



EU-funded research in Impact Assessment and Sustainable Development

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Political objectives - Why do we have to do an Impact Assessment?

1) To promote sustainable development

Göteborg (2001) Sustainable Development Strategy proposed introduction of Sustainable Development Impact Assessment (Economic, Environmental and Social impacts)

2) To promote better law making and evidenced based policy making

Laeken (2000) and Seville (2002) Mandelkern and Better Regulation Action Plan proposed introduction of Regulatory Impact Assessment (Regulatory analysis, Subsidiarity and Proportionality)

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Towards the EU Sustainable Development Strategy II

- **Launch of Public consultation in 2004**
- **The 2005 Review of the EU Sustainable Development Strategy: Initial Stocktaking – COM(2005) 37 final of 09.02.2005 + Staff Working Document**
- **Declaration on Guiding Principles for Sustainable Development – COM(2005) 218 final of 25.05.2005**
 - 10 Principles (i.e. equity, stakeholder involvement, policy coherence, precautionary principle etc.)
 - Research-related principle: Use best available knowledge.

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The Review: Initial Stocktaking and future orientations (I)

PART I: What is at stake?

- **Changing the way we make policies:**
 - **Improving policy coherence:** introduction of the Impact Assessment instrument
 - **Developing the Open method of Co-ordination:** best practices, common objectives and indicators have been agreed by the Commission and MS for ex. in the area of social inclusion.
 - **Getting prices and incentives right:** Introduction of market-based instruments along with regulatory measures (Allowance Trading Scheme for GHG emissions, Energy Tax Directive).
 - **Investing in Science and technology:** The Sixth Framework Programme devotes a research area to Sustainable Development research.
 - **Communicating and mobilising Citizens and Business:** improvement of the consultation process at the EU level also thanks to the adoption of the Communication on the minimum standards for consultation.
- **Unsustainable trends**
 - Climate change and Clean energy, Public health, Poverty and social exclusion, Ageing society, Management of natural resources, Land use and transport
 - Still unsustainable
 - The external dimension has been incorporated (2002 European Council in Barcelona)

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The Review: Initial Stocktaking and future orientations (II)

PART II: Responding to the challenges

- **Reaffirming the basic principles of the EU SDS:**
 - three-dimensional nature
 - complementarity with the Lisbon Strategy
- **Reaffirming the new approach to policy making and policy coherence**
- **Maintaining a focus on key unsustainable trends and exploring their linkages**
- **Setting objectives, targets and milestones:**
 - Need for clearer objectives, targets and deadlines for giving focus to action in priority areas and enabling progress to be measured.
 - Need of intermediate milestones
 - Need of indicators for monitoring progress
- **Ensuring effective monitoring**
 - EUROSTAT Sustainable Development Indicators + structural indicators + sectoral policy indicators
 - Efforts in developing models, forecasts and scientific data
- **Strengthen ownership and improve co-operation with public and private actors at all levels.**

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Introducing Impact Assessment at the Commission

- **Communication on Impact Assessment**
COM(2002)276 fin + Guidelines
- **Commitment to perform an IA of policy proposals to assess their impacts on economic, environmental and social impacts**
- **It builds on existing sectoral experiences**
(Environmental, SME business, gender assessments etc.)
- **Sustainability Impact Assessment of DG Trade co-exists with Impact Assessment.**
- **Assessment of spillovers of sectoral policies, trade-offs between environmental, economic and social impacts and coherence of different policies.**
- **Impact Assessment is a support to policy**

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Impact Assessment Practice at the Commission

- 43 Extended Impact Assessments foreseen in 2003 and 46 in 2004
- Learning process
- 21 out of 43 IAs carried out in 2003 – first experience
- 30 out of 46 IAs carried out in 2004

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Overview of recent Developments

- Better Regulation for Growth and jobs in the European Union – COM(2005)97 final
- New guidelines:
 - Reinforcing economic and competitiveness impacts
 - Stressing the obligation of including several options (no EU action, simplification of legislation)
 - Enhancing stakeholder consultation: Roadmaps, provisions for final report
 - Providing guidance on proportionate analysis
 - Stressing the importance of effective inter-service consultation

