



World Health
Organization



Clean Household Energy Solutions Toolkit (CHEST)

The kit includes six modules with practical tools and resources to help countries implement the recommendations in the WHO Guidelines for Indoor Air Quality Guidelines: Household Fuel Combustion to achieve the WHO Global Air Quality Guidelines. CHEST can be used by governments, policy makers, researchers, and program implementers to help enact clean household energy interventions that can reduce household air pollution and improve health, the environment, livelihoods, and our climate.



Cooking



Heating



Lighting



Clean Household Energy Policy and Programme Planning Guide

- Walks users through a series of steps to create an action plan for implementing and evaluating a clean household energy policy or programme.
- Describes how to use the tools within CHEST to identify, assess, compare and develop clean household energy policy and technology interventions tailored for specific country settings.

How is CHEST being used?

The individual tools within CHEST have been piloted and implemented in many different countries across the globe. If you are interested in using CHEST, please visit our website or contact us.

www.who.int/tools/clean-household-energy-solutions-toolkit
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MODULE 1

Goal: To facilitate a country-wide evaluation of household energy use and its impacts, and identify key household energy and health stakeholders.

Key tools:

- **Household Energy Assessment Rapid Tool (HEART):** A template for mapping stakeholders and assessing the national household energy and health situation.
- **Global Health Observatory Household Air Pollution Data Portal:** Data on household cooking fuels and burden of disease from household air pollution.
- **Household Energy Database:** National survey data on fuels used for cooking, heating, and lighting.
- **Global Database of Household Air Pollution Measurements:** Data on household air pollution exposures and concentrations from studies in over 50 countries.



MODULE 2

Goal: To help countries determine which clean household energy technologies and policies to implement based on the costs and benefits, potential impact on household air pollution, and anticipated health impacts.

Key tools:

- **Benefits of Action to Reduce Household Air Pollution (BAR-HAP) Tool:** Models country-specific costs and benefits of different clean cooking policy and technology interventions.
- **Household Multiple Emission Sources (HOMES) Model:** Estimates household air pollution that would result from the use of up to three different devices.
- **Household Energy Policy Repository:** Database of policies promoting clean cooking, heating and lighting, and evaluations on policy impacts.



MODULE 3

Goal: To facilitate the development of national performance standards for stoves, heaters, and lighting devices.

Key tools:

- **Defining clean fuels and technologies webpage:** Provides the WHO definition of clean, transitional, and polluting fuels and technologies.
- **International Organization for Standardization (ISO) Voluntary Performance Targets:** Guidance on classifying cookstoves into tiers based on their emissions of pollutants, efficiency, safety, and durability.
- **WHO Setting National Voluntary Performance Targets for Cookstoves document:** Practical guidance on how to set national cookstove standards.
- **ISO Protocols:** Instructions for evaluating stove performance in laboratory and field conditions.
- **WHO Performance Target (PT) Model:** A tool to develop context-specific voluntary performance targets for cookstove emissions



MODULE 4

Goal: To enable countries to effectively monitor and track household energy use, adoption of clean fuels and technologies, and related impacts.

Key tools:

- **Core Questions on Household Energy Use:** Questions that can be integrated into national surveys to assess household cooking, heating and lighting.
- **Measuring Energy Access Guidebook:** Guidance on administering the 'Core Questions' and calculating key indicators related to household energy use.
- **Catalogue of Methods for Evaluating Household Energy Interventions:** Methods and tools for measuring the impacts of household energy interventions.



MODULE 5

Goal: To facilitate the engagement of health ministries and providers in promoting clean household energy use, and ensure that health perspectives are represented in policy development.

Key tools:

- **Training Toolkit on Air Pollution and Health for the Health Workforce:** Training modules for healthcare workers on how to address household air pollution with patients and communities.



MODULE 6

Goal: To help countries raise awareness of the health, environmental, livelihood and other impacts of air pollution and generate community-wide demand for clean household energy.

Key tools:

- **Video Series on Air Pollution and Health:** Interviews with experts that can be used to raise awareness and garner support for addressing household air pollution.
- **BreatheLife:** A platform for sharing best practices and demonstrating progress toward achieving WHO air quality guidelines. performance targets for cookstove emissions



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