

# The right to a healthy environment: Use of air quality data to inform air pollution assessments in Central Asia

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Regional Training on air quality and emissions to air statistics and indicators  
Geneva, Switzerland  
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United Nations General Assembly resolution (28 July 2022):

## The right to a clean, healthy and sustainable environment



"This resolution sends a message that nobody can take nature, clean air and water, or a stable climate away from us – at least, not without a fight"

Inger Andersen, Executive Director, UNEP

<https://www.unep.org/news-and-stories/story/historic-move-un-declares-healthy-environment-human-right>

# Air quality and health in Central Asia



Country	Deaths attributable to air pollution (2019)*	
	Number	% of total deaths
Kazakhstan	12,039	9
Kyrgyzstan	4,159	12
Tajikistan	7,455	15
Turkmenistan	3,608	11
Uzbekistan	30,096	15

\*Institute for Health Metrics and Evaluation (IHME), 2022. University of Washington 2022. Global Burden of Disease 2019: GHDx

## Need for modernizing air quality management



Disclaimer: Country borders or names shown in this presentation do not reflect the official position of the United Nations Environment Programme (UNEP). The maps used here are for illustrative purposes and does not imply the expression of any opinion on the part of UNEP, concerning the legal status of any country or territory or concerning the delimitation of frontiers or boundaries.

### Air quality standards

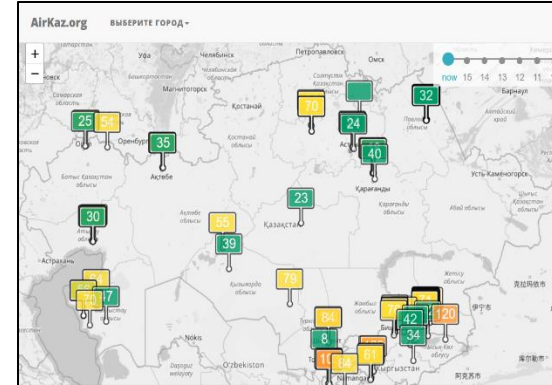
- Maximum Allowable Concentrations (MACs) & comprehensive Index of atmospheric Air Pollution (IZA)
- Not in line with the latest science or international accepted standards

### Modernising air quality management:

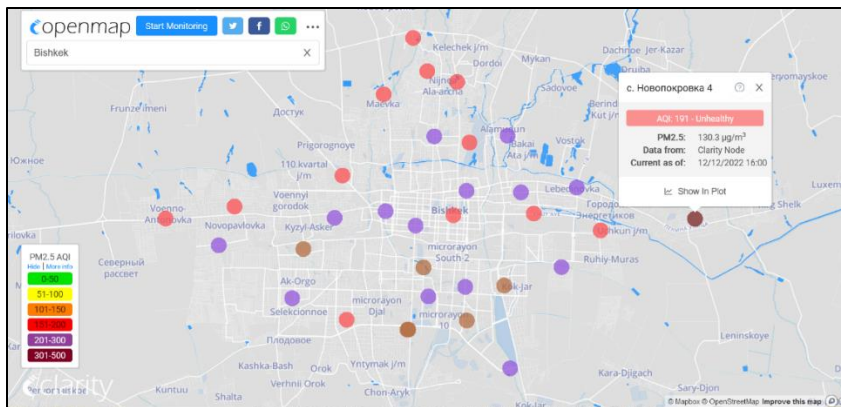
- Legislative & regulatory reform
- Institutional rearrangement
- Deployment of monitoring infrastructure
- Public communication



Central Asian Air Quality Dialogue Platform



Air quality monitoring in Kazakhstan  
(Kazhydromet & AirKaz)



Pilot sensor network in Bishkek, Kyrgyzstan  
(KyrgyzHydromet)



