



**Workshop
,External Costs'
Research Results**

Overview of ExterneE Results

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For what purpose are estimates of external costs needed?

Technology assessment: comparison of techniques, identification of weak points

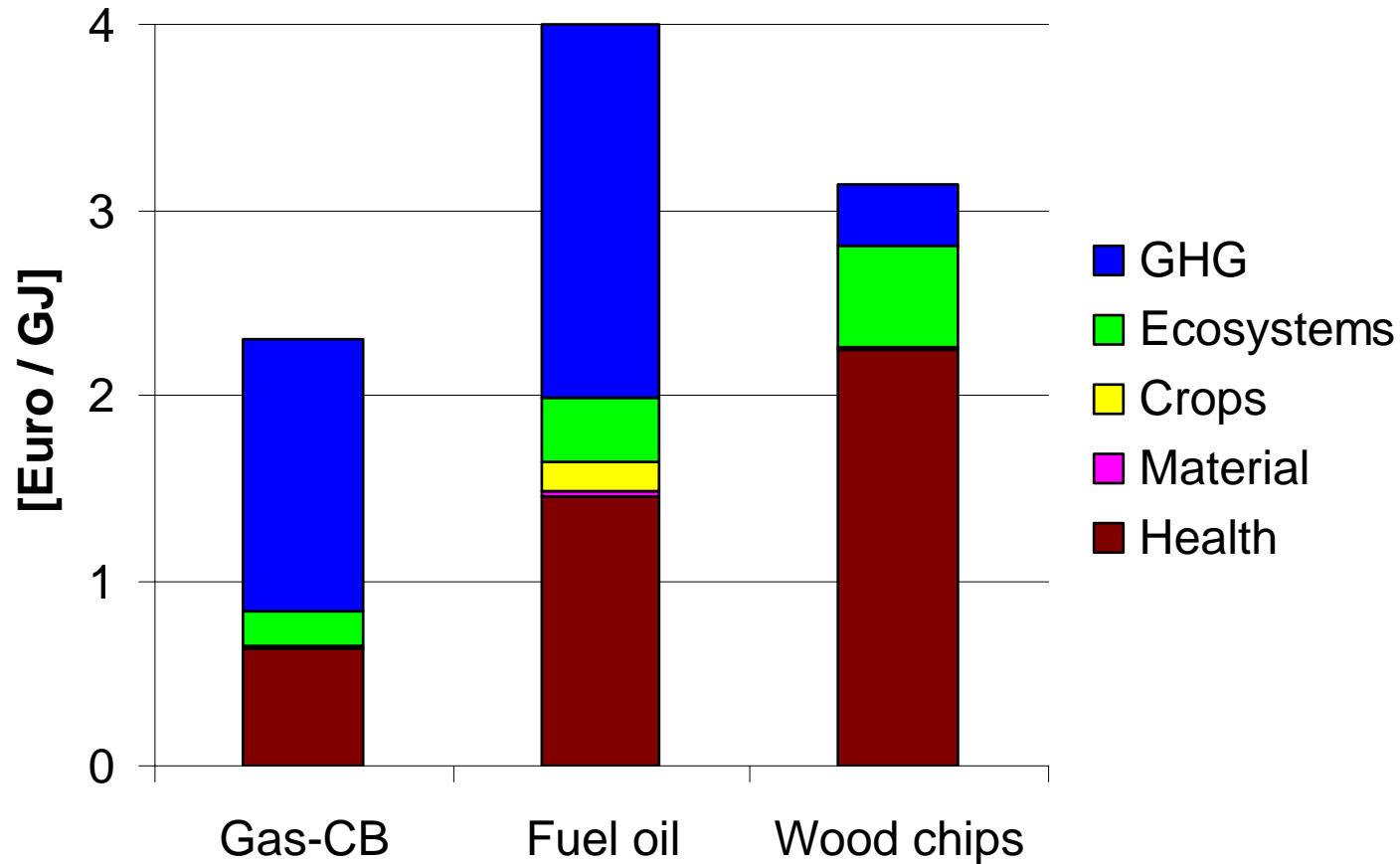
**Internalising external costs –
,getting the prices right‘**

Cost-Benefit-Analyses, e. g. for measures and directives to protect the environment and human health

Sustainability and welfare indicator, comparison of impacts, priority setting for environmental policies



