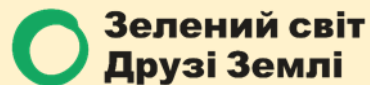


Inventory and analysis of contaminated sites in the Czech Republic



Marcela Černochová, Clean Air for Ukraine / Arnika



Clean air for Ukraine

Joint long-term campaign / program:

Arnika & Free Arduino – Ecocity & Green world – Friends of Earth

Active in Ukraine since 2017

Focus on:

- air quality (industrial regions)**
- environmental damages caused by war**



<https://cleanair.org.ua/>

Air quality monitoring



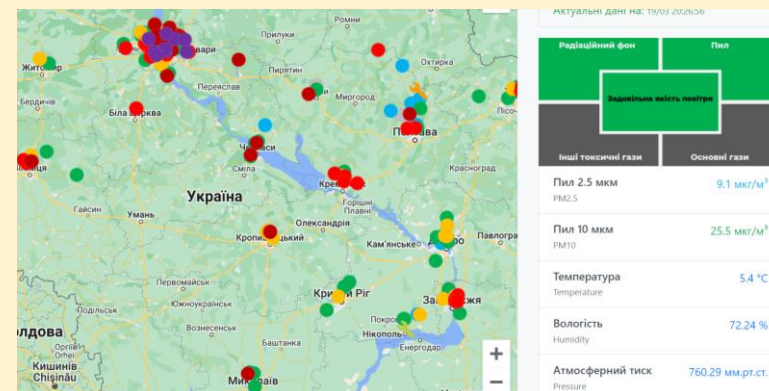
Civic air monitoring network EcoCity

<https://www.eco-city.org.ua/>

(220 monitoring stations)

Target:

4 stations with radiation sensor in each region



Radiation and Smog Alarm notification system – Telegram chatbot

https://t.me/ecocity_smog_alarm_bot



Environmental damages caused by war

Environmental consequences of the Ukrainian war
(report, Angurets et al)

Case studies – 4 selected sites
(Dnipropetrovsk and Zaporizhian Region)

Czech Republic has a long experience in:
mapping and evidence of contaminated sites
remediation

TRANSFER OF KNOW HOW



CZ – mapping of contaminated areas

Contaminated sites:

- Soviet army - military areas
- Economic activities during communist regime



Mapping and evidence – database of sites

Why?

Investment projects, privatisation

(investment incentive, remediation guarantee)

Accession process to EU

(evidence of contaminated sites is required)



CZ – contaminated military areas

Soviet army occupied 73 military areas / 60 significant environmental damages

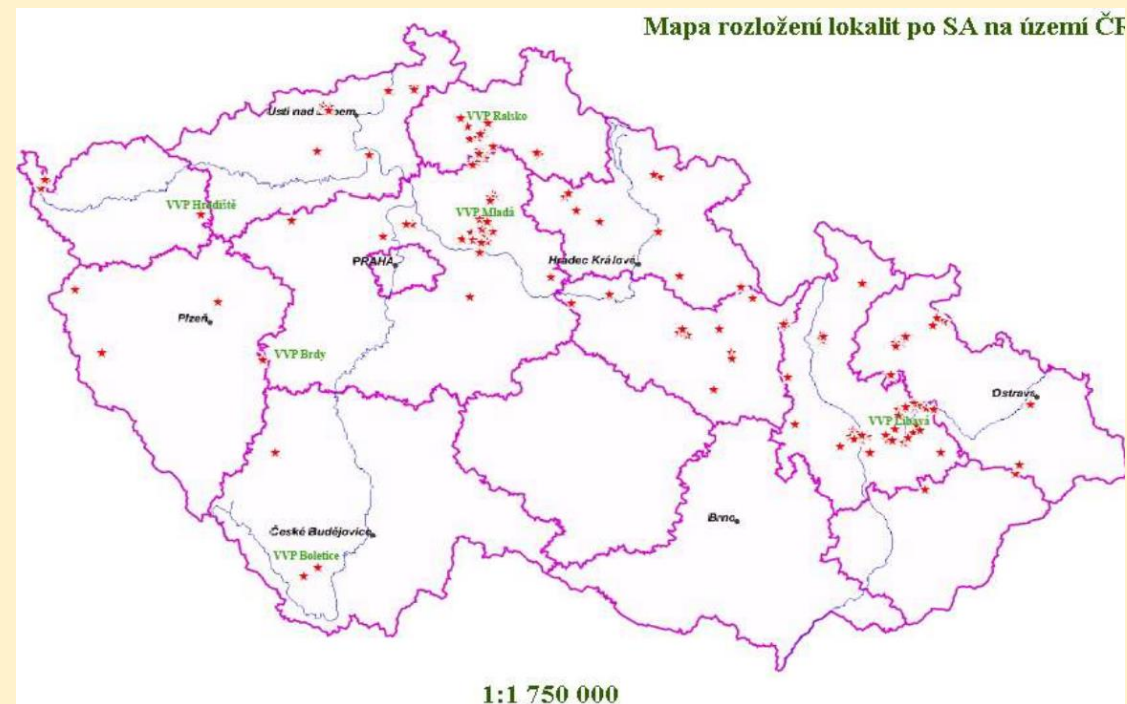
155 sites – received a passport (10 categories)

Soil and groundwater contamination:

- petroleum hydrocarbons
- chlorinated hydrocarbons
- polychlorinated biphenyls
- heavy metals etc.

