Some special problems of improving air quality strategies for Russian cities. – View from the inside Sergei

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Monitoring and AQ in cities:

- National AQ monitoring network lunched in 60-es
- Regular observations in more than 650 stations
- More than 250 cities
- Approx. **30 pollutants**
- Annual exposure is very high in 35 cities
- Among **5 major contributors** to very high exposure in these cities **are**:
- BaP in 33 cities, rank 1in 6 cities
 Formaldehyde in 31 cities, rank 1 in 12 cities
 Nitrogen dioxide in 26 cities, rank 1 in 5 cities
 TSP in 14 cities, rank 1 in 7 cities
 Phenol in 4 cities, rank 1 in 2 cities
 Hydrogen fluoride in 4 cities, rank 2 in 2 cities
 Carbon bisulfide in 4 cities, rank 1 in 2 cities
- trends to higher annual average levels in largest cities:
- nitrogen dioxide in 5 cities
- formaldehyde in 7 cities
- BaP in 13 cities



(Normal AQ at API=5)

Air Pollution Index &Number of Cities (%):

- 1: API > 13 (very high)
- 2: API = 7 to 13 (high)
- 3: API = 5 to 6 (higher)
- 4: API < 5 (low)

Total population in cities under (1) and (2) is 58.1 mill. in 2002

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Major current factors:

- A huge number (598) of pollutants under legal control with no prioritizing
- A legal status of AQ limit values is not high enough to enforce effectively
- AQ limit values are too strong to be met in the foreseeable future
- Hygienic criteria are regulatory ones at the same time
- Enormous growth of urban traffic in 90- is (hundreds per cent) growth of cars amount
- Infrastructure of cities is not correspond actual traffic
- High intensity of transit transportation through cities
- Low quality of fuel combustion in automobiles
- Industry sited in living districts leads to "specific" AP
- Energy losses (transportation, home heating)
- Low level of public awareness in AQ&Health issues

What should be done?

What could be done?

- To answer the question: is clean air needed indeed or there exist different national/regional/municipal priorities?
- To answer the question: what is the acceptable AQ?
- To answer the question: what is the achievable AQ in the time fixed?
- To answer the question: could national/regional/municipal economy be converted to meet clean air everywhere?
- To answer the question: who/what should be responsible for clean air to be purchased to everyone?
- To develop and to declare to the nation clear AQ policy
- To determine pollutants of highest priority at national/regional/municipal level
- To establish AQ standards for priority pollutants as national law/governmental act and terms&rates to meet them as well
- To elaborate cooperation of authority, busyness, and society in AQ&Health issues
- To construct the bridge between decision makers and scientific community on AQ&Health issues
- To restore public transport
- To strengthen pressure upon industry (land price, technologies, products/goods
- To harmonize national approaches in activity on improving air quality with international ones
- To strengthen activity on improving policy makers/public awareness