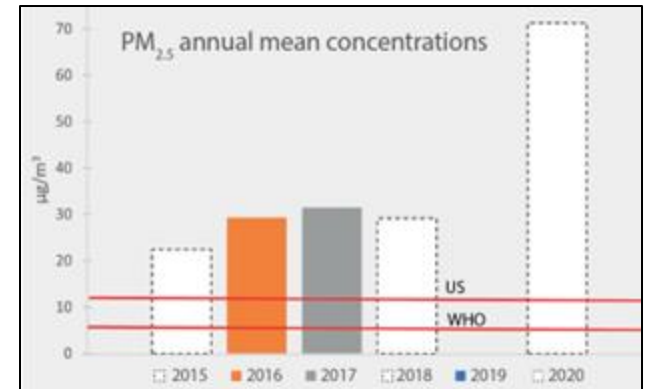
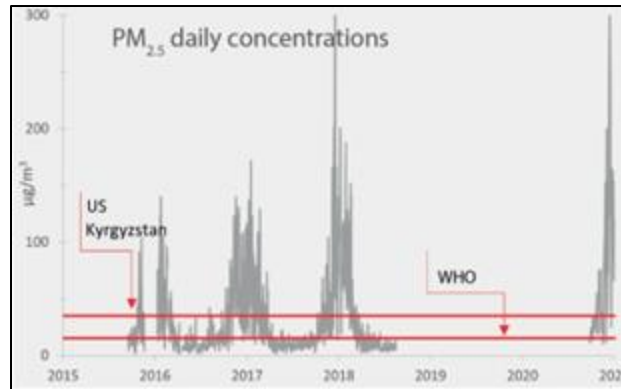
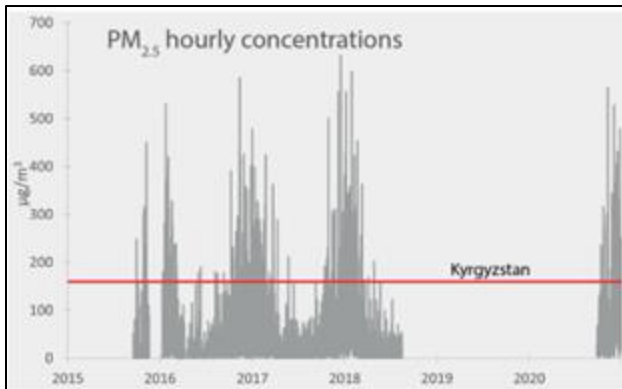
Zamin Public International Foundation,  
Uzbekistan

