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| Innovation | |
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| Indicator | | absolute adverse effect on the environment due to rebound | | | | |
|-------------------|--|--|--|--|--|--|
| | | higher | | | | lower |
| Innovation | Type What is the functional principle of the innovation? | technological Propulsion, sensors, materials, ... | | | | organisational/social sharing, crowd, billing, logistics, navigation, ... |
| | Depth How far does the innovation go? | radical new approach, may be combined with existing products/processes, may be transferred to non-transport applications | | | | incremental Improvement of existing solutions, substitutes selected products/processes |
| | Energy carrier Which energy source powers the innovation and related transport? | fossil Petrol, diesel, conventional electricity mix, ... | | | | renewable Green electricity, muscular power, ... |
| | Investment costs How expensive is the acquisition of the innovation for the company? | low Retrofit, applied in existing platforms, standard configuration, payment by installment, ... | | | | high New acquisition, extensive conversion, extra configuration, one-off payment, ... |
| | Infrastructure Which infrastructure coverage is required by the innovation? | high Physical modification of buildings and roads, retrofitting the vehicle fleet, high maintenance, high energy demand during operation | | | | low Incorporated in existing infrastructure, virtual infrastructure, low maintenance, low energy demand during operation |
| Zielgruppe | Target group size How many economic sectors use the innovation? | entire economy Broad range across all economic sectors | | | | selected economic sectors Use only in the services sector, tailored to a specific company or sector |
| | CO₂-intensity of the company How CO ₂ intensive is the industry sector or company which uses the innovation? | high Examples: metal production and processing, energy production, paper, glass, chemical industry | | | | low Examples: hotel business, health care, mechanical engineering |
| Wirkungen | Travel mode choice From which travel modes are trips shifted to the innovation? | ecomobility Less transport by rail, ship, pipelines | | | | fossil mobility Less transport by conventional trucks and airplanes |
| | Ton-km undertaken How do number and length of trips change? | increase Cost reduction, time savings in transport, storage and transit | | | | decrease Less empty trips, better usage of capacities, optimisation of transit processes |
| Total | | | | | | |

Innovation

Description of innovation-specific rebound effects

| direct rebound | indirect & economy-wide rebound |
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| <p>Increase in transport performance</p>  | <p>indirect rebound:</p> <p>Additional consumption or substitution of other products and services</p> <p>economy-wide rebound:</p> <p><i>One-off effects at market entry:</i> Construction of infrastructure, changes in production processes, new market actors</p> <p><i>Demand-driven effects:</i> Operation and maintenance of infrastructure, redistribution between economic sectors, capacity utilization in road network and public transport</p>  |

Instruments for avoiding rebound

| Avoiding direct rebound | Avoiding indirect and economy-wide rebound |
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| <ul style="list-style-type: none"> ■ Inner city toll ■ Road charge by km traveled ■ Transport-specific carbon tax ■ Fuel tax ■ Annual vehical tax by km traveled | <p style="text-align: center;">fiscal</p>  <ul style="list-style-type: none"> ■ Economy-wide carbon tax ■ Value-added tax by environmental impact |
| <ul style="list-style-type: none"> ■ Speed limit ■ Transport-specific carbon tax | <p style="text-align: center;">regulatory</p>  <ul style="list-style-type: none"> ■ Standards for carbon content in all consumer goods ■ Carbon budget across all consumer goods |
| <ul style="list-style-type: none"> ■ Information platforms and campaigns ■ Self-monitoring of km traveled ■ Obligatory trainings in driving schools ■ Obligatory meters for fuel consumption | <p style="text-align: center;">persuasive</p>  <ul style="list-style-type: none"> ■ Information platforms and campaigns |