



Current activities, ICP IM

**ICP Integrated Monitoring of Air Pollution Effects on
Ecosystems -**

ICP IM

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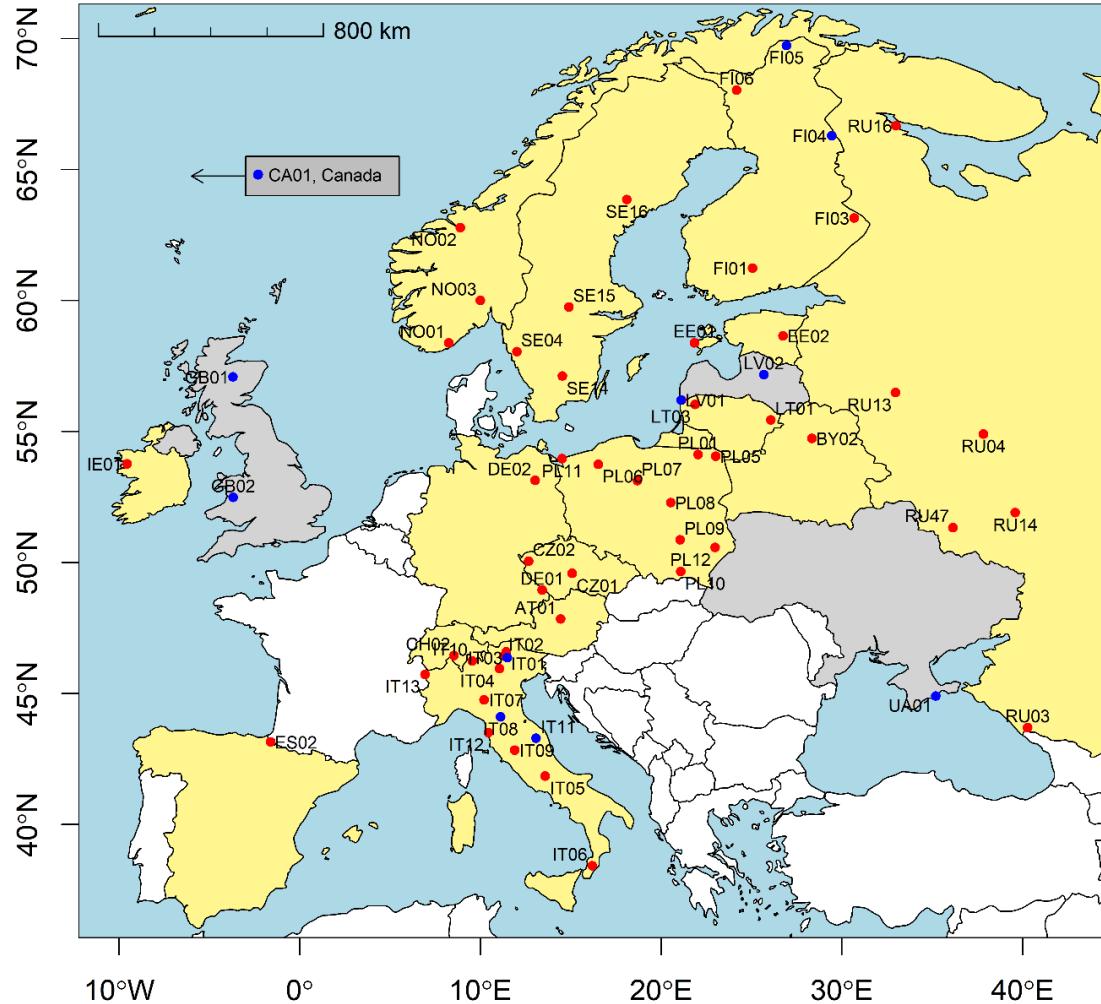
Maria Holmberg (presenter)



SWEDISH ENVIRONMENTAL
PROTECTION AGENCY



The current ICP IM network



15 active countries

48 active sites

New interest from Canada

● Active IM site

● Inactive IM site

■ Country with active IM sites

■ Country with only inactive IM sites

■ Country without IM sites



Status for LRTAP 2020-21 work plan items

Activity	Status
1.1.1.15 Scientific paper on the impacts of internal catchment-related nitrogen parameters to TIN leaching	To be submitted summer 2021. Study lead by Jussi Vuorenmaa
1.1.1.16 Scientific paper on HM trends in concentrations and fluxes across ICP IM sites in Europe	Draft MS, by Karin Eklöf et al.
1.1.1.17 Scientific paper on the effects of N enrichment on forest bryophyte vegetation. A co-operation between ICP IM and ICP Forests.	James Weldon et al. Submitted to Annals of Forest Science



Other scientific activities 2020-21

Activity	Status
Scientific paper on the lack of recovery in the epiphytic lichen community after the decrease in S deposition	Published: Weldon, J., & Grandin, U. (2021). Weak recovery of epiphytic lichen communities in Sweden over 20 years of rapid air pollution decline. <i>The Lichenologist</i> , 53(2), 203-213. doi:10.1017/S0024282921000037
Scientific paper on the relationship between CL exceedances and empirical ecosystem impact indicators	Published: Forsius et al. (2021). Assessing critical load exceedances and ecosystem impacts of anthropogenic nitrogen and sulphur deposition at unmanaged forested catchments in Europe. STOTEN 753. https://doi.org/10.1016/j.scitotenv.2020.141791
Continued work on mercury and other heavy metals	Ongoing



Other activities during 2021

Other important activities

Finalization and launch of “IM light”: *extended monitoring strategy for ICP IM:*

- simplified protocol
- integrated with other ICPs under WGE
- Reflecting current and future environmental problems
- Cooperation also with EU-NECD, eLTER, LifeWatch and others
- Opening for other ecosystem types than forests, and for higher number of sites

Migration of ICP IM database and its operation from SYKE (Finland) to SLU (Sweden)

Contribute to the review of the Gothenburg protocol



Thanks for your attention!