Transport Pricing Guidance

Guidance for assessing the greenhouse gas impacts of transport pricing policies

May 2018

What is the guidance and why should I use it?

1. **INTRODUCTION**

   *With the adoption of the Paris Agreement in 2015, governments around the world are increasingly focused on implementing policies and actions that achieve greenhouse gas (GHG) mitigation objectives. The transport sector is responsible for approximately 15% of global GHG emissions.¹ Experts predict a potential doubling of transport activity by 2050 driven by economic growth. In this context, there is an increasing need to assess and communicate the impacts of transport policies and actions to ensure they are effective in delivering GHG mitigation and helping countries meet their sectoral targets and commitments.*

   **Purpose of the guidance**

   This document provides methodological guidance for assessing the GHG impacts of pricing policies in the transport sector. Specifically, the guidance provides a stepwise approach for estimating the impacts of higher fuel prices using price elasticities of demand. Additional guidance is also provided in less depth on estimating the impacts of vehicle purchase incentives and road pricing policies.

   This guidance is part of the Initiative for Climate Action Transparency (ICAT) series of guidance for assessing the impacts of policies and actions. It is intended to be used in combination with any other ICAT guidance documents that users choose to apply. The series of guidance is intended to enable users that choose to assess GHG impacts, sustainable development impacts and transformational impacts of a policy to do so in an integrated and consistent way within a single impact assessment process. Refer to the ICAT Introductory Guide for more information about the ICAT guidance documents and how to apply them in combination.

   **Intended users**

   This guidance is intended for use by policymakers and practitioners seeking to assess GHG impacts in the context of Nationally Determined Contribution (NDC) development and implementation, national low carbon strategies, and Nationally Appropriate Mitigation Actions (NAMAs), and other mechanisms. The

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¹ SLoCaT 2017.
primary intended users are developing country governments and their partners who are implementing and assessing transport pricing policies. Throughout the guidance, the term “user” refers to the entity implementing the guidance.

The main emphasis of the guidance is on the assessment of GHG impacts. Impact assessment can also inform and improve the design and implementation of policies. Thus, the intended users include any stakeholders involved in the design and implementation of national transport policies, strategies, NDCs or NAMAs, including research institutions, businesses and non-governmental organisations.

Scope and applicability of the guidance

This guidance provides general principles, concepts and a stepwise method for estimating the GHG impacts of the following types of transport pricing policies, which are described in more detail in Chapter 3:

- **Fuel subsidy removal**: Removal of subsidies that reduce the price of vehicle fuel below its fair-market cost.
- **Increased fuel tax or levy**: An increase in the tax imposed on each unit of vehicle fuel, which may include general taxes that apply to many goods and special taxes specific to vehicle fuel.
- **Road pricing (road tolls and congestion pricing)**: Motorists pay directly for driving on a particular roadway in a particular area. Road pricing has two general objectives; revenue generation and congestion management.
- **Vehicle purchase incentives for more efficient vehicles**: Governments increase the fuel efficiency of the vehicle fleet and/or promote a shift to lower-carbon fuels by providing incentives for the purchase of selected vehicles. This policy is most applicable to electric, plug-in hybrid-electric, hydrogen-fuelled and other vehicles that are not powered by gasoline or diesel, and is applied by governments through lower purchase taxes, purchase rebates, income tax credits and lower vehicle taxes.

The guidance does not include non-motorised transport, nor every fuel or vehicle type. However, the methods and calculations of this guidance can be applied to other transport or fuel types depending on country-specific needs.

The guidance does not cover all transport policies, but rather aims to fill gaps in existing guidance. Users can refer to the *Compendium on Greenhouse Gas Baselines and Monitoring Passenger and Freight Transport* for descriptions and links to guidance on other transport policies or actions. Appendix H lists the full criteria used to choose the scope of the guidance.

This guidance details a process for users to follow when conducting a GHG assessment of pricing policies. It provides guidance on defining the assessment, an approach to GHG assessment including ex-ante (forward-looking) assessments and ex-post (backward-looking) assessments, and monitoring and

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2 Throughout this guidance, where the word “policy” is used without “action,” it is used as shorthand to refer to both policies and actions. See Glossary for definition of “policies or actions”.

reporting. Throughout the document, examples and case studies [to be developed] are provided to illustrate how to apply the guidance.

The guidance is applicable to policies:

- At any level of government (national, subnational, municipal) in all countries and regions (depending on the approach chosen)
- That are planned, adopted or implemented
- That are new policies, or extensions, modifications or eliminations of existing policies

When to use the guidance

The guidance can be used at multiple points in time throughout the policy design and implementation process, including:

- **Before policy implementation**: To assess the expected future impacts of a policy (through ex-ante assessment)
- **During pricing policy implementation**: To assess the achieved impacts to date, ongoing performance of key performance indicators, and expected future impacts of a pricing policy
- **After pricing policy implementation**: To assess what impacts have occurred as a result of a pricing policy (through ex-post assessment)

Depending on individual objectives and when the guidance is applied, users can implement the steps related to ex-ante assessment, ex-post assessment or both. The most comprehensive approach is to apply the guidance first before implementation, regularly during policy implementation, and again after implementation. Users carrying out an ex-post assessment only skip Chapter 8. Users carrying out an ex-ante assessment only skip Chapter 9.

