

OECD Experience in Reforming Environmentally Harmful Subsidies

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SUBSIDIES ARE PERVASIVE



- **OECD transfers at least \$US400 billion annually to different sectors**
 - Equal to around 1.9% of GDP
 - Likely to be an underestimate
- **Distort prices and resource allocation decisions**
- **Negative effects on the environment**
- **Not all transfers are environmentally harmful subsidies**
 - But how to target those that are?



OECD AND IEA WORK OVER THE YEARS



- The OECD and IEA have measured transfers to agriculture, energy, fisheries and industry since mid-1980s.
- But some data series are more complete (and cover more years and more countries) than others.
- Some model-based analyses of effects of energy-pricing reform undertaken in 1990 (by OECD), in 1999 (by IEA for non-member countries), and in 2009 (by OECD and IEA).
- These studies showed that reforming consumer energy subsidies would yield significant improvements in welfare and in reducing GHG emissions.
- Modelling the effects of agricultural policy reform has been undertaken using PEM and - for the environment - SAPIM



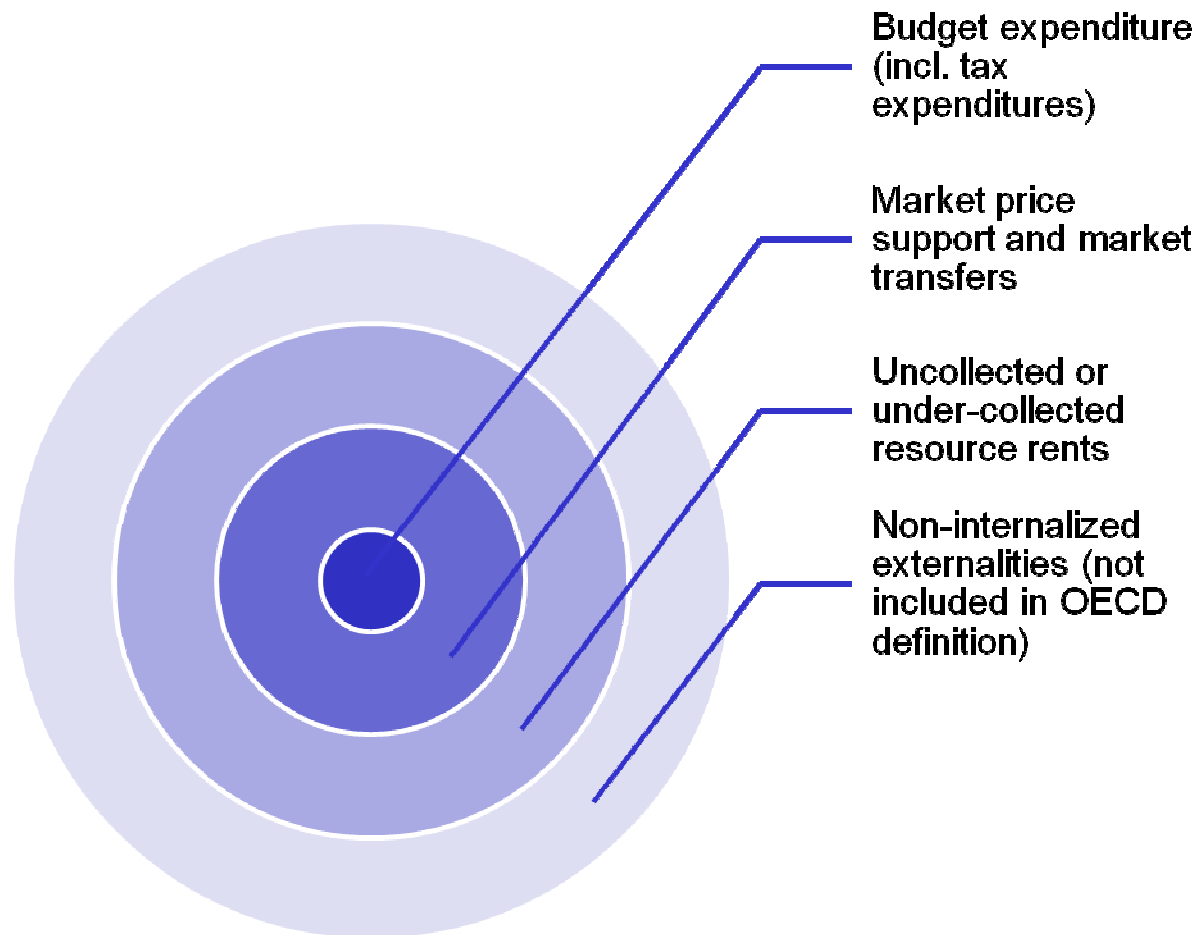
TOOLS FOR ANALYZING SUBSIDY-ENVIRONMENT LINKS