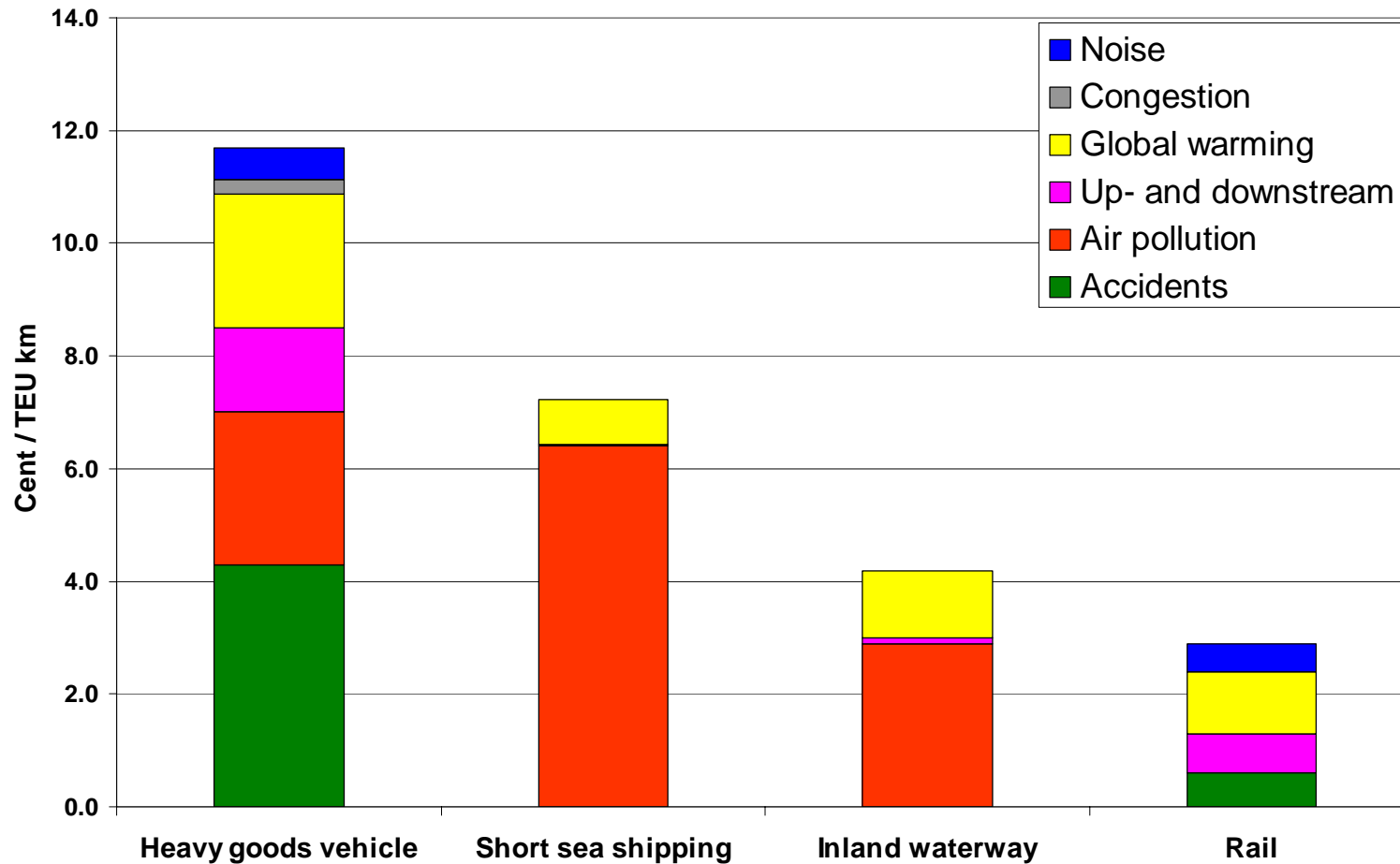
Quantification of Externalities of Heat Supply of a Multi Family House



(CB = condensing boiler, MFH = multi family house)