# Air Quality in Bishkek: Assessment of emission sources and Roadmap for improving air quality management

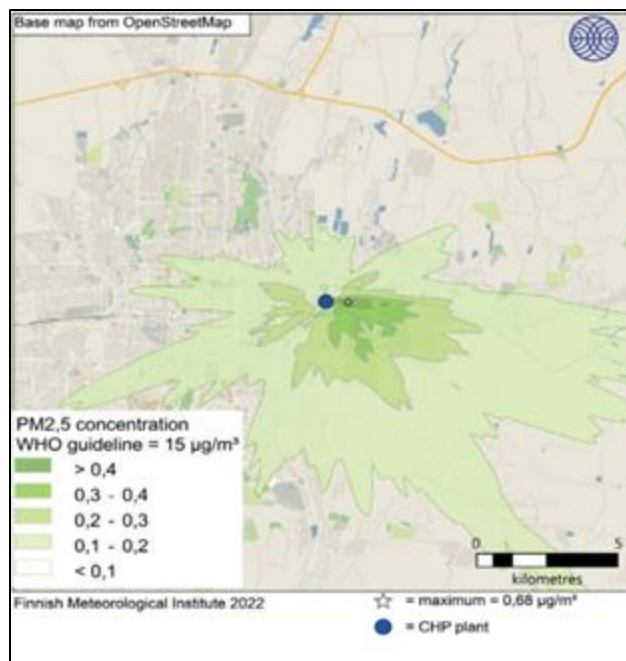


**Reducing concentrations of fine particulate matter (PM<sub>2.5</sub>) is the highest priority.**

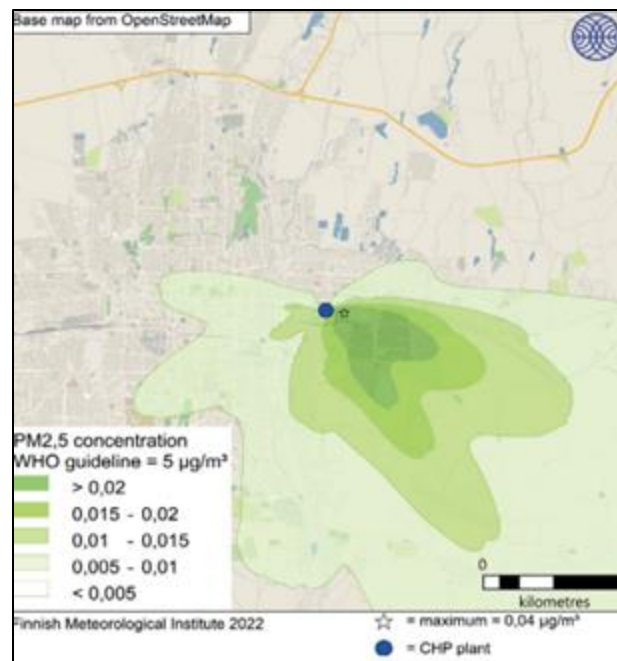
PM<sub>2.5</sub> poses the most severe health risk of all air pollutants.



**Emissions from the CHP have a limited impact on ground-level air pollution in Bishkek**



Average annual PM<sub>2,5</sub> concentration



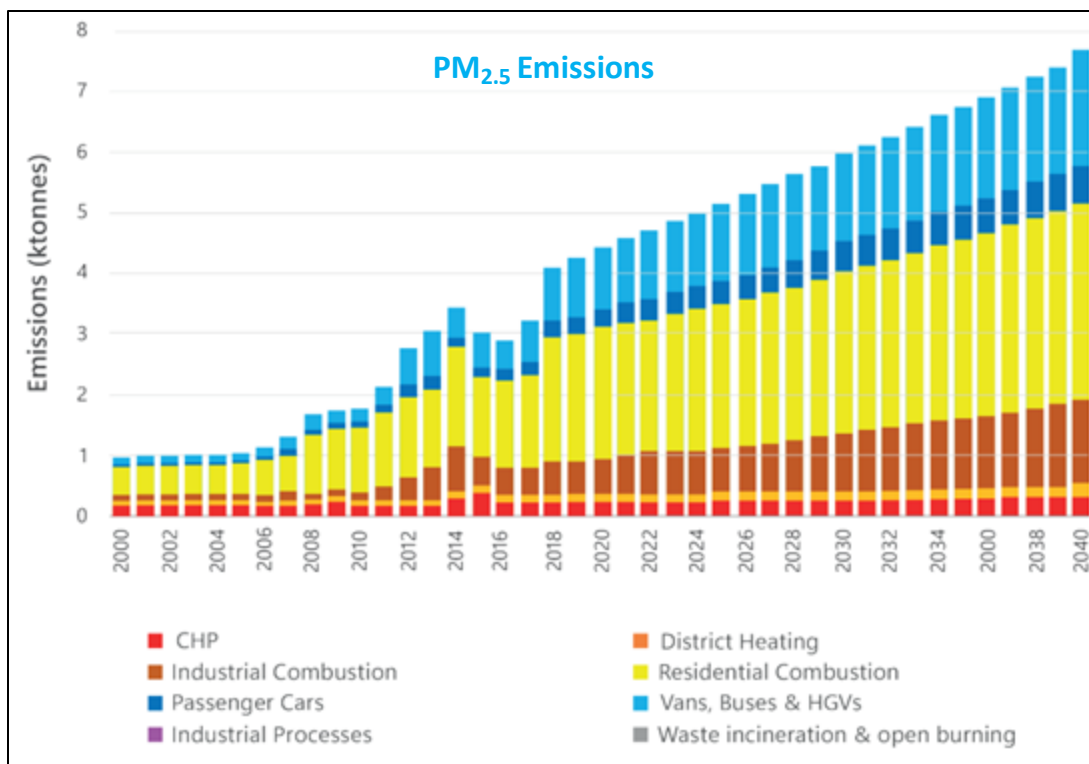
Average daily PM<sub>2,5</sub> concentration