Remediation – more than 1,5 billion CZK

(source: Ministry of Environment, CZ)



CZ – evidence of contaminated areas

Mapping & evidence – long term project

NIKM I 2009-2012

Development of the methodology

Public administration records

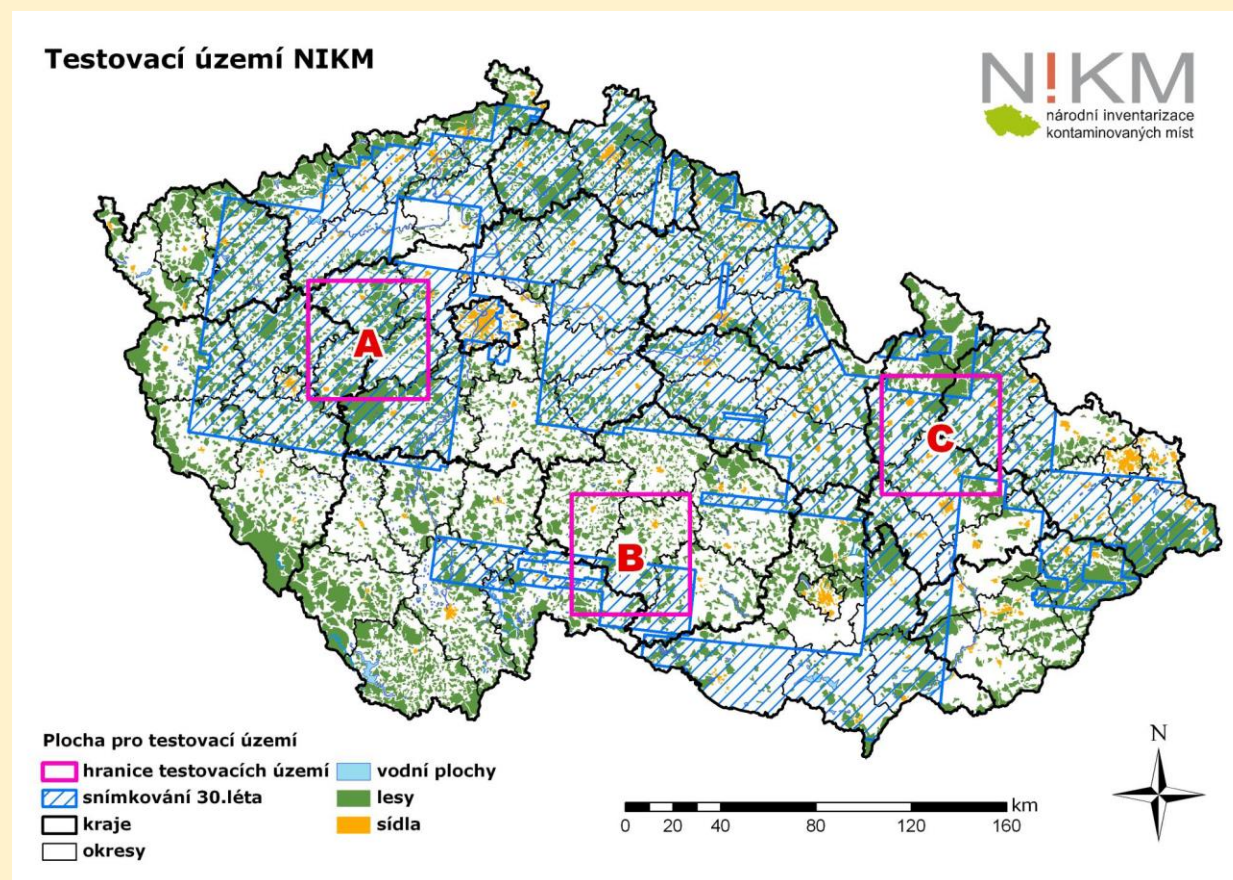
Remote Sensing methods
(orthophoto maps, satellite data)

Questioning
(local and regional institutions)

Methodology verified

3 tested areas (50 km x 50 km)

(source: CENIA CZ)





ЧИСТЕ ПОВІТРЯ
ДЛЯ УКРАЇНИ
cleanair.org.ua

CZ – evidence of contaminated areas

NIKM II (2018 – 2021)

1) Evalution / verification: **30 020 sites**

Devided – into two groups:

- excluded - 21 377 sites
- contaminated or potentially contaminated - 10 134 sites



2) Investigation in field – teams of researchers

3) Results:

in total: 446 sites

remediation required or recommended

(source: CENIA CZ)



CZ – evidence of contaminated areas

Czech Republic – military sites, historical contamination, „recovery“ after communism and entering EU

Similarities CZ and UA

Transfer of the Czech „know how“

Adjusting and testing the methodology according UA situation

Why important for Ukraine to deal also with historical contamination?

Recovery processs:

safety + incentive / requirement of potential investors

Accession to the EU

Thank you!

Разом до перемоги!



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