- ***Quick-scan:*** a roadmap that guides the analyst through three “linkages” between support measures and environmental effects:
 - The impact of support on the volume and composition of output in the economy
 - The mitigating effects of in-place environmental policies
 - The assimilative capacity of the affected environment
- ***Check-list:*** a simplified decision tree that requires less data than the quick scan.
- ***Integrated assessment:*** a set of guidelines for taking into account a wider range of subsidy impacts — on economic, social and environmental parameters, on other countries, cost-effectiveness.



IMPORTANT TO FIRST AGREE DEFINITIONS



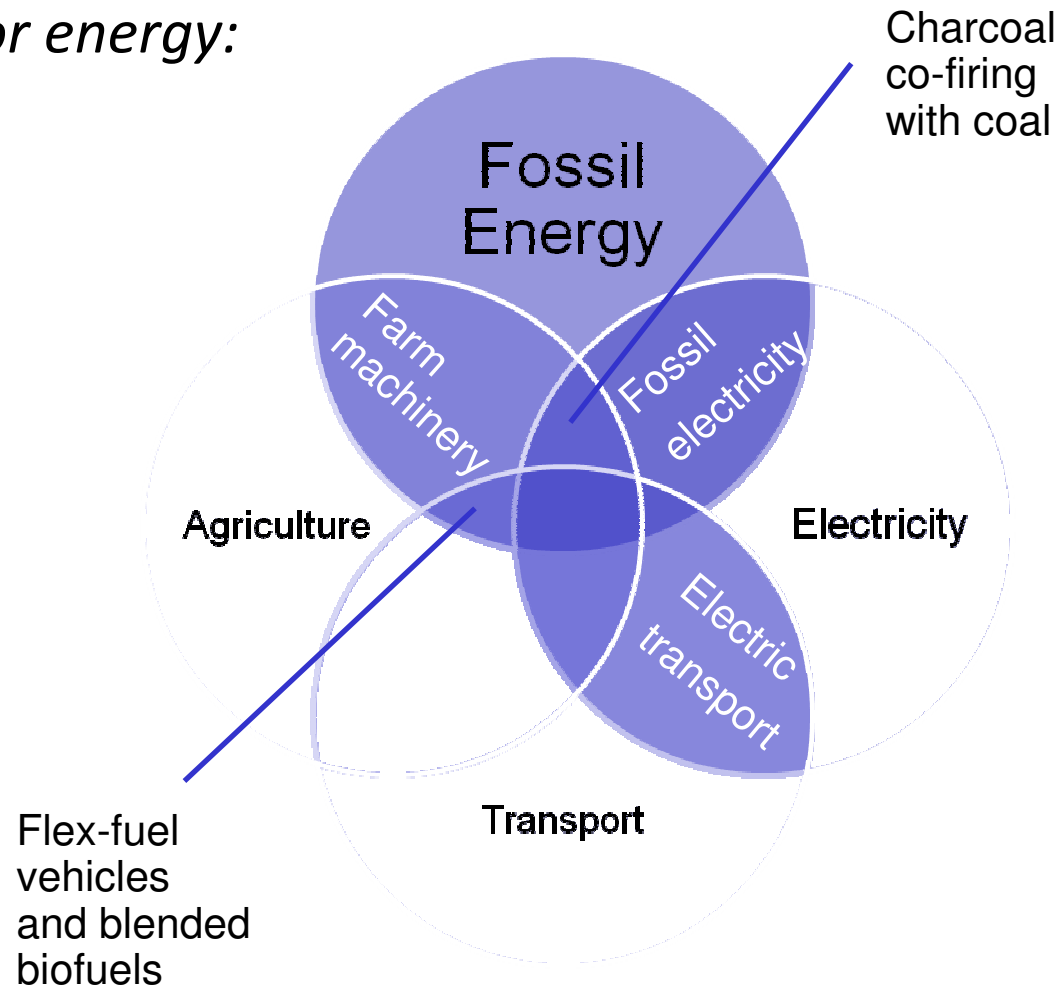
(Source: Steenblik, 2008)



... where to draw the boundaries ...

