

# Workshop on Air Quality and Health Research Needs and Implications for Policy

19 January 2009

In collaboration with **CONCAWE**

Time	Speaker	Title
9.00	Ranjeet Sokhi, University of Hertfordshire, UK	Air quality research for policy needs – outcomes of CAIR4HEALTH
9.15	Dick van den Hout, TNO, Netherlands	Policy links of research outcomes from CAIR4HEALTH project
9.45	Jaakko Kukkonen, FMI, Finland	Review of research recommendations
10.15	Bert Brunekreef, University of Utrecht, Netherlands	Air quality and health research – future needs
10.45		Coffee Break
11.00	Denis Sarigiannis JRC Ispra	Implications of indoor air pollution on health
11.30		Discussion on recommendations for future research on air quality and health related issues in Europe
12.00		End of Workshop

# Outcomes of CAIR4HEALTH

**Ranjeet S Sokhi**

Centre for Atmospheric and Instrumentation Research (CAIR)  
University of Hertfordshire, UK

SPECIFIC SUPPORT ACTION  
SIXTH FRAMEWORK PROGRAMME  
Sub-Priority 1.1.6.3.  
GLOBAL CHANGE AND ECOSYSTEMS

*Integrating and Strengthening the European Research Area*



Environment and Health Action Plan (EHAP)

[http://ec.europa.eu/environment/health/index\\_en.htm](http://ec.europa.eu/environment/health/index_en.htm)

Children's Environment and Health Action Plan for Europe (CEHAPE)

<http://www.euro.who.int/childhealthenv/>

Clean Air for Europe Programme (CAFÉ) – Thematic Strategy on Air Pollution

<http://ec.europa.eu/environment/air/cafe/>

Environmental Technology Action Plan (ETAP)

<http://ec.europa.eu/environment/etap/>

Thematic Strategy on the Urban Environment (TSUE)

[http://ec.europa.eu/environment/urban/thematic\\_strategy.htm](http://ec.europa.eu/environment/urban/thematic_strategy.htm)

Seventh Framework Programme (FP7)

<http://cordis.europa.eu/fp7/>

- Highlight outcomes of the project
- Obtain feedback and views
- Link outcomes of CAIR4HEALTH with needs of CONCAWE meeting and work plan

## Aim:

To examine and analyse research results from European and other projects related to air quality and health to support key European sustainable development action plans and strategies

