

## Summary of Workshop

# CAIR4HEALTH

Research Needs for Sustainable Development Policies

[www.cair4health.eu](http://www.cair4health.eu)

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SPECIFIC SUPPORT ACTION

SIXTH FRAMEWORK PROGRAMME

Sub-Priority 1.1.6.3.

GLOBAL CHANGE AND ECOSYSTEMS

*Integrating and Strengthening the European Research Area*

# Summary of talks

## Session 1

- **Dick van den Hout**
  - Harmonisation of methods, IA
- **Jaakko Kukkonen**
  - PM major issue – size, number, composition
  - Changes in O<sub>3</sub> due to CC, regional and global
  - Integrated assessment tools and new data
- **Bert Brunekreef**
  - Particle number, shipping and airport emissions, wildfires, non-exhaust, coarse fraction, episodic events (eg dust storms)

# Summary of talks Session 2

- **Denis Sarigiannis**
  - IA, mixtures of pollutants
  - indoor AP, data fusion,
  - high resolution regional impacts
- **Fintan Hurley**
  - HIA, full chain approach,
  - HEIMTSA, NEEDS, INTARESE,
  - CBA, large benefits compared to costs (eg PM2.5),
  - inequalities in impacts of air pollution
- **Johannes Hendricks**
  - QUANTIFY,
  - emission inventories, road, aviation, shipping,
  - local-regional-global interactions,
  - improved treatment of precursors in models,
  - PM major focus

# Summary of talks

## Session 3

- **Martin Williams**
  - reduction in life expectancy, cost ~£10b/yr, use of CBA
  - Impact of national and local measures on air quality
  - Harmful components of PM?, effects of low levels and changing levels of O<sub>3</sub>,
  - exposure reduction approach for PM<sub>2.5</sub>,
  - combined attack on emission reductions for CC and AQ
- **Andrej Kobe**
  - TSAP towards 6EAP
  - Exceedances still in urban areas
  - PM<sub>2.5</sub> limit value introduced
  - National average exposure indicator
  - AQ Directive review in 2013

# Summary of talks Session 3

- **Tuomo Karjalainen**
  - Role of DGs, many projects on AQ&H – FP6
  - Projects contributing to EHAP
  - FP7 opportunities – various mechanisms
  - Transport related air pollution and health impacts call
  - FP7 - More money!!

# Research questions on (outdoor) air pollution and health

- E-R functions for long term effects (HIA & Policy)
- Independent role of coarse PM
- Non-exhaust traffic PM
- Growing importance of wood smoke, wild fires (relation with climate & land use change)
- CNS effects
- Relative toxicity of local and background PM
- Toxicity evaluation of new technology
- Effect modification by SES, nutrition etc
- Vulnerability markers
- Validation of exposure models
- Changing composition of roadside air pollution mixtures & potential consequences for NO<sub>2</sub> LV

From Bert Brunekreef (2008)

# Research questions on (outdoor) air pollution and health

- Accountability studies: effects of abatement measures on air pollution levels
- Accountability studies: effects of changes in pollution on health
- Transport & health: effects of participation in traffic on health; subway/public transport environments; zoning questions; noise & air pollution; spatial planning issues & physical exercise/obesity; urban cycling & air quality, accidents; air quality impacts near airports; role of shipping emissions
- Increases in ground level ozone
- Interactions between heat waves and air pollution

From Bert Brunekreef (2008)

## Discussion Points

- **Current research synthesis**
  - PM major issue – size, number, composition
  - Changes in O<sub>3</sub> due to CC, regional and global
  - Integrated assessment tools and new data
- **Future research priorities**
- **Policy implications**
  - What policies will we need in the future?
  - Ensuring latest science is being used for policy
- **General feedback**
  - How do we define integrated assessment tools?
  - New instruments for PM

**Dinner**

**Al Piccolo Mondo  
19 rue Jourdan**