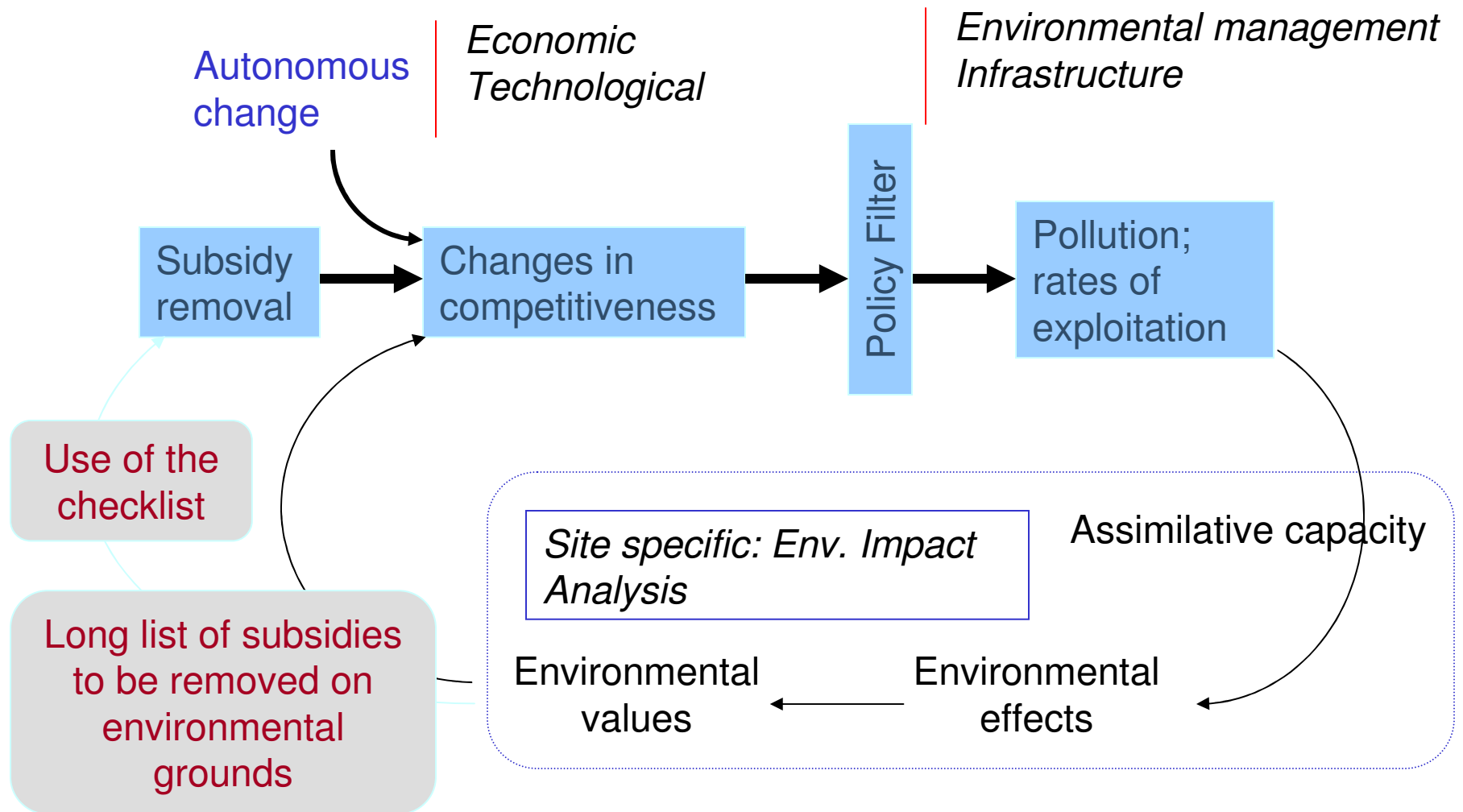


Example for energy:



(Source: Steenblik, 2008)