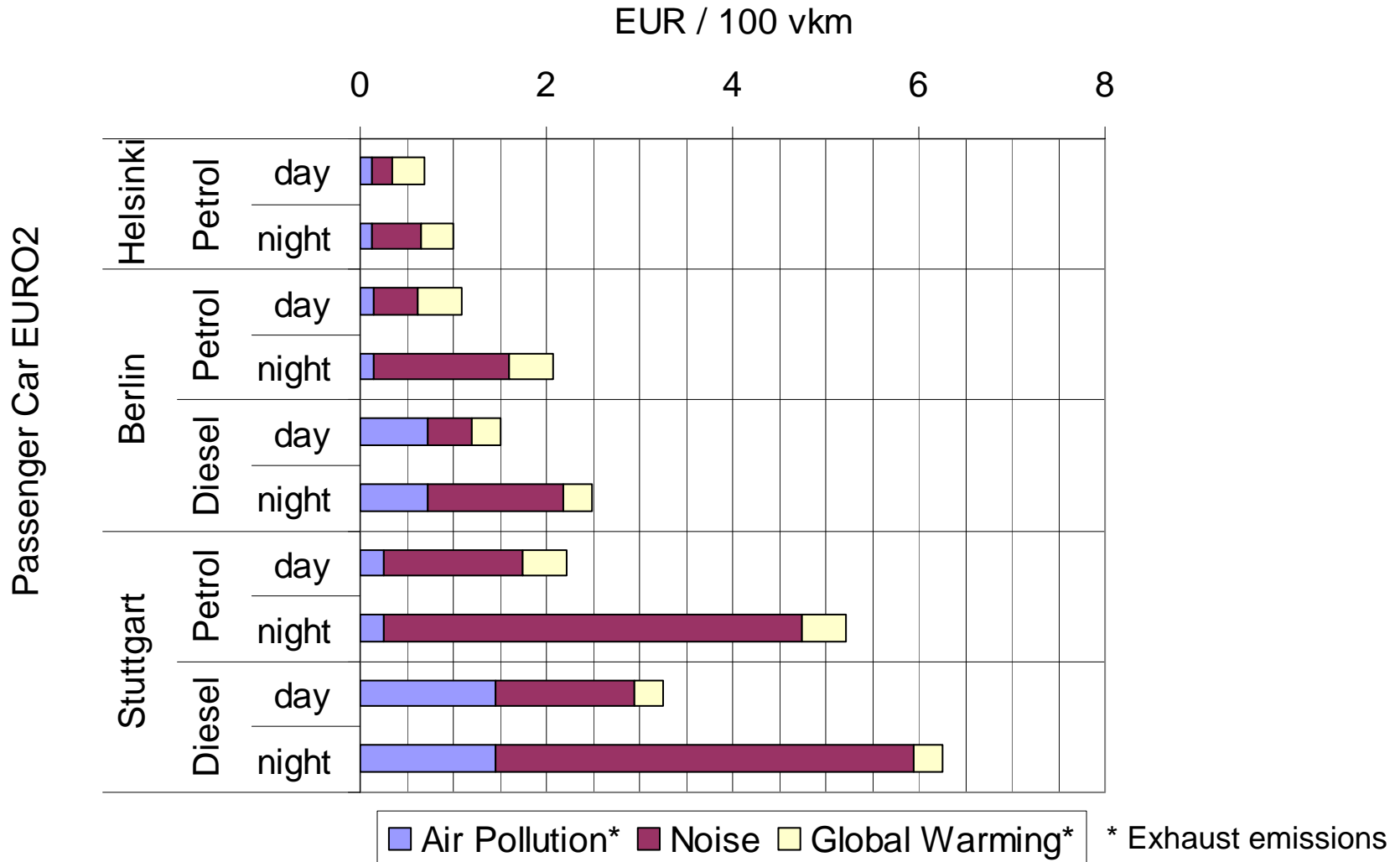


Marginal external costs for long-distance goods transport



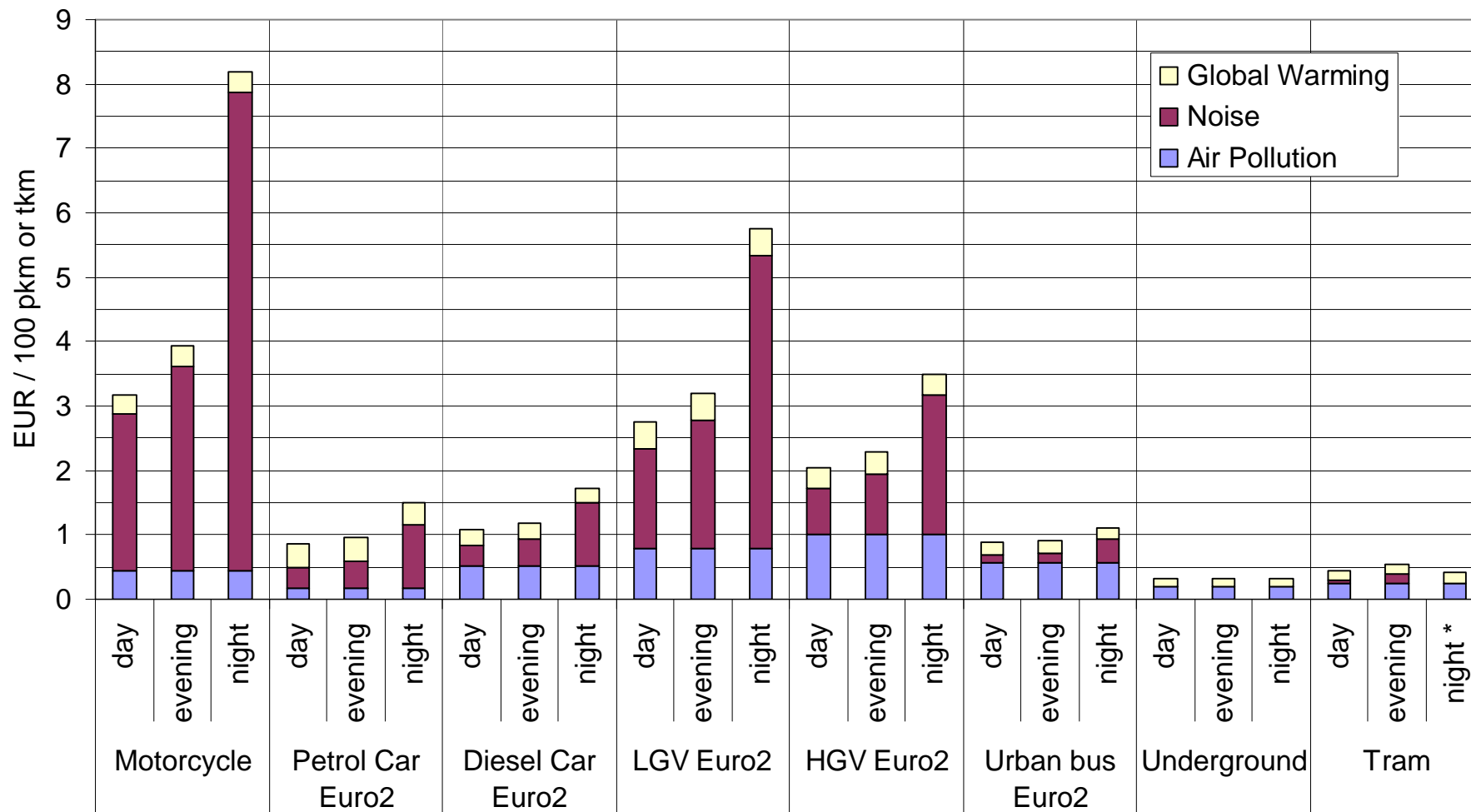


Marginal costs due to urban road transport





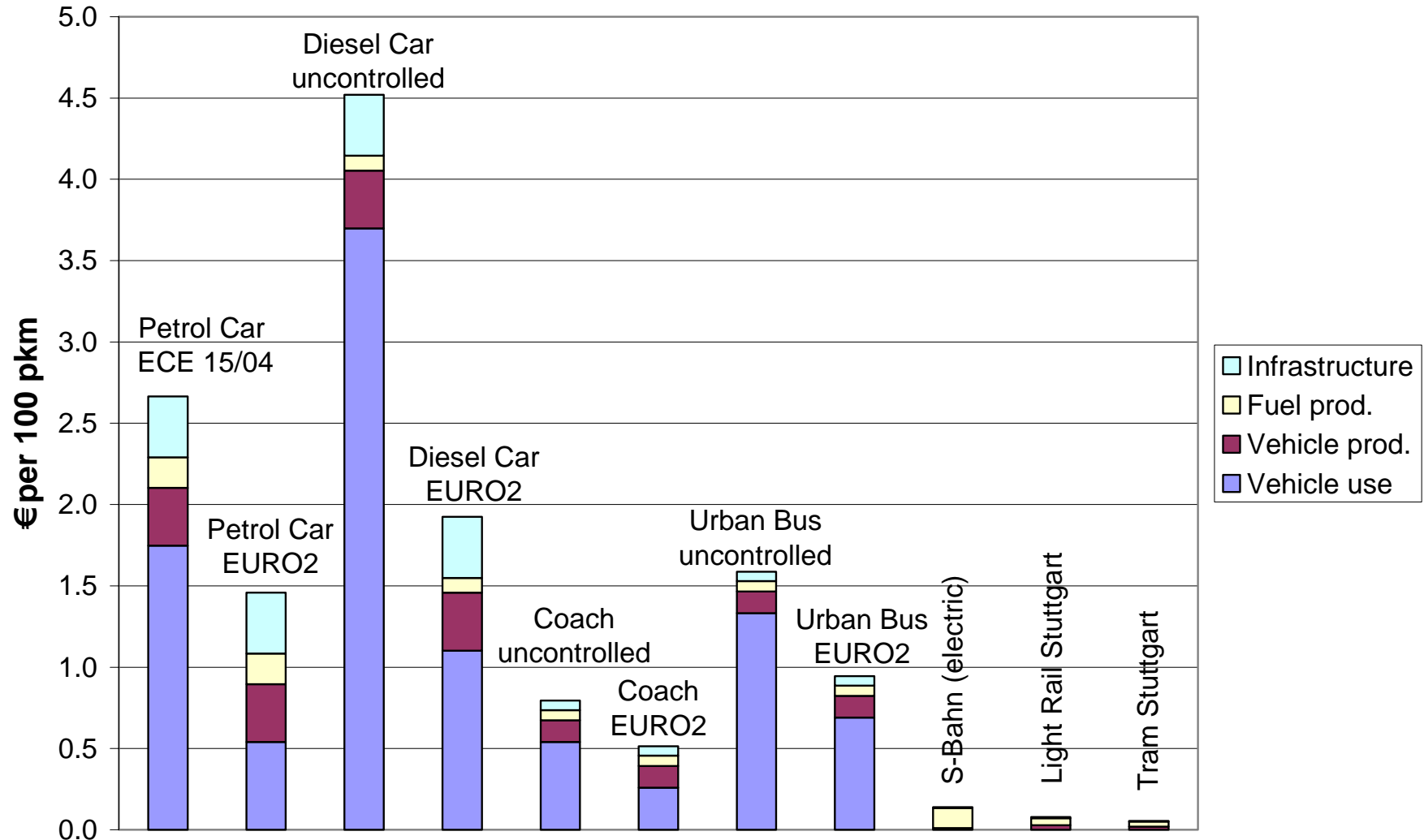