Started: February 2007

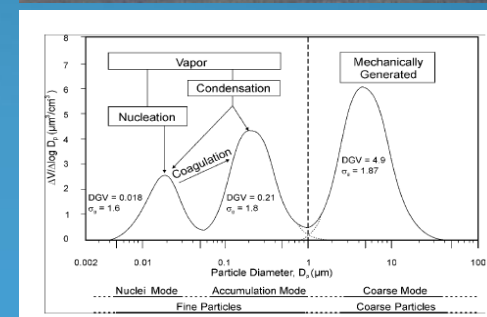
Duration: 2 years

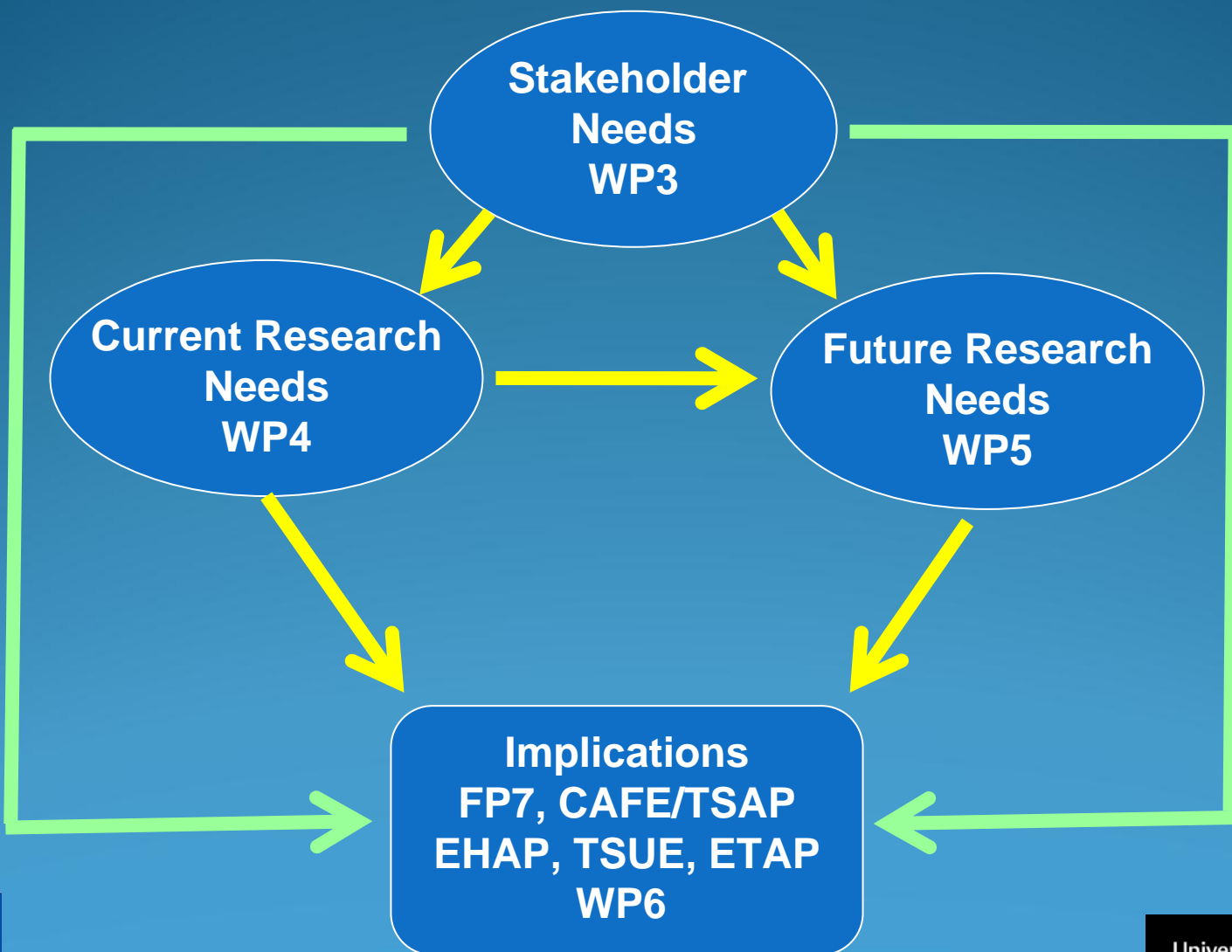
Type: Specific Support Action (SSA)

