



Fact Sheet: GHG Strategy Tool

What is the GHG Strategy Tool?

The [Center for Climate Strategies' GHG Strategy Tool](#) is a Microsoft Excel-based, **open, transparent, user-friendly** analysis tool developed to support **national and subnational** jurisdictions with **initial, fast, low-cost mitigation scenario** development and analysis to achieve specified greenhouse gas (GHG) emission reduction targets, including near term and mid-century goals needed for climate stabilization.

The GHG Strategy Tool **orients jurisdictions to target setting, sector level strategy choices, and implementation design of mitigation actions** across sectors. It serves as a **kickstart** for accelerated development and implementation of detailed short and long-term decarbonization Pathways, **reducing the process length from years to months**. It also provides an **entry point for use of additional analysis and design tools where needed**.



How does the GHG Strategy Tool differentiate form other tools and models?

Other tools available have been described as a 'black box' by state governments – overly complex software with expensive licensing which only a few specially trained experts can master. This lack of accessibility often keeps their use out of reach of governments with limited resources, while non-transparent methodology limits true understanding and self-determination of jurisdictions.

The GHG Strategy Tool was designed at the request of governments to overcome these barriers and has been locally validated. It **allows users to get started relatively quickly and increases the likelihood of continued adaptation and use over time**, a requirement for keeping scenarios relevant as priorities and contexts change.



Who does it serve?

The GHG Strategy Tool serves two key groups: 1) It provides **policymakers and interest groups** with the ability to develop and collaborate on GHG mitigation targets, strategies, and scenarios, and 2) it enables the **research and academic community** to verify, further develop, and expand the tool for local use.

The Center for Climate Strategies (CCS) is a 501c3 nonprofit organization

What information is needed to get started?

1. **Data inputs to construct GHG baselines** (inventories and forecasts of GHG emissions) in all sectors (historical activity data, forecast assumptions, emission factors).
2. **Initial climate mitigation strategies and related design parameters** (level of targets for each of the strategies). Strategies can cover all sectors.

The GHG Strategy Tool **provides default values** for locally relevant activity data, emission factors, timing and target levels, and **guidance on the functionality of mitigation strategies and analysis templates**. These can be modified by users as needed to review alternate scenarios and conduct sensitivity analysis.

Examples of key mitigation strategies included in the Tool

- Utility scale solar generation the energy supply sector in
- Energy demand management in the residential sector
- Manufacturing process efficiency in the industrial sector
- Electric vehicle fleet requirements in the transportation sector
- Forest conservation practices in the forestry sector
- Low carbon production methods in the agriculture sector

Can a jurisdiction use the GHG Strategy Tool independently?

After initial technical assistance and capacity building, a jurisdiction can **independently use** the GHG Strategy Tool if it has local capacity for GHG baseline impact assessments across different economic sectors and the identification and assessment of mitigation strategies. This capacity is enhanced in the long term if local academic and research institutions are available for future development of the tool.

What types of assistance are required?

Expert third party technical assistance and capacity building are needed for **set-up of the tool** to reflect local GHG emission sources and activity data, **guidance on its functionalities, and identification and design of the mitigation strategies**. The level of technical assistance and capacity building will vary based on the **level of local capacity** in conducting GHG impact assessments, identifying mitigation strategies, and using MS Excel analytical tools.

How long does it take to set up the GHG Strategy Tool and assess a mitigation scenario?

With expert third party technical assistance, the GHG Strategy Tool can be set up and an initial mitigation scenario can be assessed within **two to six months** depending on the availability of baseline data inputs. **This period could be shorter** if activity data and specific strategies are readily available.

Is it replicable?

Yes, the GHG Strategy Tool **can be used in different jurisdictions at the subnational and national level**.

Does it have potential for expansion of its scope?

The scope of the GHG Strategy Tool can be expanded to cover new baseline areas and impact assessment of additional performance metrics such as **direct economic costs and benefits, indirect macroeconomic impacts, financial impacts, health, social equity, and other sustainability metrics**.