Marginal costs urban transport in Berlin



* no night time noise available



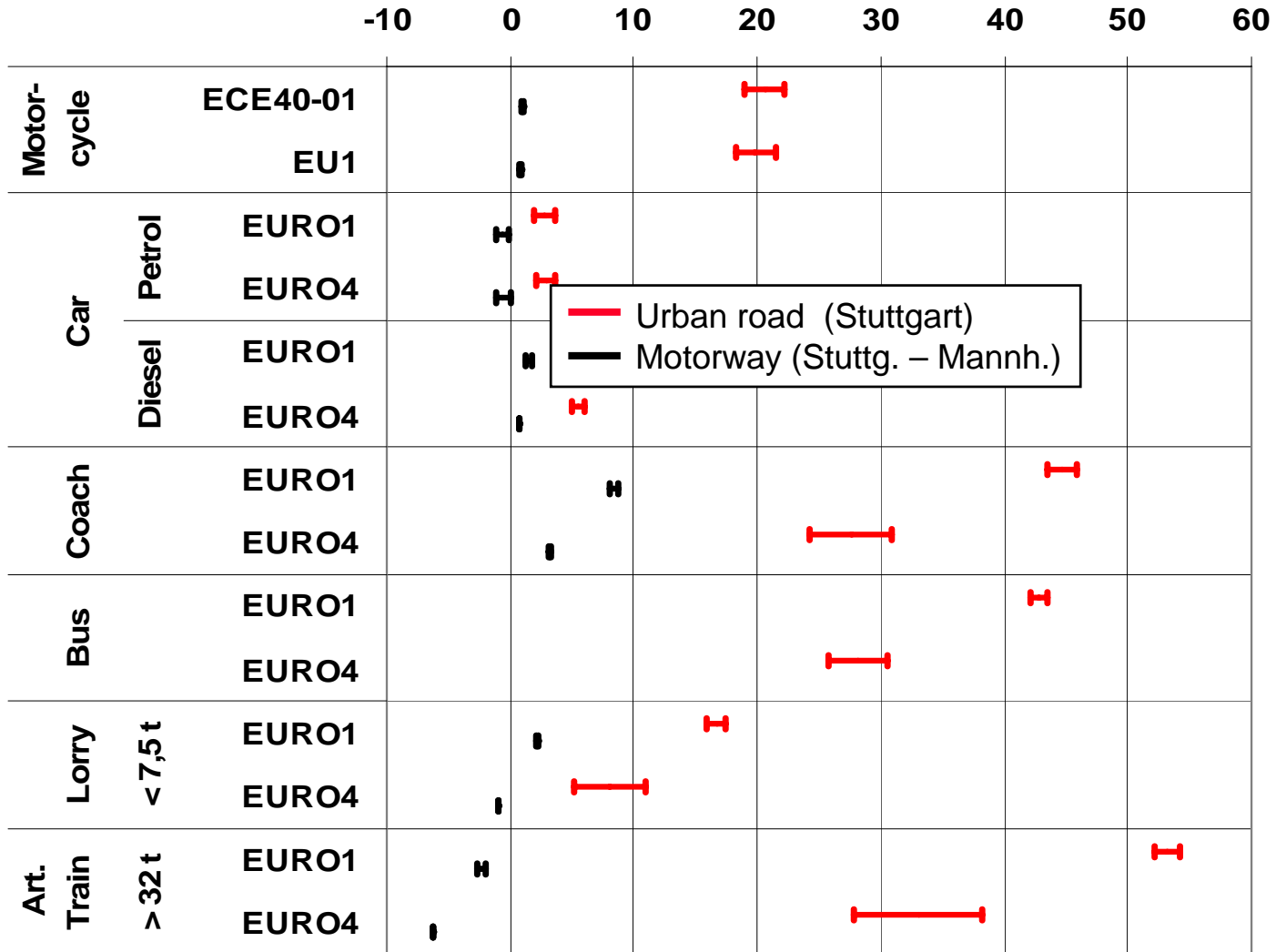
Costs due to Up- and Downstream Airborne Emissions from Urban Passenger Transport (Stuttgart)





