



ALPENKONVENTION
CONVENTION ALPINE
ALPSKA KONVENCIJA
CONVENZIONE DELLE ALPI

EU GREEN WEEK 2021 - PARTNER EVENT: An Alpine approach to improving air quality

4 June 2021

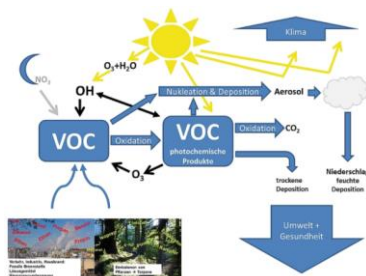
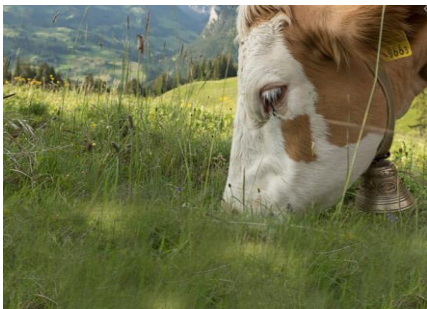
Matthias Rinderknecht: RSA 8 smart solutions in the different sectors



RSA 8 Emission sectors analysed

Based on the scientific analysis of air quality in the Alps the following sectors had been analyzed:

- Biomass combustion, general heating systems
- VOC and Ozone precursor emissions
- Transport emissions
- Ammonia emissions from agriculture

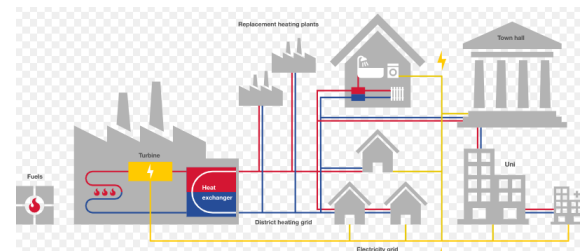




A) Biomass combustion / heating systems and smart solutions

Wood burning can contribute massively to PM emissions (10-30%)

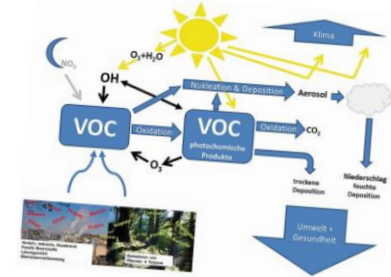
- [Implementation/enforcement of emission control systems for biomass combustion (e.g. by chimney sweeps)]
- Incentives for renewal by low emission stoves (F, IT)
- Knowledge transfer for wood use, qualification for professionals (SI, CH/FL, IT)
- Installation of district heating system (where possible) + incentives /biomass district heating (CH, DE, AT)





B) VOC and Ozone precursor emissions

- Legal framework regulation for VOC emitting installations (chemicals, lacquers/paints, coating/printing installations, petrol/gas stations with vapor recovery, etc)
- EU Regulations as basis, but stricter application with best available techniques in Germany
- In Switzerland: regulated in the Ordinance on Air Pollution Control for stationary sources, and
- Specific introduction of the non-methane VOC (NMVOC) incentive fee to reduce these emissions (since 2000)
 - Emission fall: -15% between 2007 and 2016



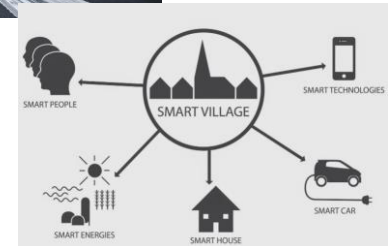


C) Transport emission reduction

- Most important sector focusing on NO₂ and PM
- Most of the examples, broad variety of types of measures

Type of measures and smart solutions:

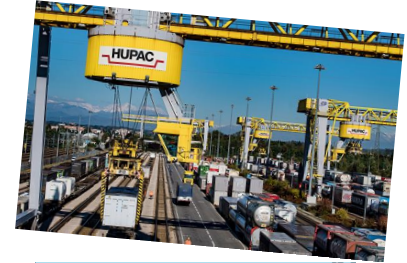
- Passenger / freight / intermodality / crossborder
- Regulatory measures / prohibition
- Technical measures
- Financing / incentives
- Operation/management / shared mobility etc
- Innovation / technology / alternative/renewables/e-mobility research





C) Examples of Transport emission reduction National + Regional level

- Long term Freight modal shift policy in CH (tolling, rail infra, regulatory measures, promotion / incentives CT, innovation)
- Low Emission Zones (FR, IT)
- Vehicle conversion
- *At the edge of Alps/ Med Sea*: short sea shipping low emission controlled area in Monaco (SO_x: -95%, PM: -80%, BC: -51%)
- Mobility management (all countries): promotion by ministries, in undertakings, PT in remote areas, car sharing, multimodal mobility etc.
- Integrated planning procedures for mobility +spatial planning
- Linking tourism + mobility by promoting free PT and smart Apps (Bavaria, AT, CH), partly also free transportation for local population
- Promotion of active mobility / cycling (all countries)
- Conversion of conventional to electric mobility (individual+ PT) including incentives, charging stations, promotion of e-vehicle parking
- Energy strategies and transition (all countries)





D) Ammonia emissions from agriculture

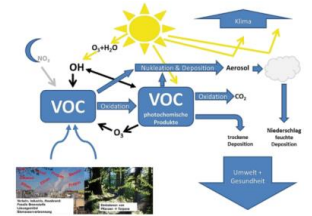
- Cattle farming as the most important factor for ammonia emissions, open stabulation increasing the negative effect (Swiss case)
- Reducing number of livestock
- Federal contributions for resource efficiency at cantonal level:
 - Storage and spreading of manure
 - Structural adaptation of stabulation / quick draining of urine
 - Protein-reduced feeding





RSA 8 smart solutions: sum up

- Smart solutions / examples at national and/or regional level
- Large potential concerning Biomass combustion
- Only few and regulatory measures/fees in VOC and Ozone precursor emissions
- Wide range and variety of multiple Transport smart solutions
- Very limited Ammonia emission reduction from agriculture
-> all types of measures contribute to emission-fa



Recommendations in the Report:

- 2 Rec for wood burning/heating
- 3 Rec for mobility
- 1 Rec for agriculture (general)
- No specific Rec for VOC / Ozone prec.
- Several general Rec for procedure + governance of AlpConv





Thanks for your attention