No. of partners: 6

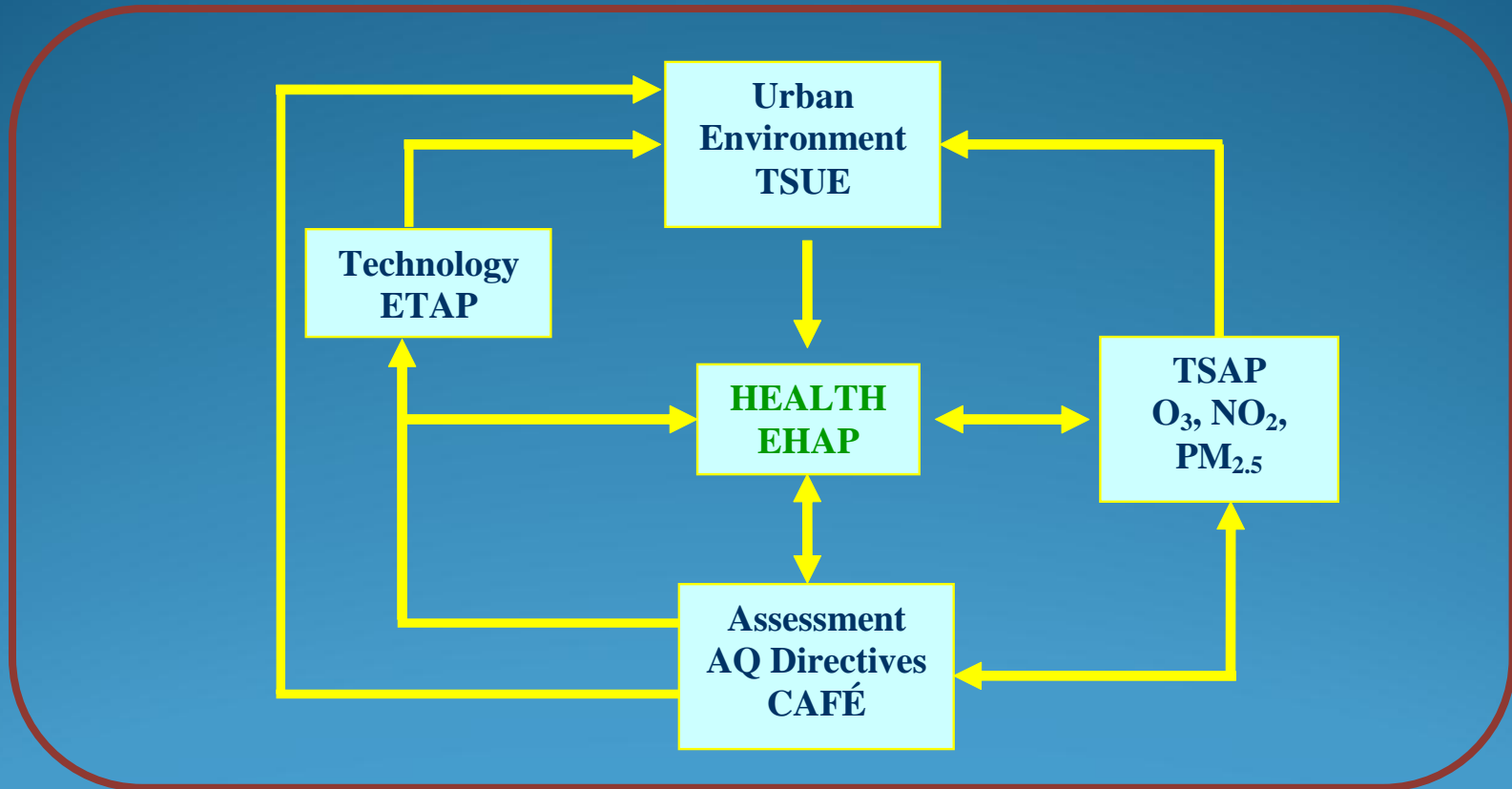
Participant number	Participant name	Participant short name	Country
1	University of Hertfordshire	UH	UK
2	The Netherlands Organisation for Applied Scientific Research	TNO	Netherlands
3	Finnish Meteorological Institute	FMI	Finland
4	Joint Research Centre (Ispra)	JRC	Italy
5	Aristotle University of Thessaloniki	AUTH	Greece
6	Utrecht University	RUUTR-FVM	Netherlands

- Air pollution
  - greatest impact on health in Europe
  - largest burden of environment-related disease (EEA 2005 Environment and Health)
- Examination of research on air quality and its impact on health
- Key problem pollutants – PM, O<sub>3</sub>, NO<sub>2</sub>
- Outdoor and indoor sources
- Light touch on air quality and climate (MEGAPOLI, EUCAARI, ACCENT)
- Assessment approaches

