

Contribution of NATAIR to the Atmospheric Emission Inventory Handbook



by

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emep

A Contribution of the Agriculture and Nature
Expert Panel

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6th JOINT UNECE TFEIP & EIONET Workshop
Rovaniemi, 19 – 21 October 2005



Outline

- Motivation
- The EC NatAir Project
- Contribution to the EMEP/CORINAIR Emission Inventory Guidebook SNAP11
- Emissions from Natural Sources
- Conclusion



Motivation

- The SNAP code 11 chapter „Other sources and sinks“ from 1999 needs an update as we recognised a substantial increase on
- data availability on natural sources as well as
- on understanding of emission processes of specific sources

How can NATAIR contribute?

by

- Improving methodologies
- Improving emission factors
- Updating source categories



The NatAir Project



Improving and applying
methods for the
calculation of natural and
biogenic
emissions and assessment
of impacts to the air
quality

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Participating Institutions

IER



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Where can NATAIR contribute?

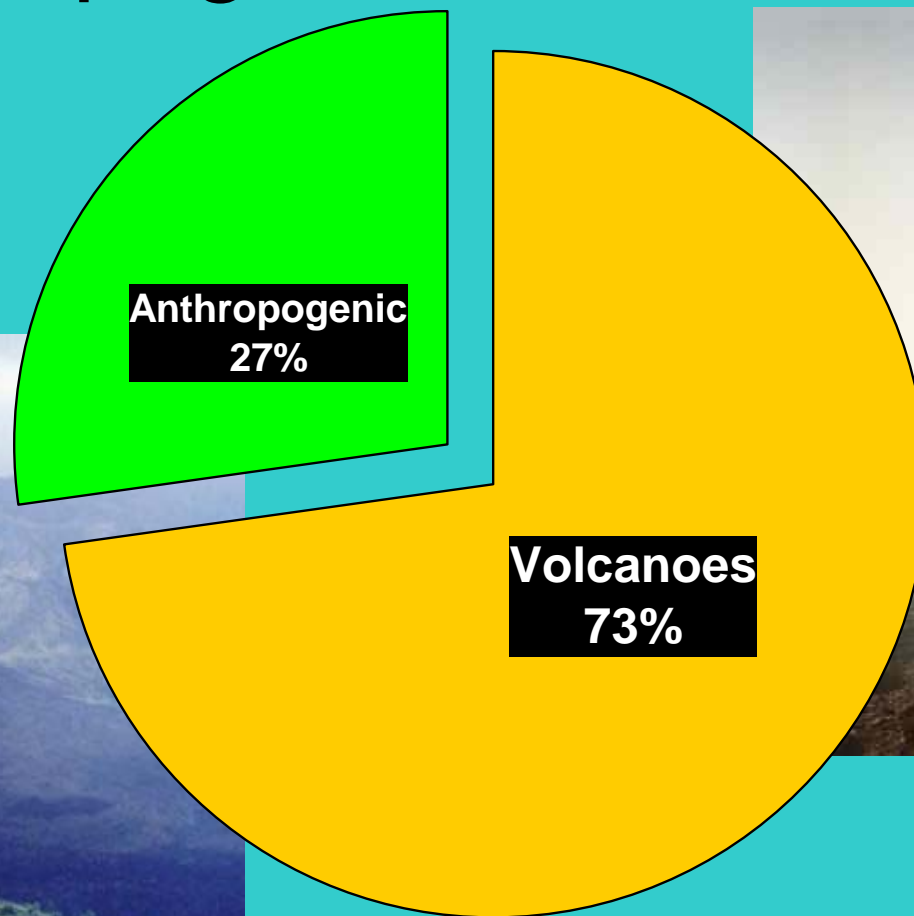
- Forests
- Soils
- Forests and other vegetation fires
- Natural grassland and other vegetation
- Wetlands
- Animals and humans
- Volcanoes
- Gas seeps
- Lightning



Sources and Pollutants

Sources	Pollutants
Vegetation, esp. Forests	VOC, N ₂ O
Biomass burning and forest fires	NO _x , PM, CO, VOC
NO from soils (natural)	NO
Pollen	PM
Wild animals	CH ₄ , NH ₃
Anoxic soil processes (wetlands)	CH ₄
Natural seepage of gas storage	CH ₄
Wind blown dust (incl. Saharan)	PM
Volcanoes	SO _x , NO _x , PM
Lightning	NO _x
Sea, Coastal zones	PM, DMS

SO₂ Emissions from Natural vs. Anthropogenic Activities in Italy



Schedule

- First Updates December 2005
- Circulate/improve the chapters (internal)
- Final draft updates May 2006
- Circulate/improve the chapters (internal)
- Final update July 2006
- Submit agreed text etc. to TFEIP lead panel September 2006 for approval



Conclusion

- The outcome NATAIR will significantly improve the Group 11 chapter “Other Sources and Sinks” in the EMEP/ CORINAIR Emission Inventory Guidebook.
- Thus, the impact of nature on atmospheric pollution levels will better be understood in the near future.

- **Thanks for your attention!**