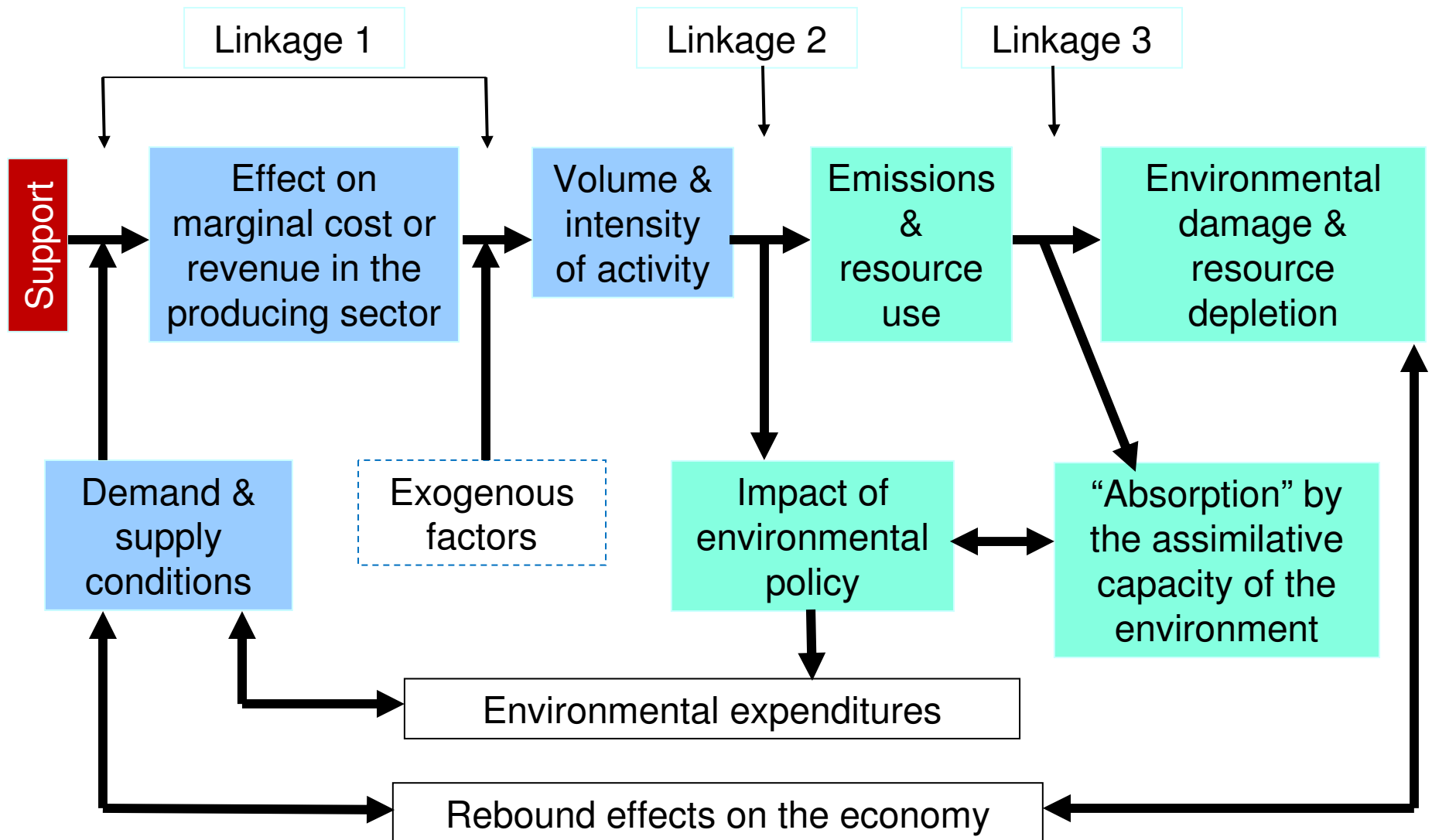
AND UNDERSTAND ENVIRONMENT-SUBSIDY LINKAGES



(Source: Pieters, 2003)



QUICK SCAN MODEL



(Source: Pieters, 2003)



STRENGTHS & WEAKNESSES OF THE QUICK SCAN



- The “Quick Scan” looks conceptually elegant, but proved to be difficult to apply in practice by most analysts in government.
- To really follow all of the links would require judgements about direct and indirect effects that would be hard to reconcile without the aid of sophisticated models.
- Hence, Jan Pieters, at the request of the OECD, helped develop a “checklist” that incorporates general relationships between subsidies, economic effects and environmental effects into a sort of decision tree.



