Universal access to clean energy for cooking, heating, and lighting for households can improve health, reduce poverty, protect the environment, and contribute to the Sustainable Development Goals (SDG) for health and energy.

**Promoting clean household energy for the forgotten 3 billion**

Despite efforts to introduce cleaner household energy solutions, the number of people who still rely on polluting fuels and technologies for cooking has remained largely unchanged for decades at 3 billion. Thus, WHO is working closely with countries and partners to accelerate the transition to clean household energy in order to achieve universal access to clean and affordable energy by 2030, as envisioned by SDG 7: “Ensure access to affordable, reliable and modern energy for all”.

**Major impacts on health, development and climate**

Air pollution from cooking, heating or lighting with polluting fuels using inefficient devices leads to high levels of household air pollution – the world’s largest environmental risk factor.

- Breathing smoke from inefficient cookstoves leads to some 4 million deaths per year.\(^1\)
- The toll is particularly heavy for women and children: 60% of all deaths are among women and children.
- It’s not just cookstoves: polluting heating systems and kerosene lighting are also major sources of air pollution in the home.
- Reliance on polluting fuels and technologies causes burns and poisonings and fuel collection leads to injuries.
- Girls in homes using polluting fuels spent about 18 hours weekly collecting fuel or water, while girls in homes mainly using clean fuels averaged only 5 hours in 16 African countries surveyed. (WHO 2016)
- Household emissions from dirty cooking, heating and lighting are an important source of near-term climate pollution, providing an unparalleled opportunity to realize near-term climate and health co-benefits.

**Now is the time for Action**

By promoting clean cooking, heating and lighting, the global community can unleash a wave of progress for billions of people in low- and middle-income countries. Not only will clean household energy technologies protect human health, but also impact climate change and reduce the drudgery of fuel collection for millions of people.
WHO’s response: informing and empowering ministries

1. Support countries in policy evaluation and implementation

WHO works with country partners to increase awareness about the risks of household air pollution, encourage collaboration across Ministries, identify suitable interventions, and develop national plans for the adoption of clean household energy.

2. A global, public database to track progress towards the SDG 7 target for universal energy access

The WHO Global Household Energy database on household cooking, heating and lighting is a unique resource available to countries, UN agencies, and researchers to monitor progress in transition to cleaner fuels and stoves. The database also provides the basis for determining global emissions from household air pollution, which informs disease burden estimates. Future plans include refinement of the data on fuels and stove types to facilitate better assessment of the impacts from household energy interventions.

3. Implementation of guidance for household fuel combustion

WHO is rolling out workshops in Africa, Asia and Latin America to raise awareness about the Guidelines for indoor air quality: household fuel combustion and how they can be used in the development of national policies for clean household energy. The Guidelines provide health-based recommendations on which household fuels and technologies can be considered clean for health, discourages the use of unprocessed coal and kerosene and suggest prioritizing low-emission stoves during the transition to clean household energy.

4. Research and programme evaluation

WHO, in collaboration with surveying agencies, researchers, national statistical offices and other agencies have developed a set of harmonized questions to monitor progress towards the household energy indicator associated with SDG 7.1. In addition, WHO is creating a clearinghouse of national policies and programmes on access to clean household energy to facilitate knowledge exchange and cooperation.

5. Global leadership and advocacy

Clean household energy also needs to be a core element of public health policies, for example the promotion of child survival or prevention of noncommunicable diseases. WHO supports exchanges between health, energy, environment and other relevant ministries and collaborates closely with other key actors like the Global Alliance for Clean Cookstoves, Sustainable Energy for All, and the World Bank to facilitate a global transition to clean household energy.

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WHO’s Clean Household Energy Solutions Toolkit (CHEST) provides the tools and resources for:

- Stakeholder mapping: Supports Ministries of Health in gathering key actors to advise on the development and implementation of a clean household energy programme or policy.
- Needs assessment & situation analysis: Drawing on WHO databases, examines current household energy use patterns, local policies and behavioural factors important to uptake of clean household energy options.
- Optimized technologies and policies: Supports local adoption of “enabling” policies and selection of household energy devices – assessing their impacts on emissions and health.
- Guidance on standards and testing: How to develop or apply existing standards and testing for clean household energy fuels and technologies.
- Monitoring and evaluation: Clear advice on techniques for measuring household air pollution and the health impacts of household energy use.
- Engaging the health community: Expanding the capacity of health professionals to address health risks from household energy use.
- Communication and awareness raising: Strategies for increasing awareness of household air pollution health risks and the benefits of adopting clean energy.

Endnotes:
1 http://www.who.int/pollution/publications/burning-opportunities/en/
2 http://www.who.int/pollution/publications/burning-opportunities/en/
3 http://www.who.int/indoorair/guidelines/hhfc/en/
4 SDG 7 Target 7.1: By 2030, ensure universal access to affordable, reliable and modern energy services