

# EQUITY AND DANGEROUS FUELS



## What is the Global Cooksafe Coalition?

The Global Cooksafe Coalition (GCC) is an unprecedented alliance of public health, climate, aid and development organizations, billion-dollar property developers and leading chefs, joining forces to call for universal access to safe, sustainable cooking. GCC founding members and corporate partners support the phase-out of dangerous fuels from our kitchens, and urgent action to ensure low-income communities around the world benefit from the renewable energy revolution.

## Electrifying Equity

Cooking with dangerous fuels causes tragic loss of life.

The health impacts of cooking with polluting fuels in OECD countries pale in comparison to the 3.2 million premature deaths the World Health Organisation (WHO) attributes to cooking with solid fuel and kerosene.<sup>1</sup>

*“Around 2.4 billion people worldwide (around a third of the global population) cook using open fires or inefficient stoves fueled by kerosene, biomass (wood, animal dung and crop waste) and coal, which generates harmful household air pollution.”*

– The WHO<sup>2</sup>

Funding to provide alternatives to solid fuels has been tragically neglected by the international community. Despite years of efforts, investment in clean cooking has remained insignificant compared to the sums required to achieve universal access.

*Electric cooking is cheaper and more energy-efficient than LPG in many regions.*

Gas prices are spiking globally. At the same time, the price of renewable energy is plummeting.

According to the IEA Africa Energy Outlook 2022, five million people who were using LPG for cooking were no longer able to afford LPG at the beginning of 2022. However, recent price spikes are making LPG unaffordable for 30 million people across Africa.<sup>3</sup>

Modern Energy Cooking Services (MECS), based at Loughborough University and with funding from UK AID, have used data and fuel prices from Africa and Asia to compare energy consumptions and costs.<sup>4</sup> Their expert analysis found that, on average, LPG used four times the energy and was three times the price of cooking with an electric pressure cooker.<sup>5</sup> This was before recent price spikes in LPG, which have only made electric pressure cookers more competitive.

## Electric cooking solutions have become a cost-effective solution for low- and middle-income countries.

Until recently, electricity had been considered an impractical solution for low- and middle-income countries urgently needing to transition communities off dangerous solid fuels. But renewable energy, and solar power in particular, is now the cheapest energy source in history. That, alongside major advances in appliance energy efficiency, means electric cooking solutions have become a cost-effective solution in many low- and middle-income countries.

The plummeting price of renewable energy has destabilized energy markets, and analysis of programs, from Kenya to Cambodia, now demonstrates the opportunities renewable energy brings to safe cooking solutions. And with affordable solutions comes an economy of scale for appliance makers that makes electric appliances not just more affordable, but also compatible with diverse energy supply scenarios.

Local Indonesian companies, for example, are making 300W induction stoves for the Governments' LPG to induction conversion program, making induction technology an option for lower income households.<sup>6</sup>



## FACTS & FIGURES

The health impacts of cooking with polluting fuels in OECD countries pale in comparison to the **3.2 million** premature deaths the WHO attributes to indoor air pollution caused by cooking with solid fuels and kerosene.<sup>9</sup>

According to the IEA Africa Energy Outlook 2022, five million people could no longer afford to cook with LPG at the beginning of 2022.<sup>10</sup>

In Africa and Asia, on average, LPG uses **four times** the energy and is **three times** the price of cooking with an electric pressure cooker.<sup>11</sup>

*Solar is now the cheapest electricity in history.*



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## Electric cooking powered by renewables also addresses energy poverty in higher income countries.

Affordable energy-efficient electric cooking solutions have the potential to alleviate energy poverty in higher income countries like the UK and US, where gas prices have more than tripled and analysis [shows](#) all-electric single-family homes in all regions of the US have lower energy bills than comparable mixed fuel-homes (i.e., electricity and gas).<sup>7</sup>

Prices for renewable energy are also more stable, helping to address inequities in energy burdens amongst renters and minority households.<sup>8</sup> Moreover, the resulting deflationary impact of transitioning to renewables will eventually mean lower retail prices everywhere, even when the costs for new transmission infrastructure has been factored in.



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### Sources

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