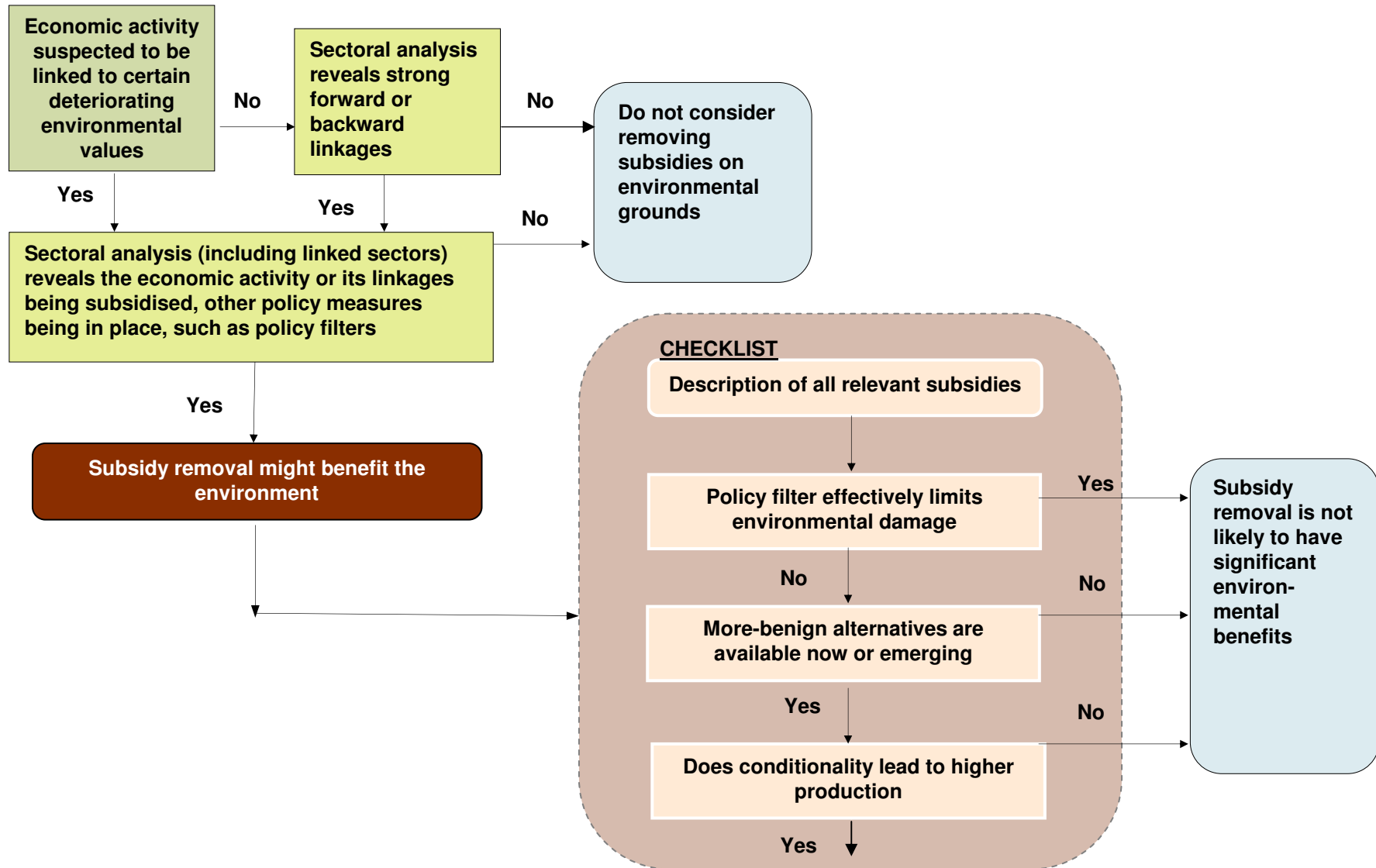
CHECKLIST APPROACH



- Identify those subsidies whose removal would lead to an environmental improvement, other things being equal
- Two stage process
 - Identify effects of subsidies on consumer and producer decisions
 - Identify the link between these decisions and the environment
- Policy filter
- Technology lock-in



