



HEIMTSA

Health and **E**nvironment **I**ntegrated
Methodology
and **T**oolbox for **S**cenario **A**ssessment

Project Information Leaflet

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Website: www.heimtsa.eu



HEIMTSA is an integrated project funded under the EU Sixth Framework Programme for Research – Thematic area “Sustainable Development, Global Change and Ecosystems”.
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What is HEIMTSA?

Main Objective

HEIMTSA was established to support the work of the European Commission, especially the Environment and Health Action Plan, to inform the development of policy at the European level by providing

1. methodologies,
2. tools,
3. processes and
4. worked examples

for predicting the intended and unintended environmental health impacts of proposed policies and measures, assessing associated uncertainties, and presenting the results visually.

1. Methodologies

HEIMTSA develops and provides improved methods for Health Impact Assessment (HIA) and Cost Benefit Analysis (CBA) to predict and quantify, as fully as evidence permits, the environmental health impacts of European-level policies in various sectors by using the Full Chain Approach. Each step of the chain uses models and data appropriate to the pollutants under consideration. The methodology pays particular attention to transitions between elements of the chain, including linkage across stages in terms of space, time and population disaggregation; and to uncertainty assessment.

2. Tools

An associated set of tools being developed to implement the methodologies EU-wide, the so called Integrated Environmental Health Impact Assessment Computational System (IEHIACS).

3. Processes

The methodologies and tools described above will be applied to selected realistic policy scenarios at the European level, identifying priority knowledge and data gaps. The developing of HIA/CBA capability in Europe will be achieved through improvements in methods and tools, dissemination and training, and by

strengthening the HIA community (practitioners and users) in Europe.

4. Worked examples

The methodology development has involved close collaboration with the 'sister' projects INTARESE and 2-FUN, including joint work with INTARESE on an integrated toolbox and a complex case study – evaluating the environmental health effects of EU-wide policies to mitigate or adapt to climate change. In addition, HEIMTSA is developing so called 'case studies' for the topics indoor air, outdoor air, traffic noise and heavy metals, by which the application of the full chain approach is demonstrated.

Expected Results

- Methods:
 - (i) Clarifying the core methodology of integrated environmental health impact assessment (IEHIA);
 - (ii) Extending detailed IEHIA methods e.g. using an exposure scenario approach, including for personal exposures to PM; risk assessment of aggregate exposures; expressing mortality impacts of changes in hazards; valuation studies of COPD.
- Tools, for an Integrated Toolbox
 - (i) Main development of IEHIACS, including for uncertainty assessment and visualisation;
 - (ii) Contributions to complementary Guidance System (on how to do IEHIA) and Toolkit of selected tools, led by INTARESE.
- Worked examples – The joint IEHIA case study of climate change policies; HEIMTSA full chain examples of selected pollutants in outdoor air, indoor air, noise from traffic and heavy metals.
- Dissemination to and training of potential users – policy makers at EC and national/regional level, practitioners, students

Structure of HEIMTSA

HEIMTSA comprises 7 sub-projects (Streams), with 18 Work Packages (WPs)

Stream 1: Scientific infrastructure

This cross-cutting Stream will ensure that HEIMTSA is well connected with other researchers and with potential users of its methods and tools (WP1.1), and that advanced methods of uncertainty assessment (WP1.2) and mapping (WP1.3) are integrated as core activities.

Stream 2: Exposure and transport pathways: from emissions to human exposure

S2 will provide and, as far as practicable, quantify the links between emissions, transport pathways, exposure pathways and exposures of individuals and populations.

Stream 3: From human exposures to health effects

The aim of this Stream is to provide a methodology for quantifying health effects arising from the exposures considered in S2, particularly those that can be assigned economic values in S4.

Stream 4: Monetary valuation WP4.1 will extend existing methods with new field studies in the UK, Norway, Czech

Republic and Italy. WP4.2 will examine alternatives to the usual methods of monetary valuation, and see whether other ways of aggregating diverse health impacts might be more acceptable to non-economists.

Stream 5: Integration and application

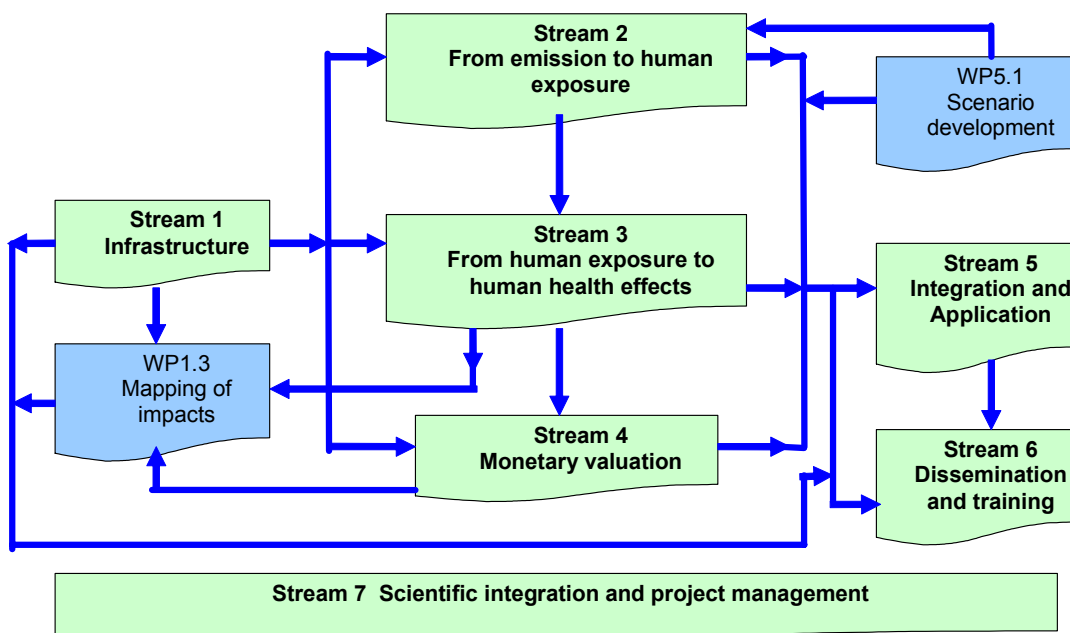
WP5.1 will develop the baseline and other scenarios to be evaluated. WP5.2 deals with system design and integration, including interfaces between the component tools and modules. WP5.3 will test the usability of the methods and tools, and provide results from selected scenarios for discussion and use.

Stream 6: Dissemination and training

S6 will ensure dissemination of the project tools, methods and findings to the Commission, to the scientific community and to other stakeholders; and will provide internal and external training.

Stream 7: Scientific integration and project management

The aim of S7 is to ensure that HEIMTSA as a whole is unified, coherent and efficient, both scientifically and in terms of its management.



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