Comparison of Variable Costs and Revenues Road Transport DE

EUR / 100 km



External Costs:

- Air pollution
- Greenhouse gases
- Accidents
- Noise
- + Infrastructure Costs
- Fuel duty (excl. VAT)
- Motorway Toll (articulated train only)



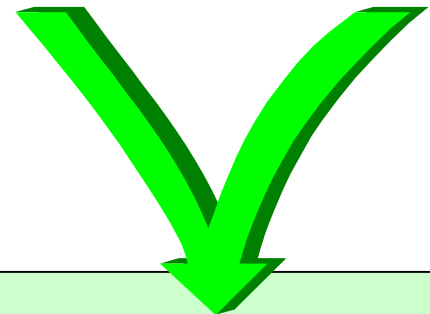
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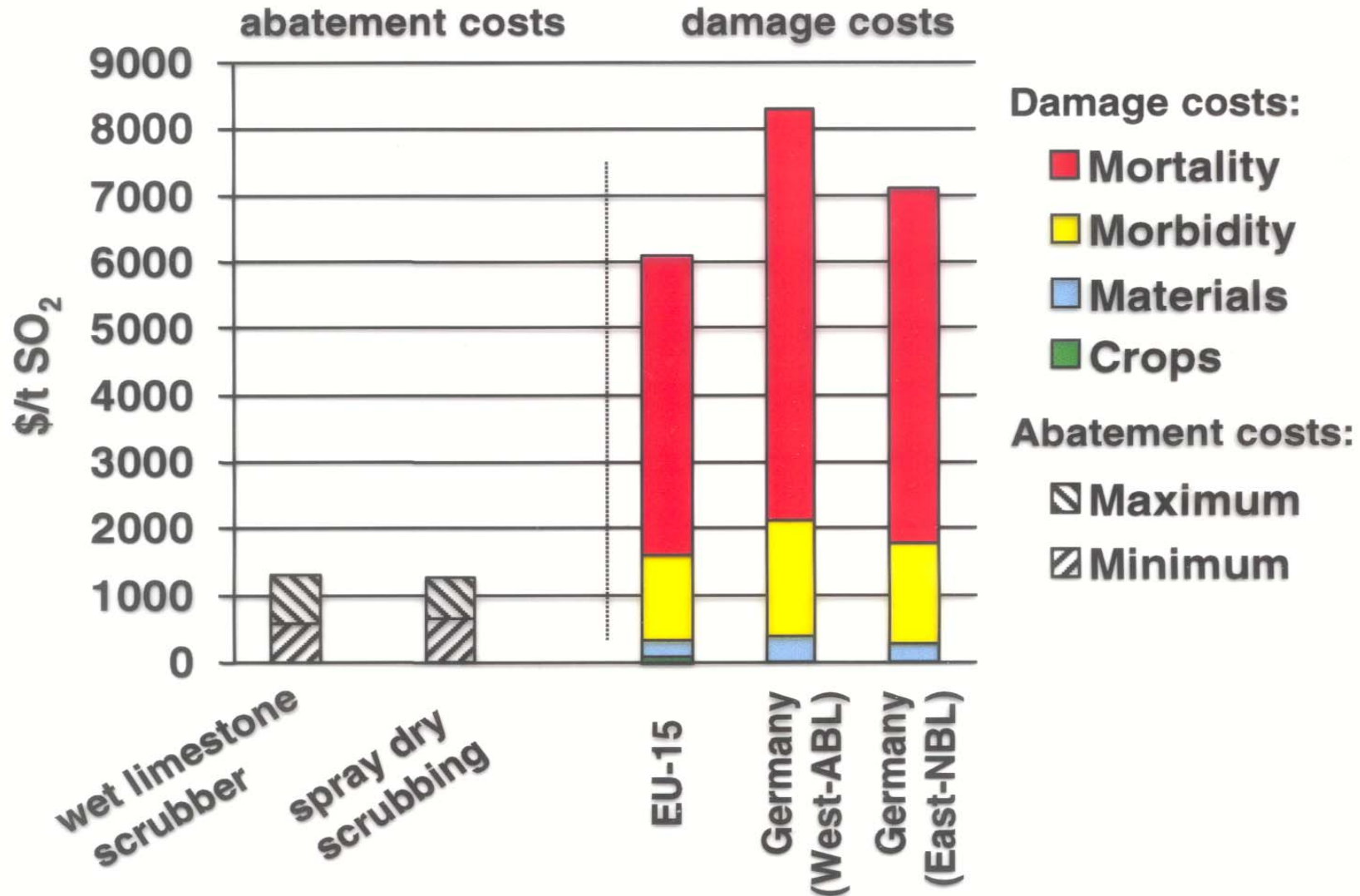
Cost-Benefit-Analyses, e. g. for measures and directives to protect the environment and human health

