



**LPG**  
EXCEPTIONAL  
ENERGY

# HUMANISING ENERGY

## THE ROLE OF LPG AS A CLEAN COOKING SOLUTION



**WLPGA**



### 1/3

ONE IN THREE PEOPLE STILL RELY ON TRADITIONAL METHODS OF COOKING USING FIREWOOD OR OTHER SOLID BIOMASS



### 3.8 MILLION DEATHS

THE WORLD HEALTH ORGANIZATION ESTIMATES THAT THE BURNING OF SOLID OR LIQUID FUEL SOURCES FOR COOKING LEADS TO APPROXIMATELY 3.8 MILLION PREMATURE DEATHS ANNUALLY

### THE NEGATIVE TRIFECTA OF COOKING RELATED POLLUTION



### HEALTH IMPACT

Increased rates of **pulmonary and cardiovascular disease**



### GENDER INEQUALITY

Time spent cooking and collecting fuel **prevents emancipation and puts women at risk**

### BLACK CARBON EMISSIONS



### EMISSIONS & DEFORESTATION

Traditional cooking methods produce **black CO<sub>2</sub>e emissions** and black carbons and leads to **wide scale deforestation**



3% OF GHG EMISSION

### 1 GT OF CO<sub>2</sub>

COOKING ACTIVITIES EMIT APPROXIMATELY 1 GT OF CO<sub>2</sub>e EMISSIONS EACH YEAR, ACCOUNTING FOR APPROXIMATELY 3% OF TOTAL GREENHOUSE GAS EMISSIONS



### 45%

HOUSEHOLD AIR POLLUTION IS RESPONSIBLE FOR 45% OF ALL PNEUMONIA DEATHS IN CHILDREN UNDER FIVE YEARS OLD

### THE COST OF CHANGE AND INACTION



### \$4.5 BILLION

THE UN HAS ESTABLISHED ACCESS TO "AFFORDABLE AND CLEAN ENERGY" AS ONE OF THE SUSTAINABLE DEVELOPMENT GOALS WITH AMBITIONS TO ACHIEVE UNIVERSAL ACCESS TO CLEAN COOKING METHODS BY 2030. THE COST OF ACHIEVING THIS TARGET IS ESTIMATED TO BE US\$4.5 BILLION A YEAR

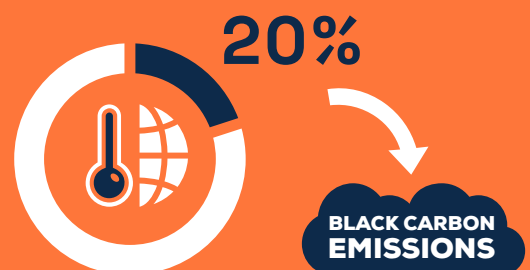
VS



### \$2.4 TRILLION

THE WORLD BANK ESTIMATES THAT THE COST OF INACTION ON CLEAN COOKING IS IN THE REGION OF US\$2.4 TRILLION PER YEAR, OVER 500 TIMES THE COST OF POSITIVE ACTION

### THE IMPACT OF BLACK CARBON



ALTHOUGH NOT A GREENHOUSE GAS, IT STILL PLAYS A SIGNIFICANT ROLE IN INCREASING THE RATE OF GLOBAL WARMING, WITH SOME ESTIMATES PREDICTING THAT IT ACCOUNTS FOR ONE FIFTH OF WARMING GLOBALLY

## THE POTENTIAL FOR RENEWABLE LPG

296 MT  
CO<sub>2</sub>E

THE TOTAL EMISSION SAVINGS IN INDIA SINCE 2000, AS A RESULT OF TRANSITIONS TO LPG, AMOUNT TO AN ESTIMATED 296MT OF CO<sub>2</sub>E EMISSIONS ANNUALLY



> 90% CO<sub>2</sub> EMISSIONS

RENEWABLE LPG, (RLPG), IS AVAILABLE IN MANY MARKETS, AND CAN DELIVER UP TO 90% CARBON EMISSION REDUCTION DEPENDING ON FEEDSTOCK, PRODUCTION PROCESS, AND CALCULATION METHOD

## AIR POLLUTION EXPOSURE, DISPROPORTIONATELY AND ADVERSELY IMPACTS WOMEN AND GIRLS



THE HOUSEHOLD CHORES ASSOCIATED WITH COOKING MEANS WOMEN AND CHILDREN INHALE **HARMFUL SMOKE AND PARTICULATE MATTER THAT CAUSE RESPIRATORY ILLNESSES**

## SOCIAL IMPACT OF THE SWITCH TO LPG

LPG IS FAR LESS LABOUR-INTENSIVE THAN TRADITIONAL FUEL SOURCES AND CAN REDUCE COLLECTION, PREPARATION, COOKING, AND CLEANING TIMES



4.5 HOURS/DAY

WOMEN SPEND AROUND 4.5 HOURS A DAY **WORKING UNPAID**, OVER DOUBLE THE AMOUNT OF TIME SPENT BY MEN



1/8 OF GLOBAL GDP

THIS GENDER INEQUALITY IS STRIKING, WITH THIS **UNPAID WORK ESTIMATED** TO BE WORTH €8.8 TRILLION, WHICH COULD BE CONTRIBUTING TO THE GLOBAL ECONOMY – **EQUIVALENT TO AROUND ONE-EIGHTH OF THE WORLD'S GDP**



4 HOURS/DAY SAVED

AROUND FOUR HOURS COULD BE SAVED FROM DAILY COOKING ACTIVITIES IF LPG IS USED AS AN ALTERNATIVE FUEL

THE POTENTIAL OF SAVED TIME

THESE ADDITIONAL HOURS IN THE DAY CAN BE SPENT ON PURSUING EDUCATION, GAINING MORE PAID WORK AND PROVIDING MORE LEISURE TIME, BENEFITING WOMEN SOCIALLY AND FINANCIALLY