Key recommendations

The guidance includes *key recommendations* that represent recommended steps to follow when assessing and reporting impacts. These recommendations are intended to assist users in producing credible impact assessments that are high quality and based on the principles of relevance, completeness, consistency, transparency and accuracy.

Key recommendations are indicated in subsequent chapters by the phrase “It is a key recommendation to…” All key recommendations are also compiled in a checklist at the beginning of each chapter.

Users that want to follow a more flexible approach can choose to use the guidance without adhering to the key recommendations. The ICAT Introductory Guide provides further description of how and why key recommendations are used within the ICAT guidance documents, as well as more information about following either the “flexible approach” or the “key recommendations” approach when using the guidance. Refer to the Introductory Guide before deciding on which approach to follow.
Relationship to other guidance and resources

This guidance uses and builds on existing resources mentioned throughout the document, such as the GIZ Reference Document on Measurement, Reporting and Verification in the Transport Sector,\textsuperscript{4} as well as additional resources listed in Appendix B.

The guidance builds upon the Greenhouse Gas Protocol Policy and Action Standard,\textsuperscript{5} (which provides guidance on estimating the greenhouse gas impacts of policies and actions and discussion on many of the accounting concepts in this document such as baseline and policy scenarios), to provide a detailed method for specific transport pricing policies. As such, the guidance adapts the structure and some of the tables, figures and text from the Policy and Action Standard where relevant. Figures and tables adapted from the Policy and Action Standard are cited, but for readability not all text taken directly or adapted from the standard is cited.

A full list of references is provided at the end of this document.

Process for developing the guidance

This guidance has been developed through an inclusive, multi-stakeholder process convened by the Initiative for Climate Action Transparency (ICAT). The development is led by INFRAS (technical lead) and Verra (co-lead), who serve as the Secretariat and guide the development process. The first draft was developed by drafting teams, consisting of a subset of a broader Technical Working Group (TWG) and the Secretariat. The TWG consists of experts and stakeholders from a range of countries identified through a public call for expressions of interest. The TWG contributed to the development of the technical content for the guidance through participation in regular meetings and written comments. A Review Group provided written feedback on the first draft of guidance.

This version of guidance will be applied with ICAT participating countries and other interested countries to ensure that it can be practically implemented, gather feedback for its improvement and provide case studies.

ICAT’s Advisory Committee provides strategic advice to the initiative. More information about the guidance development process, including governance of the initiative and the participating countries, is available on the ICAT website.

All contributors are listed in the “Contributors” section.


\textsuperscript{5} WRI 2014. Available at: \url{http://www.ghgprotocol.org/policy-and-action-standard}.
2. **OBJECTIVES OF ASSESSING THE IMPACTS OF PRICING POLICIES**

This chapter provides an overview of objectives users may have in assessing the GHG impacts of pricing policies. Determining the assessment objectives is an important first step, since decisions made in later chapters are often guided by the stated objectives.

Checklist of key recommendations

- **Determine the objectives of the assessment at the beginning of the impact assessment process**

Assessing the impacts of pricing policies is a key step towards identifying opportunities and gaps in effective GHG mitigation strategies. Impact assessment supports evidence-based decision making by enabling policymakers and stakeholders to understand the relationship between pricing policies and expected GHG impacts. It is a key recommendation to determine the objectives of the assessment at the beginning of the impact assessment process.

Examples of objectives for assessing the GHG impacts of a policy are listed below. The ICAT *Sustainable Development Guidance* can be used to assess the broader sustainable development impacts of transport pricing policies and users should refer to that guidance for objectives for assessing such impacts.

**Objectives of assessing impacts before policy implementation**

- **Improve policy design and implementation** by understanding the impacts of different design and implementation choices
- **Inform goal setting** by assessing the potential contribution of policies to national or subnational goals, such as NDCs

**Objectives of assessing impacts during or after policy implementation**

- **Assess policy effectiveness and improve implementation** by determining whether policies are being implemented as planned and delivering the intended results
- **Inform adjustments to policy design and implementation** and decide whether to continue current actions, enhance current actions, or implement additional actions
- **Learn from experience** and share best practices about policy impacts
- **Track progress toward national goals** such as NDCs and understand the contribution of policies toward achieving them
- **Report** domestically or internationally, including under the Paris Agreement’s enhanced transparency framework, on the impacts of policies achieved to date
- **Meet funder requirements** to report on impacts of policies, if applicable

Users should also identify the intended audience(s) of the assessment report. Possible audiences include policymakers, the general public, NGOs, companies, funders, financial institutions, analysts, research institutions, or other stakeholders affected by or who can influence the policy. For more information on identifying stakeholders, refer to the ICAT *Stakeholder Participation Guidance* (Chapter 5).
Subsequent chapters provide flexibility to enable users to choose how best to assess the impacts of pricing policies in the context of their objectives, including which impacts to include in the GHG assessment boundary and which methods and data sources to use. The appropriate level of accuracy and completeness is likely to vary by objective. Users should assess the impacts of pricing policies with a sufficient level of accuracy and completeness to meet the stated objectives of the assessment.