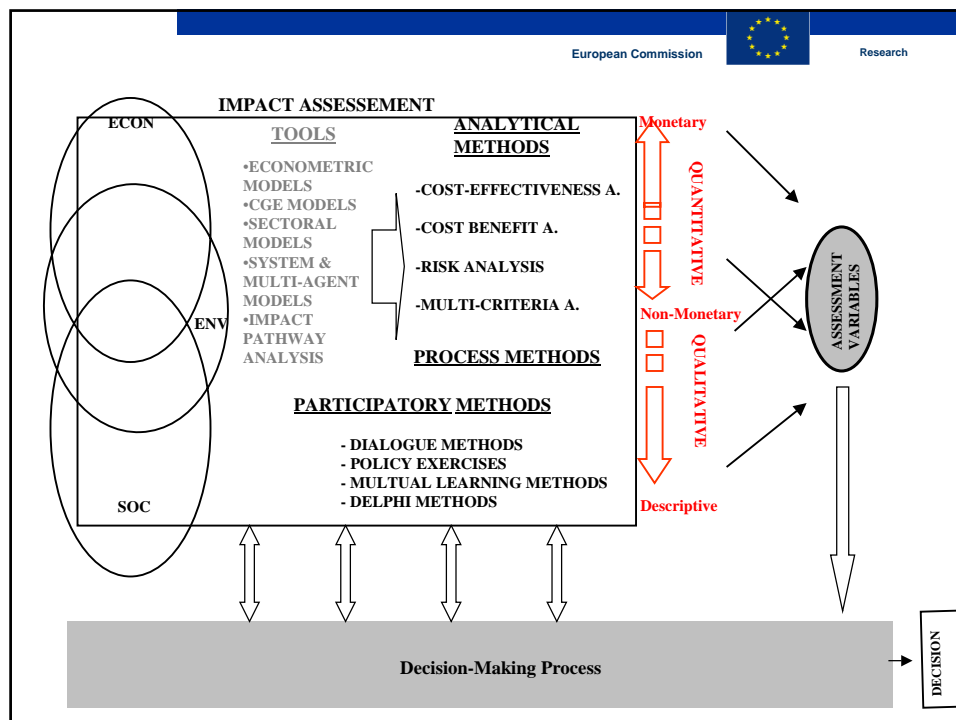
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Some areas of Improvement and lessons for research

- Alternative options
- Comprehensive analysis
- Quantitative analysis
- Building a 'culture' of IA
- Need for appropriate tools that address all dimensions of sustainability and enable to highlight trade-offs
- Further development and wider use of quantitative tools (macro and micro models, general and partial equilibrium models etc.)

→ Dissemination and capacity building within the Commission

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Achievement of past Research Framework Programmes

- **Development of economic models, specially for Climate change (specially E3 models):**
 - PRIMES, POLES, GEM-E3, NEMESIS
 - ExternE for calculating externalities in the energy sector.
- **Examples of further development of models/tools:**
 - **GECS - Greenhouse Gas Emission Control Strategy (Co-ordinator: LEPII-EPE – University of Grenoble):**
 - Co-ordinating use of different models (POLES, PRIMES and GEM-E3)
 - Calculating impacts of emission constraints on energy, transport, agriculture and land use
 - Analysing consequences of multi-gas flexibility at world level
- **GREENSENSE - An Applied Integrated Impact Assessment Framework for the EU (Co-ordinator: University of Bath):**
 - Improving availability of data on environmental damages caused by different economic activity using the 'Impact Pathway Analysis' (ExternE).
 - Developing/ applying an environmental accounting framework incorporating sustainability issues and facilitating cost-benefit analysis.

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Examples of contribution of research results to policy-making

- **Scenario building and forecasts**
- **Policy simulation (e.g. economic instruments)**
- **Quantification of impacts**
- **Some examples:**
 - PRIMES and POLES - Proposal and Impact Assessment of the Directive establishing a Scheme for GHG emission allowance trading;
 - NEMESIS – Assessing impacts of FP7 on growth and employment
 - GECS and PRIMES - Impact Assessment of the amending Directive integrating Kyoto protocol's project based mechanisms (JI and CDM).
 - ExternE – Impact Assessment of CAFE Strategy

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Role of the Sixth Research Framework Programme to Impact Assessment

- **Area “Cross-cutting Issue for Sustainable Development” of Sub-Priority “Global Change and Ecosystems” (Priority 6.3):**
 - Support Sustainable Development and provide tools and models for Impact Assessments.
- **Scientific Support to Policies**
 - Research topics identified by DG Research in co-operation with other DGs for their own policies.
 - Area 1.5 Environmental Assessment
 - Area 2.3 The impact of environmental issues on health
 - Area 3.4 “Forecasting and Developing Innovative Policies for Sustainability in the Medium and Long Term
 - Last call December 2005 (15 or 22)

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FP6 Projects on Impact Assessment

