

**THE LONG-TERM SUSTAINABILITY AND SOCIO-ECONOMIC IMPLICATIONS  
OF INTEGRATED REGULATORY APPROACHES**

*Andreas N. Skouloudis and Michael J. Mineter*  
Institute for Environment and Sustainability  
Joint Research Centre Ispra, European Commission  
TP. 280, Ispra (VA), I-21020, Italy

This presentation considers atmospheric pollution in EU countries, and assesses methods and policies that have sought to control or reduce the problems over the last ten years. The processes associated with environmental pollution are complex, with the result that interventions have frequently failed, or been unsustainable over the long term. We seek to review and understand this record.

In assessing the contribution of existing, pending and potential European legislation and regulatory policies, we focus upon several aspects. Firstly, we consider integrated regulatory tools, evaluating the relative benefits of reducing simultaneously emissions of several pollutants and of controlling individual emission sources. Secondly, we consider the effect of the changing socio-economic background against which these policies are applied, with regard to both socio-economic indicators and measured pollutant concentrations. Thirdly, we demonstrate some important differences between north and south European conditions. Fourthly, we investigate the cost-effectiveness for various incentives targeted to primary and secondary pollutants, expecting that at least preserving budget neutrality should help increase the attractiveness of such targeted instruments to fiscal administrations.

We conclude that more complex abatement legislation and strategies are needed. These must take into account regional differences, both in terms of fiscal characteristics (at regional as well as national levels) and in terms of the effect of the likely impact on pollutants. For example, the reduction of maximum concentrations does not necessarily reduce the area where exceedances above the standards occur.