

Analysis of Distributional Impacts of Environmental Policies

Linking Impact Assessment Instruments with Sustainability Expertise

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Distributional Impacts of Environmental Policies

- 1. Developing new environmental policies is challenged by suspected distributional impacts:
- ⇒. Rising prices for energy / energy poverty
- ⇒. Prices for environmental friendly goods and services
- 2. The absence of (effective) environmental policies has distributional impacts:
- ⇒. Poor people are more often affected by emissions
- ⇒. Access to natural resources unevenly distributed
- ⇒. Distributional impacts are a cross cutting issue: all policy domains are potentially affected



Distributional Impacts – Different Concepts

- 1) Normative concept: Environmental justice
- 2) Analytical concept: Assessment of the distribution of costs and benefits
- ⇒) Integrating assessment of distributional impacts in policy impact assessment (IA)

Policy IA:

- -) A process to evaluate ex ante the impacts of policies
- -) Widely applied in OECD countries
- -) Varies with regard to focus, institutional setup and implementation
- ⇒) Why applying IA for distributional impacts?
- ⇒) How can distributional impacts be assessed in the context of IA?



Scoping of Distributional Impacts

Causal chain analysis:

Policies => activities/behavioural changes => impacts (=> indirect impacts)

Distributional impacts:

Impacts vary across different groups

- ⇒ What type of impacts?
- ⇒ What type of groups?



Impact Areas and Affected Groups

Impact Areas:

- Economic impacts
- Employment
- Health
- Societal participation
- Social cohesion
- Quality of life
- Gender impacts

Affected groups:

- Socio-economic properties
- Regional properties
- Types of households
 - Preferences
 - Cultural groups
 - Gender
 - Generations
 - Ownership



Processes of Change (van Schooten 2003, Weiland et al 2014)

Processes of change as link between output and impact:

Environmental

Economic

Spatial

Demographic

Institutional

Emancipatory



Three Steps to Analyse Distributional Impacts

- 1) Scoping: Causal Chain Analysis: possible causal chains Based on common sense and literature review
- Identification of policies, potential processes, impacts and affected groups
- => Potentially large number of causal chains
- 2) Stakeholder review: relevant causal chains Consultation with affected stakeholders
- Identification of knowledge gaps
- => Risk of overlooking relevant but unorganised groups
- 3) In depth analysis: unknown causal chains
- => Need for data and/or modelling capacities



Modelling Approaches: Microsimulation (Peichl et al., 2010)

IZAYMOD

Representation of households (employment and income) and legal framework (taxation and transfers)

Data based on socio economic panel, income and consumption sample

To explore

- ⇒ Fiscal effects
- ⇒ Distributional effects
- ⇒ Labor supply
- ⇒ Employment effects



Lessons for Policy Impact Assessment

- ⇒ Integration of distributional impacts in policy impact assessment is possible and needed
- ⇒ Analysis is useful for:
 - ⇒ Demonstrating positive distributional impacts
 - **⇒** Exploring counter measures
 - ⇒ Avoiding distributional impacts on societal groups with little access to political participation
- ⇒ Not all social / economic / environmental impacts are unevenly distributed and hence require the analysis of distributional impacts
- ⇒ Need to combine policy analysis, consultation, in depth analysis including modelling



LIAISE

- EU funded Network of Excellence (2009-2014)
- In transition to a community of practice
- Ambition: To develop excellent scientific knowledge relevant for societal decision making
- Focus on models and their use in policy impact assessment for sustainable development
- www.liaise-kit.eu