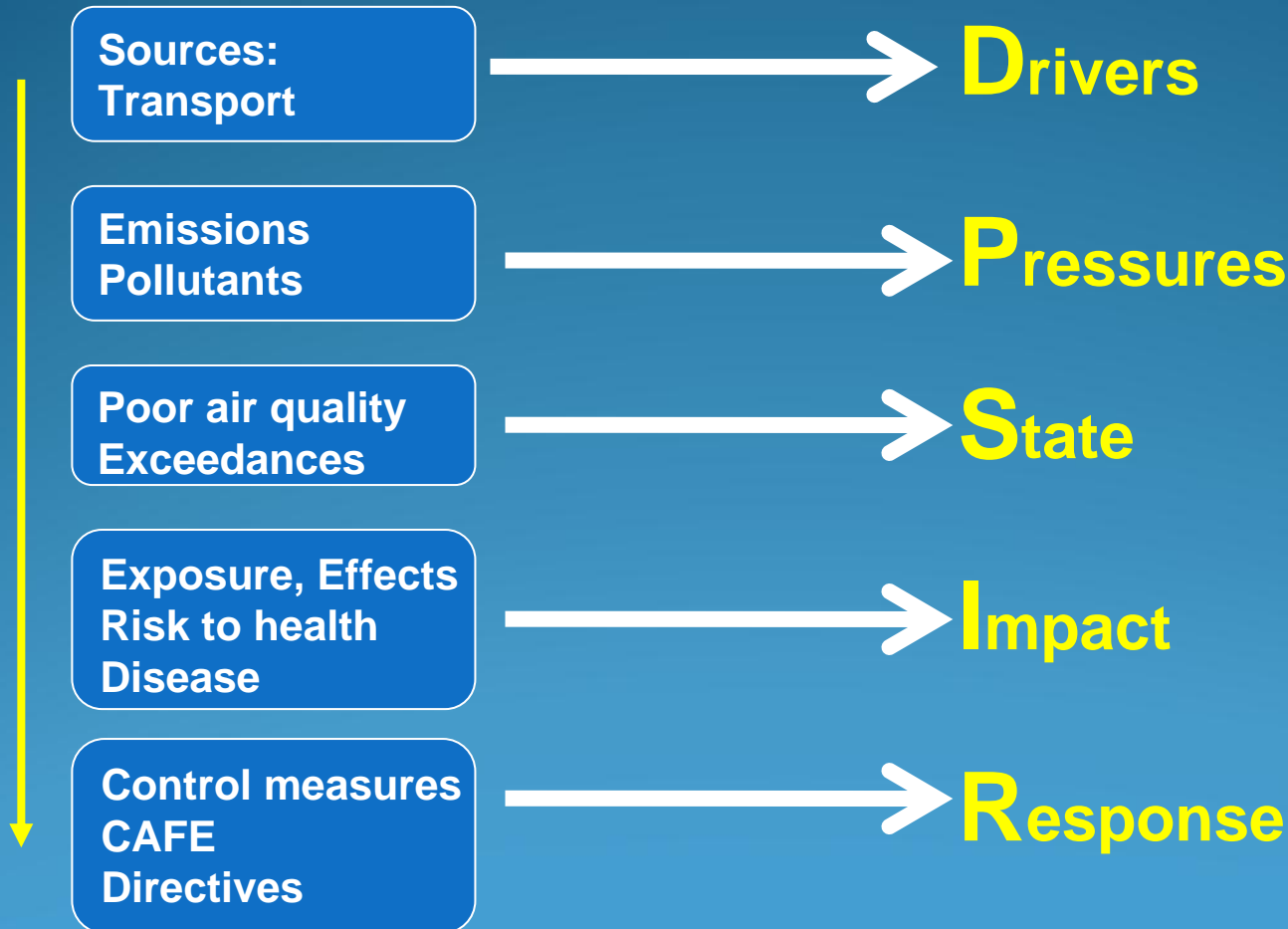


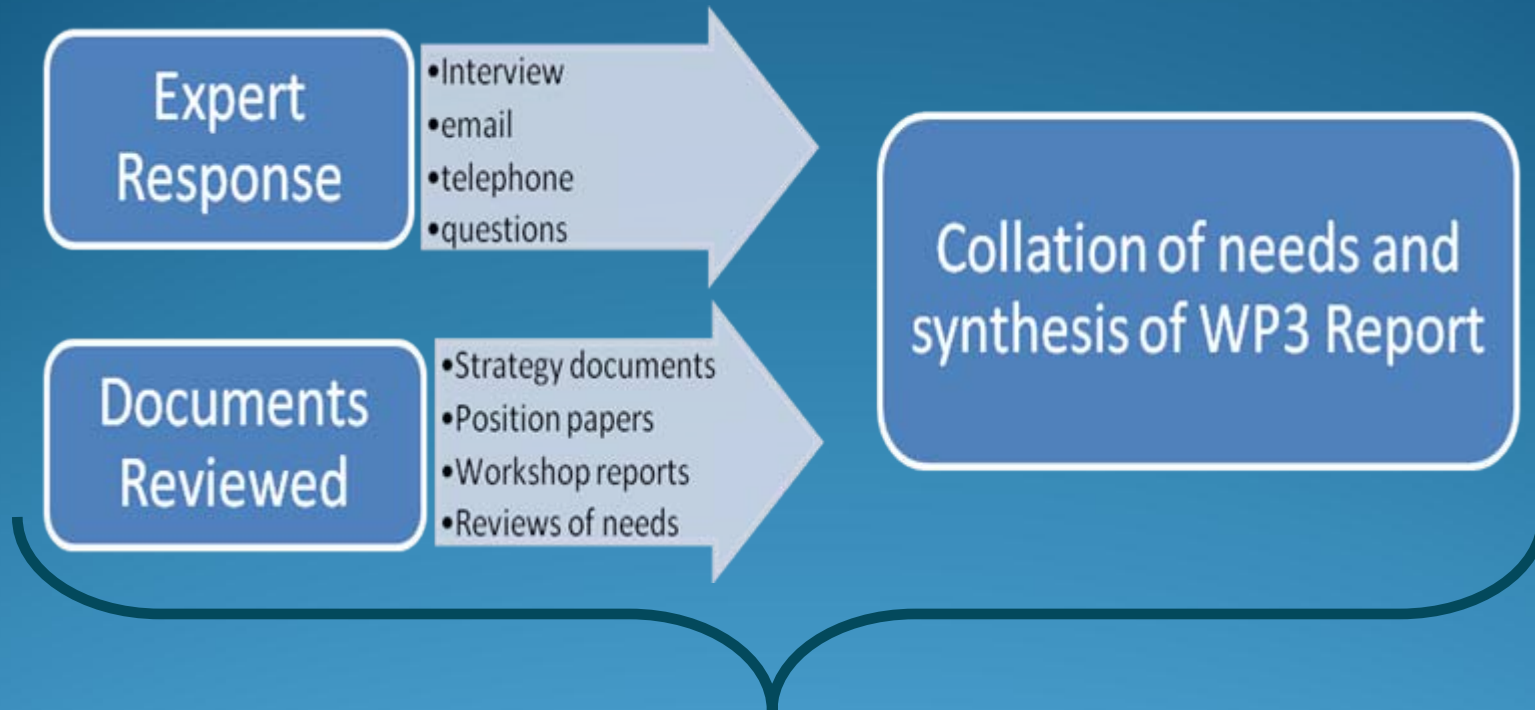


# Relationships between strategies



Research FP7



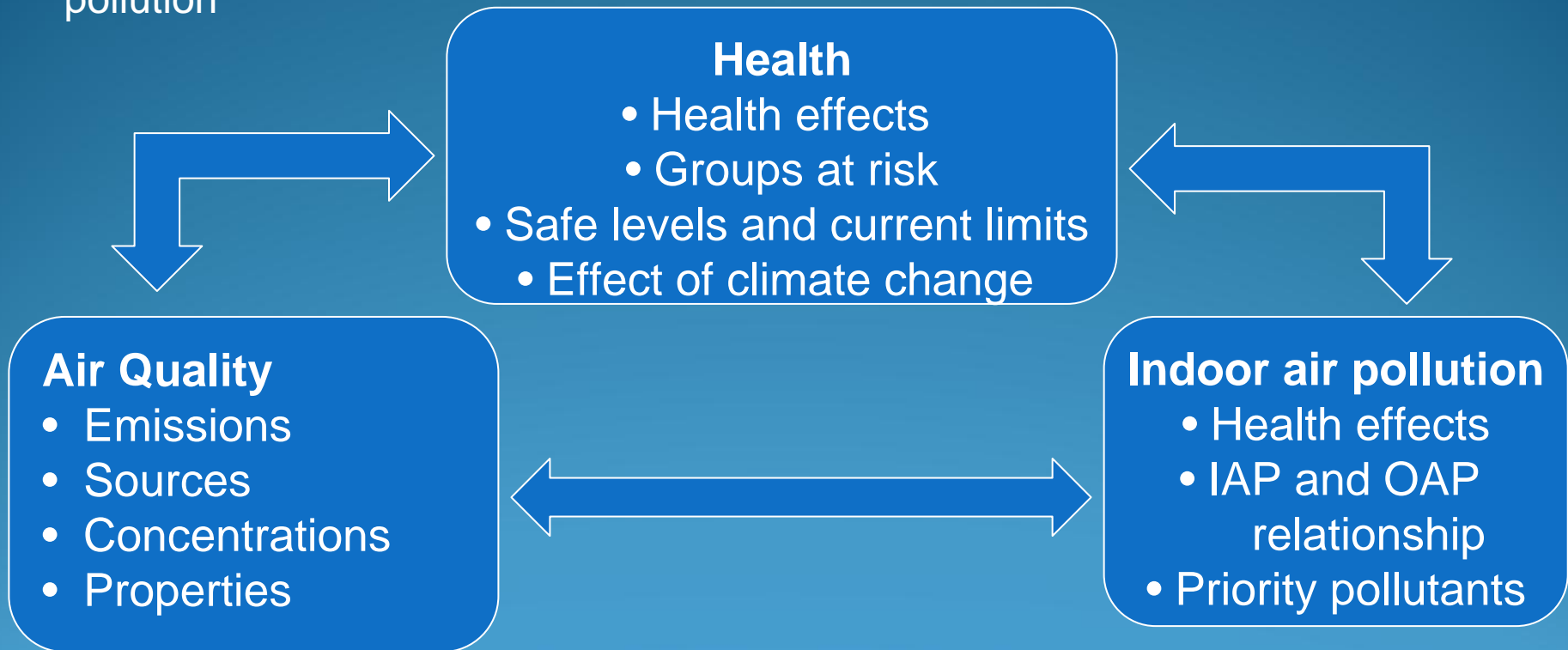


Research priorities of stakeholders

# What are the priorities of the stakeholders?

- Large number of topics highlighted
- Monitoring - greater commonality and harmonisation
- Making existing sites appropriate for health impact assessment
- Particulate matter of greatest concern – characterisation, fine fractions, sources, harmful components
- Short as well as long term epidemiology studies
- Outdoor and indoor air pollution
- improved assessment models - advanced methods, integrated approaches
- Others.....

- Q & A approach – what we already know and what we still need to know ?
- 20 questions organised according to Air quality, Health, Indoor air pollution



- **Air Quality**
  - Which emissions and sources are the most important?
  - How are concentrations changing?
  - Are current limit values attainable?