Sustainability and welfare indicator: including sectoral impacts and import/export relationships



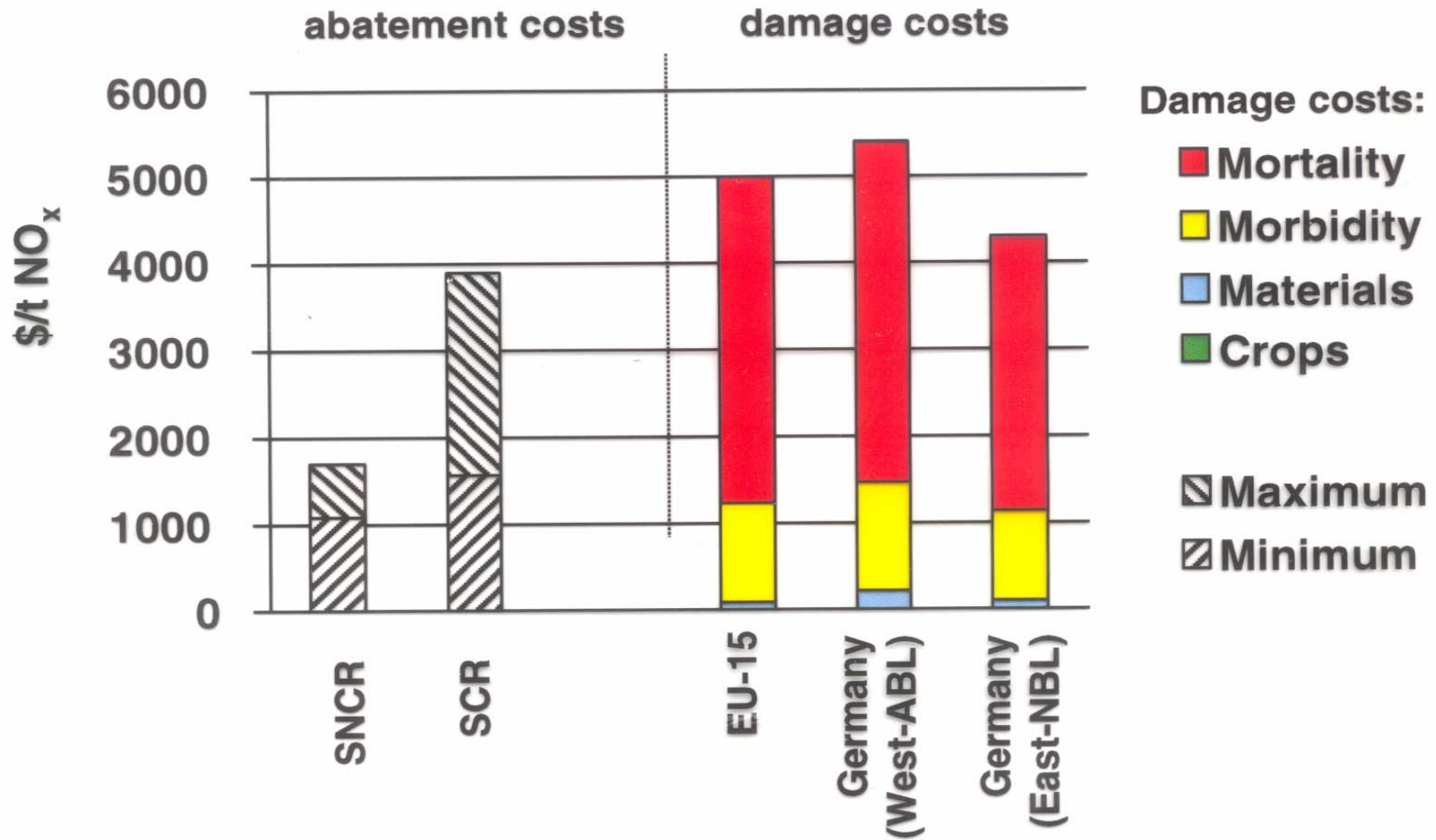


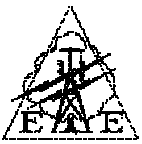
Abatement and damage costs for SO₂



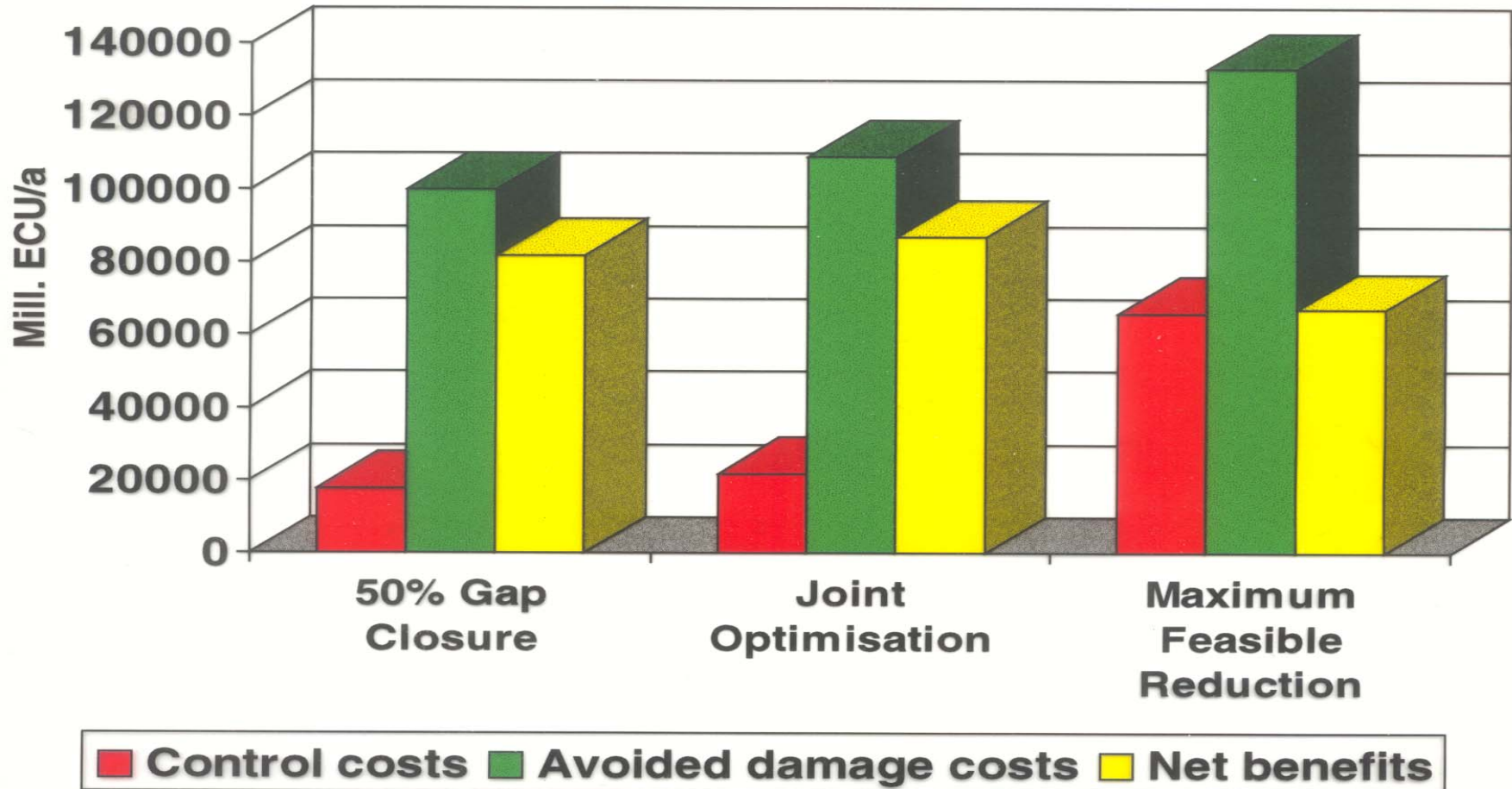


Abatement and damage costs for NO_x