FLOW CHART OF THE OECD CHECKLIST





- **Agriculture**
 - Market price support, output payments, input subsidies all are potentially harmful
- **Fisheries**
 - Effectiveness of management regime critical
- **Transport**
 - Mixed impacts from subsidy removal
- **Energy**
 - Focus on support to fossil fuels, but social considerations need to be considered
- **Water**
 - Subsidy removal generally positive, but public health and social impacts important - and depends on property rights regimes



- **Significant scope for reducing environmentally harmful subsidies across all sectors**
 - Generate economic as well as environmental benefits
- **Checklist is a useful common organising framework**
- **Improves transparency**
- **Identifies data problems**
- **Helps set priorities for action**
- **Sectoral and country diverse characteristics**
 - Resource endowments and environmental profiles



STRENGTHS OF THE CHECKLIST



- Checklist establishes a common organising framework that can be applied in a systematic way to different sectors in different countries and to existing and proposed subsidy programmes.
- Is largely intuitive – without modelling “black holes”.
- Helps to highlight those areas in which further detailed empirical analysis is required in assessing the economic, social and environmental effects of subsidy removal.
- Helpful to those new to the topic, because it’s easily understood, and can be followed up by sophisticated analyses.
- Can easily be applied in a relatively cost-effective manner and so is more versatile than traditional cost-benefit analysis.



WEAKNESSES OF THE CHECKLIST



- Risk that it could be seen as so flexible and all-encompassing that it ceases to be a useful tool for rigorous analysis.
- Analyses only as good as the underlying data, linkages and the skills and knowledge of the analyst.
- Number of people working on these issues is small, which limits benefit of frequent interchange among experts and development of the tool.
- At the end of the day, what is needed is more systematic information on policies, and models that can model both complex economic *and* environmental relationships.
- The latter has been developed for agriculture (and bioenergy) using the Stylized Agricultural Policy Impact Model (SAPIM)



INTEGRATED ASSESSMENT



- Entails a wider range of impacts of a subsidy than just the economy-environment link: encourages thinking in terms of policy coherence.
- Also asks questions about the social dimension (such as “who benefits?”) and cost-effectiveness.
- Ideally, the analysis should also explore options for reform and the impacts of carrying out reform.
 - Would the impacts from reform differ from a simple reversal of the impacts of the subsidy?
 - Would flanking measures be needed, and if so what kind?
 - Would reform imply higher transaction costs?



THE WAY AHEAD



- All these tools assume that a subsidy has been identified. Yet biggest problem is often that we have incomplete knowledge about all the relevant policies.
- The effects of most subsidies cannot be assessed in isolation: they are affected not only by policy filters but also by other support measures (e.g., trade barriers) – and other factors influence environmental performance.
- We need better and more complete information on subsidies, and how to estimate them, and tools that can be used without resort to complex computerised models.
- We also need models that can enable analysts to probe deeper into the effects of subsidies and provide guidance to the more simple checklist-type tools.



Thank You



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BENEFITS OF SUBSIDY REFORM



- **Economic benefits**
 - Lowers budget expenditures
 - Spurs structural adjustment
 - Leads to efficiency and productivity gains
- **Environmental benefits**
 - Reduces harmful activity levels (e.g. some transport modes)
 - Lowers use of scarce resources/harmful inputs
 - Reduces emissions and waste generation
- **Social benefits**
 - Increases community resilience
 - Rebalances income distribution across producers/consumers
 - Improves terms of trade for developing countries
- **Policy-coherence benefits**



IDENTIFYING OBSTACLES TO SUBSIDY REFORM



- **Special interests and rent-seeking behaviour**
- **False perceptions and fear of change**
- **Concerns over competitiveness and distribution**
- **Lack of transparency**
- **Legal, technical and administrative constraints**
- **Perception of “entitlement” to subsidies**



OPPORTUNITIES FOR SUBSIDY REFORM



- **Challenge the mantras**
- **Identify policy options for meeting goals**
- **Improve targeting and design of subsidy programs**
- **Exploit windows of policy opportunity**
- **Increased transparency**
- **Remove structural impediments**
- **Transitional measures**
- **Seek reforms through competition policy as well**