  - What do we know about the properties of PM?
- **Health**
  - Which health effects are caused by air pollution?
  - Which groups are at highest risk?
  - Are there safe levels of air pollution?
  - Do any new findings affect current limit values?
  - How is climate change likely to affect AQ and health?
- **Indoor air pollution**
  - Which health effects are associated with IAP?
  - What is the relationship between IAP and OAP and how does this affect health impact?
  - What are the priority indoor air pollutants?

- **Workshops**
  - Users meeting and feedback, 24-25 May 2007, JRC Ispra
  - External experts meeting, 14 Dec 2007, Brussels
  - First Stakeholders workshop, 19 June 2008, Brussels
  - Second workshop – 19 January 2009, Brussels in collaboration with CONCAWE
- **Future needs in air quality and health research**
- **Implications for strategies and action plans**

- Research needs for FP7
- Overview of the urban air quality research needs that are expected to arise in relevant areas of society
- Current state of the art research in urban air quality and health
- Future research priorities for urban air quality and health
- Implications for research priorities of sustainable development strategies and action plans

## 7th International Conference on Air Quality - Science and Application, Istanbul, 24-27 March 2009

### Special session topics:

- Air quality and health
- Air quality policy and management
- Air quality and climate
- Chemical weather forecasting



## Discussion

Aim: To identify key research needs and make recommendations for stakeholders and policy makers

- Are all key levels of stakeholders involved and have we missed any needs?
- What benefits can policy makers derive from integrating models?
- Are there reasons why PM levels are not falling in Europe?
- Can indoor air pollution be brought into the air pollution policy framework?
- Are there any areas that have not been mentioned or covered by C4H?