Introduction to Mepsy

The Appliance & Equipment Climate Impact Calculator

Around the world, energy efficiency standards are used to enhance access to high-quality appliances and equipment while limiting the associated energy demand and carbon emissions. For efficiency policy practitioners, accurate data and predictive models provide insight into how policy decisions translate to real-world impacts.

CLASP developed Mepsy as an online tool to model the cost, energy, and carbon reduction impacts of efficiency policies. Pre-loaded with data from 162 countries, it supports analysis and prioritization for the most energy-intensive appliances and equipment. Mepsy calculates product energy use according to a "bottom-up" accounting approach. The model determines the number of appliances in use in a country, along with the energy performance of locally-representative products and other variables to analyze the electricity use, carbon dioxide emissions, and consumer energy costs associated with a given policy scenario.



IDENTIFY

Review efficiency opportunities in one country or many



PRIORITIZE

Compare the benefits of policies for different products



ANALYZE

Understand the impacts of different policy options

Mepsy supports policy analysis for space heating equipment, air conditioners, refrigerator-freezers, fans, electric motors, televisions, and lighting. Coming soon: residential water heaters, distribution transformers, and refrigerated display cases.

MEPSY MAKES IT EASY TO

- Choose a country/region, product, and expected policy effective date to calculate policy benefits through 2030
- Use pre-loaded data from CLASP research and other sources, or enter your own custom data
- Download calculation results as a CSV file for further use

HOW CAN MEPSY HELP?

NATIONAL POLICYMAKERS

- Review efficiency opportunities in your country to help prioritize which products to address
- **Experiment** with different efficiency levels to see the projected results
- **Leverage** publicly-available data or input proprietary data
- Download your results to use in supporting analysis and share it with stakeholders

RESEARCHERS AND ANALYSTS

- **Compare** the benefits of policies for different products
- Conduct detailed analyses using custom shipments data and assumptions for unit energy consumption, lifetimes, grid emission factors and discount rates

DONORS

- **Assess** the potential impacts of investing in different countries
- Visualize how appliance use varies by country, and the associated energy and climate impacts
- Ensure that policy programs address the most energy- and carbon-intensive appliances

LEARN MORE

Access Mepsy: clasp.ngo/tools/mepsy/

Mepsy Quick-Start Guide: clasp.ngo/wp-content/uploads/2021/01/Mepsy-Quick-Start-Guide.pdf

Methodology & Assumptions: clasp.ngo/wp-content/uploads/2021/04/mepsy-methodology-assumptions.pdf

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CLASP improves the energy and environmental performance of the appliances & equipment we use every day, accelerating our transition to a more sustainable world. Our programs increase uptake of affordable, low-impact, high-quality appliances. We serve as the leading international voice & resource for appliance energy efficiency policies and market acceleration initiatives.