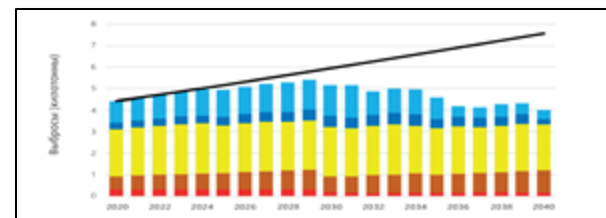


# Air quality in Bishkek

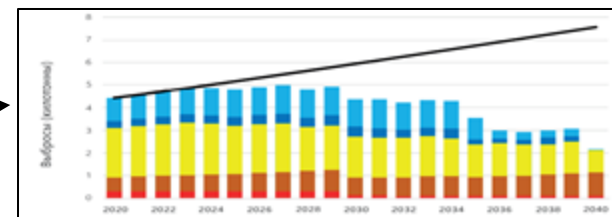
Emissions of all key pollutants are expected to grow significantly towards 2040 under a 'business as usual' scenario



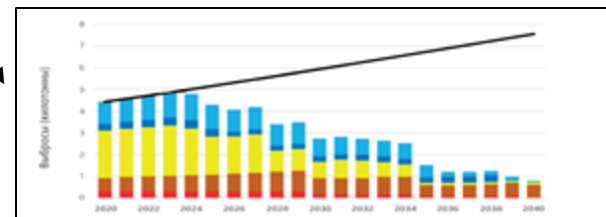
Business As Usual



Scenario 1: With additional measures



Scenario 2: With additional measures



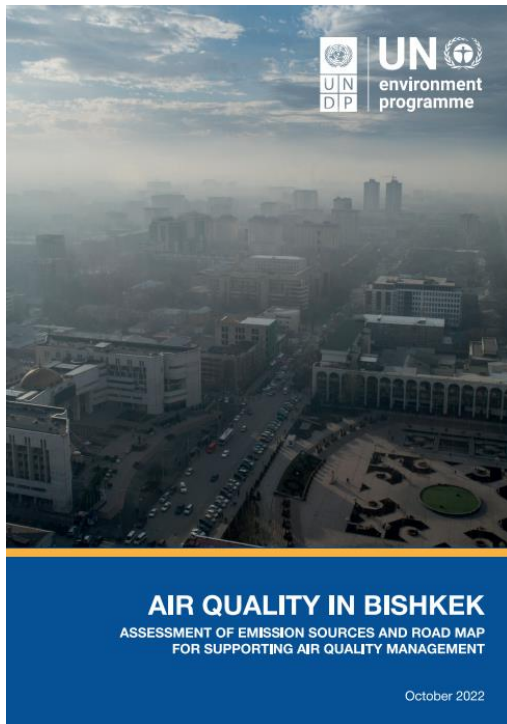
Scenario 3: Net zero 2050

## Links to the report:

<https://www.undp.org/ru/kyrgyzstan/stories/air-quality-bishkek> (Russian)

<https://www.undp.org/ky/kyrgyzstan/stories/air-quality-bishkek> (Kyrgyz)

<https://www.undp.org/kyrgyzstan/stories/air-quality-bishkek> (English)



- **Key messages**
- **Summary for Policymakers**
- **Full report**



# Thank you!

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