Comparison of costs and benefits for 3 scenarios for the multi-pollutant multi-effect protocol of the UN-ECE





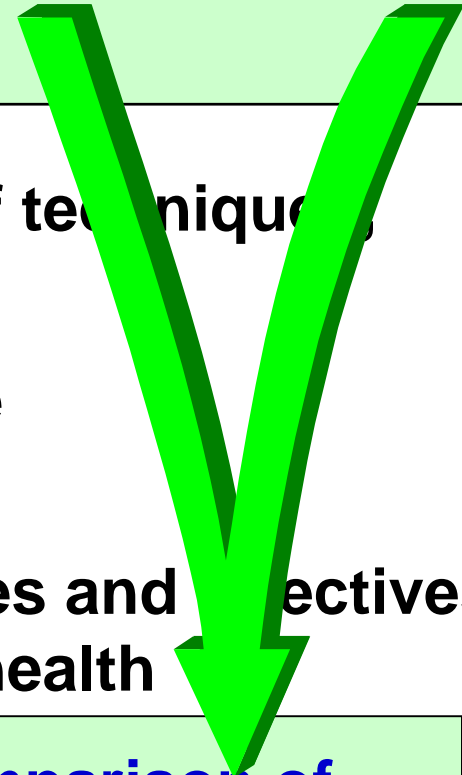
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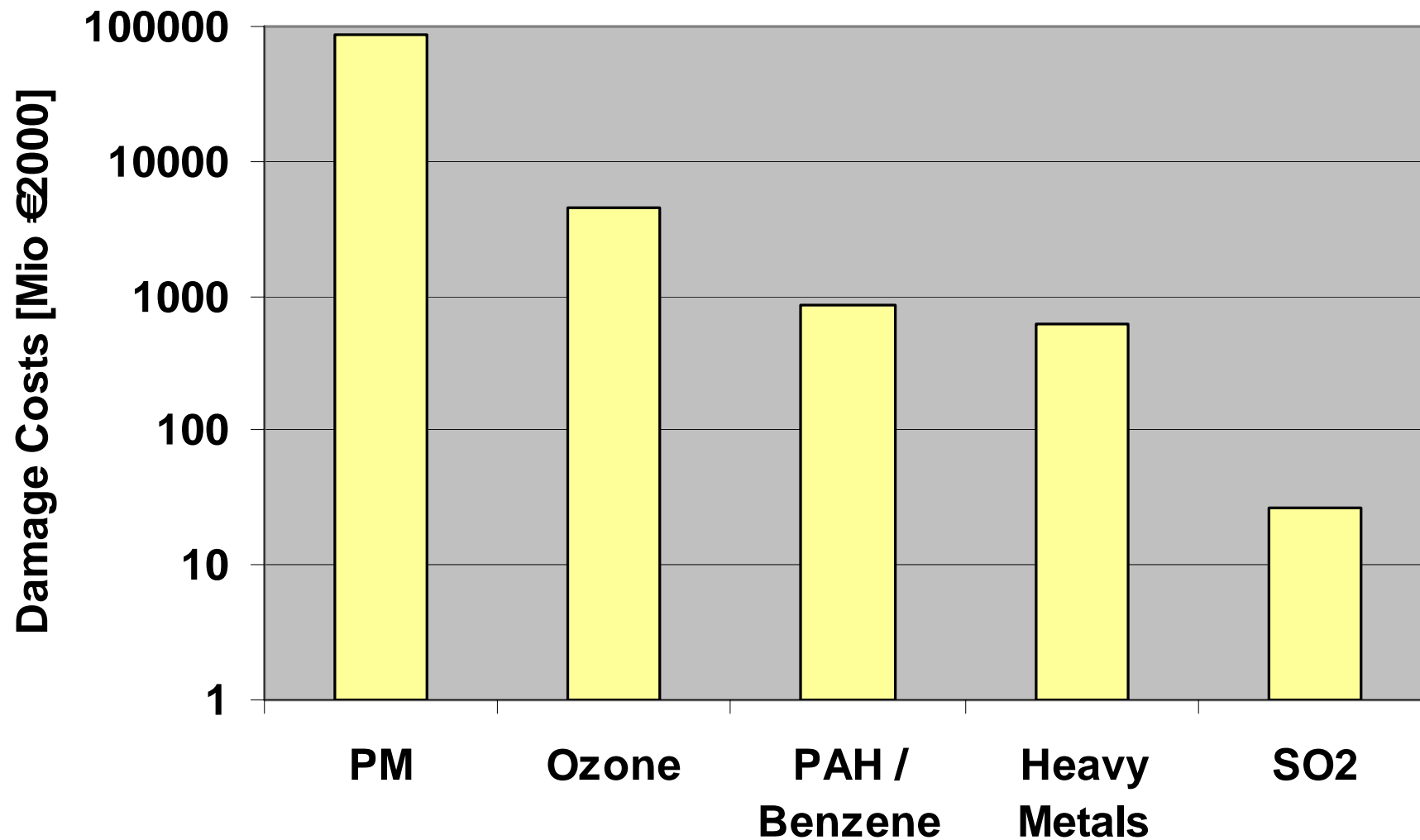
Cost-Benefit-Analyses, e. g. for measures and objectives to protect the environment and human health