IF THE FINAL ANSWER IS YES

→ Subsidy removal is likely to benefit the environment

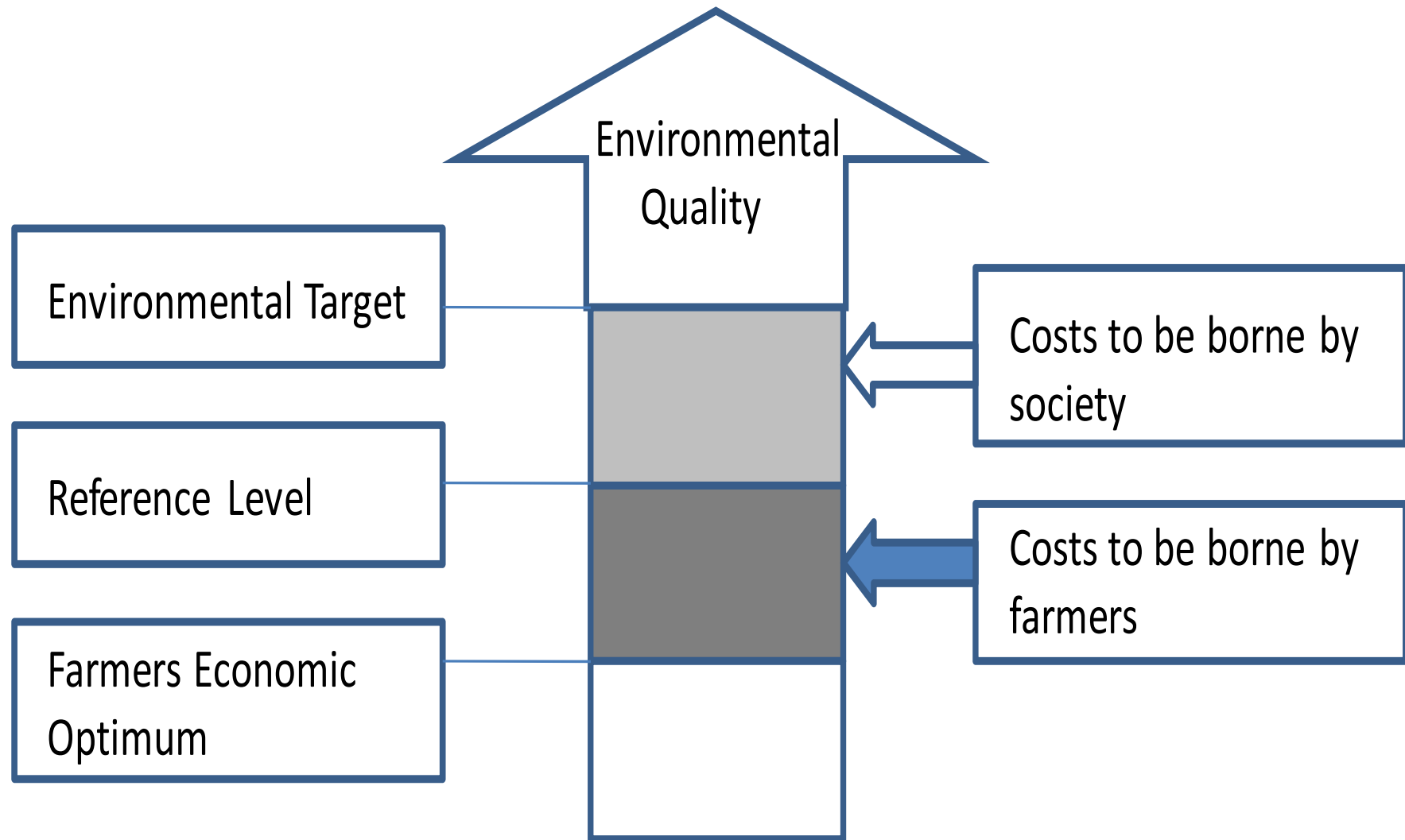


STATE OF THE ART



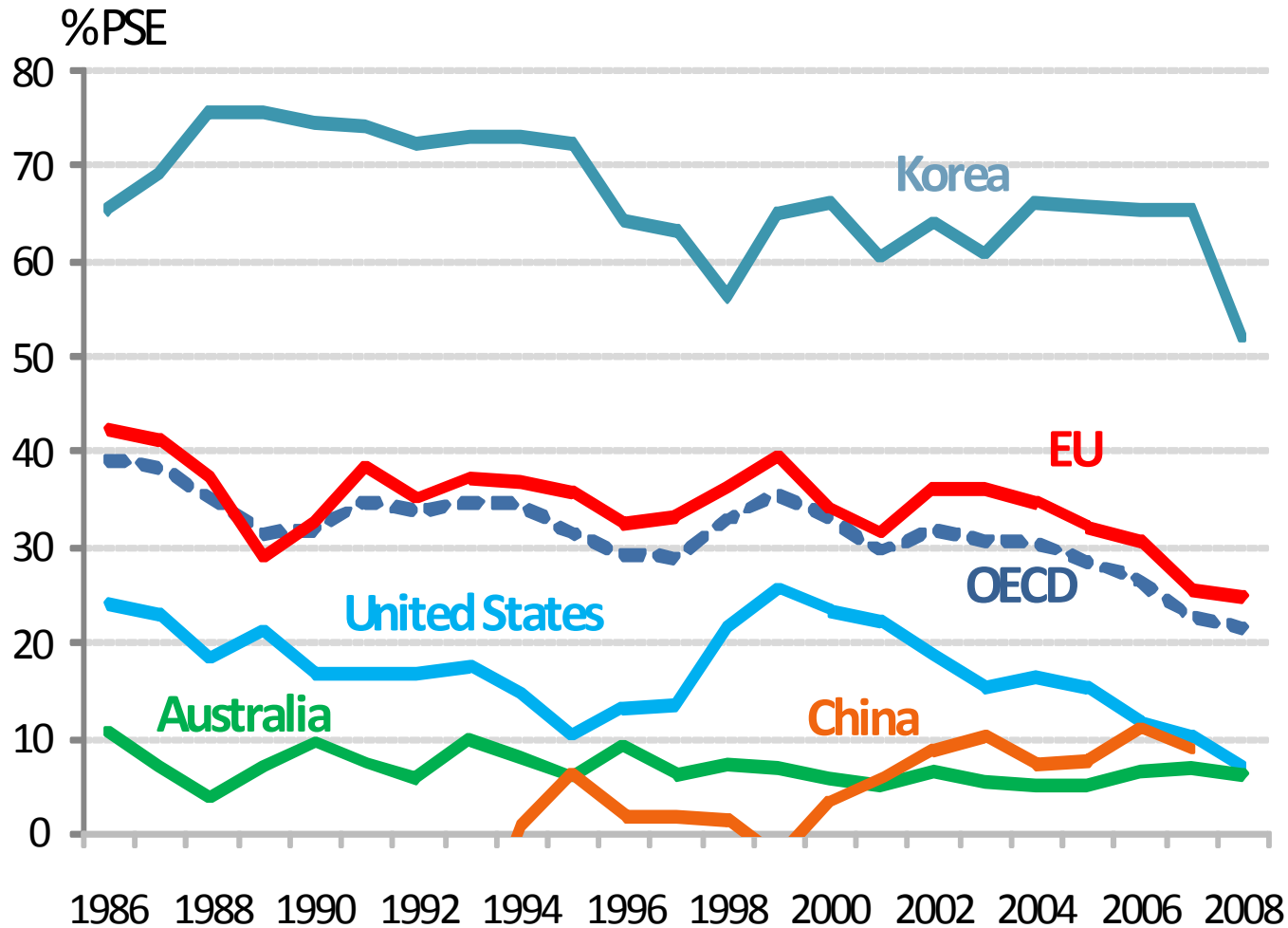
- Interest in environmentally harmful subsidies is growing – and more sophisticated measurement techniques available.
- NGOs, most notably the *Global Subsidies Initiative* of the International Institute for Sustainable Development, was formed in 2005 precisely to identify, measure and analyze subsidies that undermine sustainable development.
- OECD Ministers themselves, in June 2009, signed a declaration on *Green Growth*, which includes calls for reforming EHS.
- These various efforts, plus of course the efforts being sponsored by the European Commission's DG Environment, are likely to increase the corpus of work on EHS, and in the process further help to develop and refine the existing tools.

Reference levels (property rights) are crucial



Data on trends in support to farmers useful

(Producer Support Estimates as a percent of gross farm receipts)



But even better is the composition of farm support (%PSE)

