



Integrated Assessment Models - projects and objectives

<p>Project 4</p>	<p>Integrated Assessment Modelling, IAM</p> <p>The overall objective of this sub program is to provide a basis for optimisation and assessment of future air pollution policies in Sweden and Europe.</p> <p>Project leader: John Munthe, IVL, Swedish Environmental Research Institute.</p>
<p>Project 4.1</p>	<p>Costs of non-technical measures in IAM models - theoretical considerations</p> <p>The objectives of this sub-project are to evaluate different concepts on how costs could be included in integrated assessment models and to develop a practical theory to be able to use in integrated assessment modelling. Such an approach should take into account the parallel inclusion of both technical and non technical measures in model formulation and assumptions. The abatement cost functions should not only be theoretically correct including major costs of interest and the synergies amongst them, but these costs should also be possible to estimate and be practical to include in an IAM.</p> <p>Project leader: Mohammed Belhaj, IVL, Swedish Environmental Research Institute.</p>
<p>Project 4.2</p>	<p>Inclusion of non-technical measures in the GAINS model</p> <p>The objective is to harmonise the cost theory developed in project 4.1 with the operative features of the cost calculations in GAINS. This requires both the cost theory developed in project 4.1 to be adjusted to the operational requirements in GAINS as well as it requires the GAINS methodology to be expanded so that new abatement measures can be taken fully into account.</p> <p>Project leader: Stefan Åström, IVL, Swedish Environmental Research Institute.</p>
<p>Project 4.3</p>	<p>Development of a GAINS Sweden</p> <p>The purpose of this project is to contribute to the construction of a national IAM resource through adjusting the GAINS model developed at IIASA for testing new theories and implementing regional and local simulations on a Swedish, and eventually Nordic level. The result will be a GAINS Sweden, with possible Nordic extension, yet directly based on the European GAINS model and developed in close collaboration with IIASA. The aims are to:</p> <ul style="list-style-type: none"> • Adjust GAINS into a functional version on a Swedish (Nordic) level/resolution; • Implementing the cost module as developed in project 4.2 into the current GAINS Europe model or into the GAINS Sweden version; • Possible structure adjustments of the GAINS model to enable the introduction of alternative scenarios and baseline costs as discussed in subproject 4.1 and 4.2. <p>Project leader: Salim Belyazid, IVL, Swedish Environmental Research Institute.</p>
<p>Project 4.4</p>	<p>Integrated assessment modelling at a national scale</p> <p>To carry out a case study in GAINS Sweden based on national cost estimates, latest dose response relationships as well as alternative scenarios. The focus of the case study will most probably be the Domestic sector (or the transport sector).</p> <p>Project leader: Jenny Arnell, IVL, Swedish Environmental Research Institute.</p>