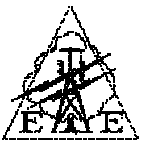
Sustainability and welfare indicator; comparison of impacts





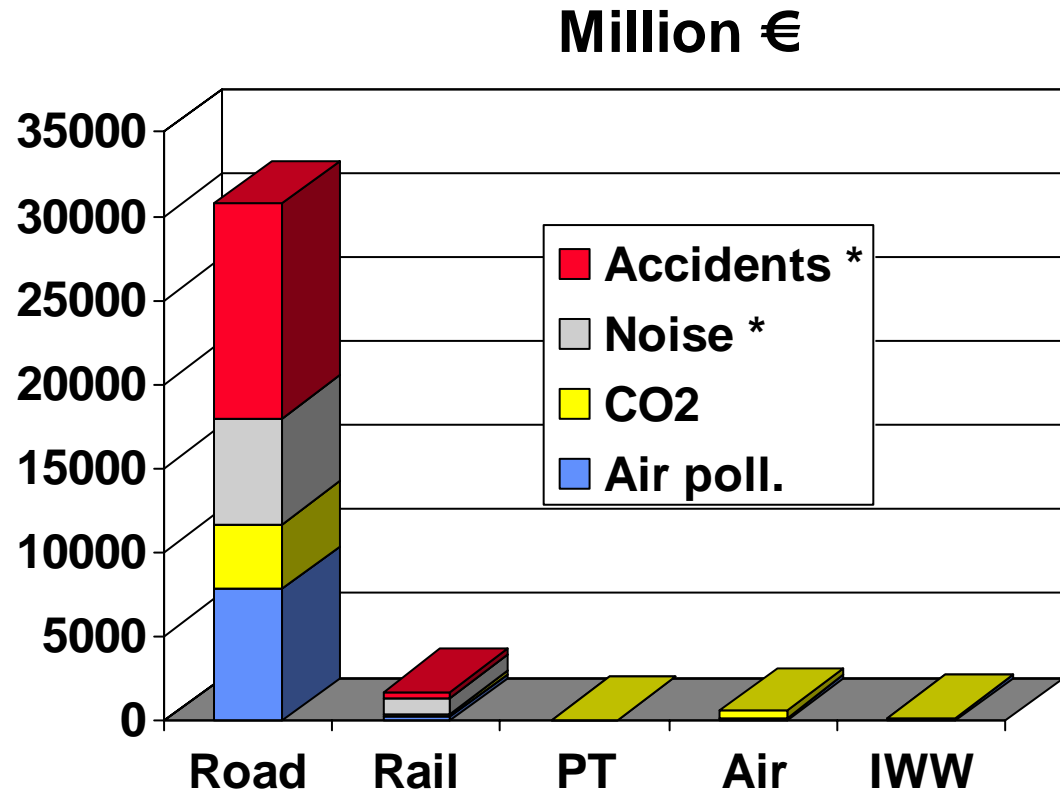
Damage Costs of Air Pollution in the European Union





Quantifiable externalities due to transport in Germany

Total: 33 000 Million € (1.7% of GDP 1998)



* Accident and Noise Externalities only for Road and Rail



Damage Costs caused by German Source Sectors

