link](#)



# Activity 3. Communication and awareness raising

## Air quality information campaign focus on wood burning and its relation to air quality


## Social media campaign on Facebook and Instagram implemented in the period 09.02 –11.04.2023

 **Топли препораки**  
Published by Kalija Bilbilovska · February 9 ·

Доколку оваа зима немате друга можност освен да користите печка на дрва за затоплување на вашиот дом, заследете ги нашите топли препораки кои ќе ги споделуваме со вас во претстојниот период. 📄

Квалитетот на воздухот и јавното здравје зависат од секој од нас. Токму затоа, правејќи вистински избори при користење на дрвата и нивно правилно согорување можеме да ги намалиме негативните ефекти и сите заедно да придонесеме кон подобрување на квалитетот на воздухот и зачувување на жи... [See more](#)



 **Топли препораки**  
Published by Kalija Bilbilovska · February 17 at 12:50 PM ·

Доколку во зимските месеци користите печка за греење на дрва, направете го вистинскиот избор и притоа земете ги предвид нашите топли препораки. Со редовно чистење и правилно одржување на оџациите ќе постигнете:

- 📄 подобро согорување
- 🔧 намалување на потрошувачката на дрва
- 🌬️ намалување на загадувањето на воздухот и

... [See more](#)





# Activity 3. Communication and awareness raising

## Air quality information campaign focus on wood burning and its relation to air quality

Educational video was produced in cooperation with Vidi Vaka, including interviews and statements from MoEPP staff, Macedonian experts, the SwEPA project team, and experts on wood burning from Sweden.

[Vidi vaka video link](#)

**Види Вака and Топли препораки**  
March 2 at 2:38 PM · 🌐

🌍 Квалитетот на воздухот и јавното здравје зависат од секој од нас. Со идентификување и делување на изворите на загадувањето можеме да го подобриме неговиот квалитетот.

🏠 Правилно согорување на биомасата во текот на грејната сезона е само едно делче од големата сложувалка наречена одржливо управување со квалитетот на воздухот.

! Доколку користите дрва за греење, правилното горење ќе придонесе во подобрување на квалитетот на воздухот и зачувување на животната средина.  
K... See more

согорувањето на биомаса, или дрва и други горива со биолошко потекло,

Creation team

Види Вака Топли препораки

You and 16 others 2 comments 2 shares



# Activity 3. Communication and awareness raising

**Air quality information campaign  
focus on wood burning and its  
relation to air quality**

Short film with Macedonian actor Igor  
Angelov, delivering “warm  
recommendations” on wood burning

[Igor Angelov video link](#)

**Топли препораки**  
Published by Bilbilovska Kalija · March 11 · 🌐

Ако се грижите за животната средина, правете добри избори. Доколку го затоплувате вашиот дом со печка на дрва, горете само суви дрва. Согорувањето на влажно или зелено дрво испушта многу повеќе загадувачки материи во воздухот што се штетни за вас, вашето семејство и за околината.

Следете ги нашите топли препораки за подобрување на квалитетот на воздухот и зачувување на животната средина и направете ги вистинските избори

Овој проект е во соработка со [Министерство за жи...](#) See more

**ТОПЛИ ПРЕПОРАКИ**  
Топло ви препорачуваме да горите само необработено дрво

NATUUR WERK SVEDEN  
Sverige



# Conclusion



- **Successful realization of crucial activities**
  - **Modernization of the air quality monitoring network**
  - **Reporting obligation towards EEA**
  - **Raising the public awareness**
- **Very good cooperation with the Swedish experts established**
- **Future cooperation is foreseen**



# Thank you