- **I.Q. TOOLS –co-ordinated by ZEW – www.zew.de**
 - Developed with Secretariat General and inter-service Steering Group to support Impact Assessment at the Commission;
 - Qualitative and quantitative tools supporting the identification of impacts and the preparatory work for drafting IAs;
 - interactive inventory of modelling tools for quantitative analysis and development of a macro-economic model (General equilibrium)
 - Good practice manual on Commission and country experiences
- **SUSTAINABILITY A-TEST –co-ordinated by IVM of Vrije Universiteit Amsterdam – www.sustainabilityA-test.net**
 - Provide consistent and peer-reviewed appraisal of common and emerging methods for sustainable development related assessments;
 - Provide and apply a framework (matrix) for the evaluation of methods and tools (e.g. how the tools relate, their characteristic, the circumstances under which they can be used, the constraints, the pros and cons)

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European Commission  Research

FP6 Integrated Project on Impact Assessment

- **MATISSE – co-ordinated by Maastricht Univ. - ICIS**
 - Building a conceptual framework for Integrated Sustainability Assessment (ISA) development, implementation and evaluation;
 - Development of a future tool portfolio for ISA including economic modelling and system dynamics modelling;
 - Test the tools in several case studies (e.g. agriculture, forestry and land-use, resource use, environmental technologies and capacity building)
 - Involvement of stakeholders and policy-makers.

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European Commission  Research

The IMP3 project

- **Providing scientific inputs for the improvement of the EIA procedure**
- **Objectives:**
 - Incorporating human health aspects into EIA
 - Developing a policy tool that enables the use of externality data in policy contexts
 - Harmonising the criteria and thresholds used across the EU for EIA.
- **Relevance of the project:**
 - Synergies with Impact Assessment methods: aiming at a greater coherence between assessments at different decision-making levels;
 - Environment and Health Action Plan: development of tools such as health Impact Assessment.
 - In the last call of Global Change and Ecosystems: IP on « Development of methods and tools for Environment and Health Impact Assessment and cost-benefit analysis for building and assessing future environment and health scenarios ».

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The Seventh Framework Programme

- Framework Programme adopted on 06.04.2005 by the Commission:
 - nearly 45 billion euro of the total 72.73 billion euro budget would be channelled towards Cooperation programme (Collaborative research, Joint Technology Initiatives, coordination of national research programmes and international cooperation).
 - Nine thematic areas for collaborative research are specified: health; food, agriculture and biotechnology; information and communication technologies (ICT); nanosciences, nanotechnologies, materials and new production technologies; energy; environment (including climate change); transport (including aeronautics); socio-economic sciences and the humanities; and security and space research
- Specific Programmes adopted on 21.09.2005 by the Commission

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FP 7 Specific Programmes

***Cooperation* – Collaborative research**

***Ideas* – Frontier Research**

***People* – Human Potential**

***Capacities* – Research Capacity**

+

JRC (non-nuclear)

JRC (nuclear)

Euratom

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6. Environment (inc. climate change)

Climate change, pollution and risks

- Pressures on environment and climate
- **Environment and health**
- Natural hazards

Sustainable Management of Resources

- Conservation and sustainable management of natural and man-made resources
- Evolution of marine environments

Environmental Technologies

- Environmental technologies for observation, prevention, mitigation, adaptation, remediation and restoration of the natural and man-made environment
- Technology assessment, verification and testing

Earth observation and assessment tools

- Earth observation
- **Forecasting methods and assessment tools**

Concluding Remarks

- Impact Assessment at the Commission is an evolving learning process
- Improving of methods and tools by learning from previous experiences and enhancing synergies (e.g. of methods used for project and programmes)
- Recognised role of EU Research in developing further tools and methods that incorporate all dimensions of Sustainability
- Policy and research relevance of integrated assessment of impacts (Sustainable Development, Environmental along with health impacts);
- Policy support tools, as well Environment and Health included in the proposal of FP7.



Links and References

Further information on IA at the Commission on:

http://europa.eu.int/comm/research/environment/index_en.htm

http://europa.eu.int/comm/secretariat_general/impact/index_en.htm

http://europa.eu.int/comm/sustainable/pages/idea_en.htm

http://europa.eu.int/comm/governance/docs/index_en.htm

http://europa.eu.int/comm/research/environment/themes/article_1352_en.htm

<http://www.cordis.lu/en/sitemap.htm#eu-research>

References:

- *Socio-economic tools for Sustainability Impact Assessment – The contribution of EU Research to Sustainable Development*, 2002, EUR 20437
ftp://ftp.cordis.lu/pub/sustdev/docs/environment/pub_ml_socio_eco_tools_en.pdf
- « Impact Assessment and Sustainability » in C. Böhringer, A. Lange (eds.) 2005 (forthcoming), *Applied Research in Environmental Economics*, ZEW Economic Studies, Vol. 31, Springer Heidelberg.
- « EU research on Environment and Health: Expanding knowledge to improve our well-being
http://europa.eu.int/comm/research/environment/pdf/env_health_en.pdf