

Latin America: The First True Smokeless Region?

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**2º Congreso Internacional del Gas LP
GASNOVA, Colombia
Bogotá, Aug 21, 2019**

The Oil/Gas Industry Gets Blamed for everything

- Off-shore platform explosions
- Pipeline spills
- Tanker collisions
- Fracking impacts
- Diesel exhaust
- Urban air pollution
- Climate change

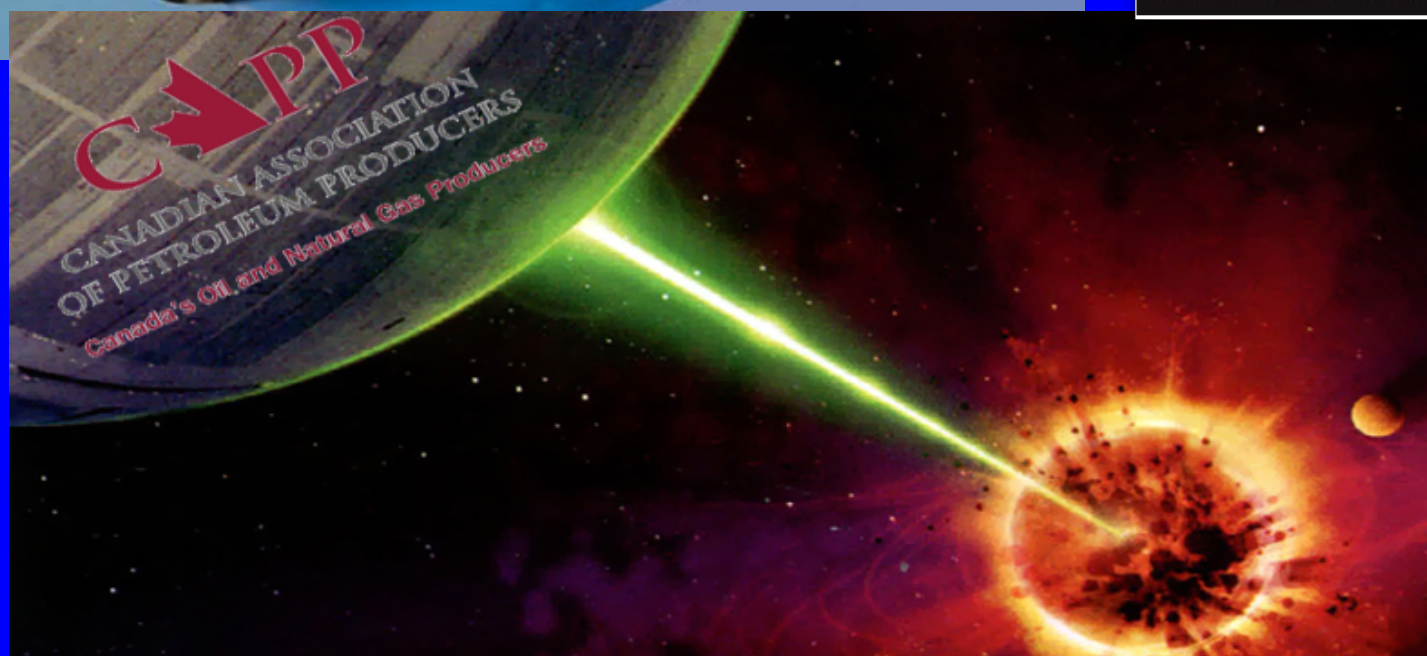


FRACKING HELL



A Modern Tale Of Brutal Horror By

MIKE GAMBLE

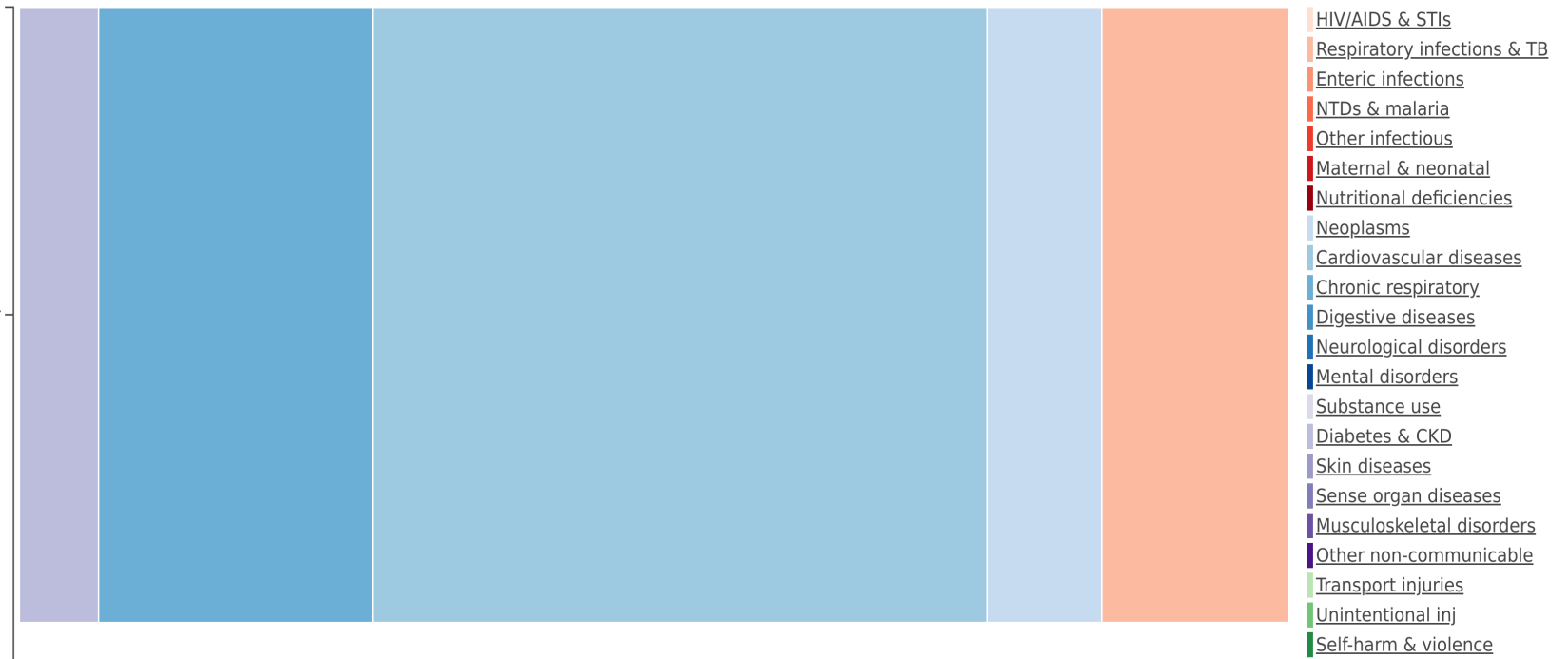


But you should push back

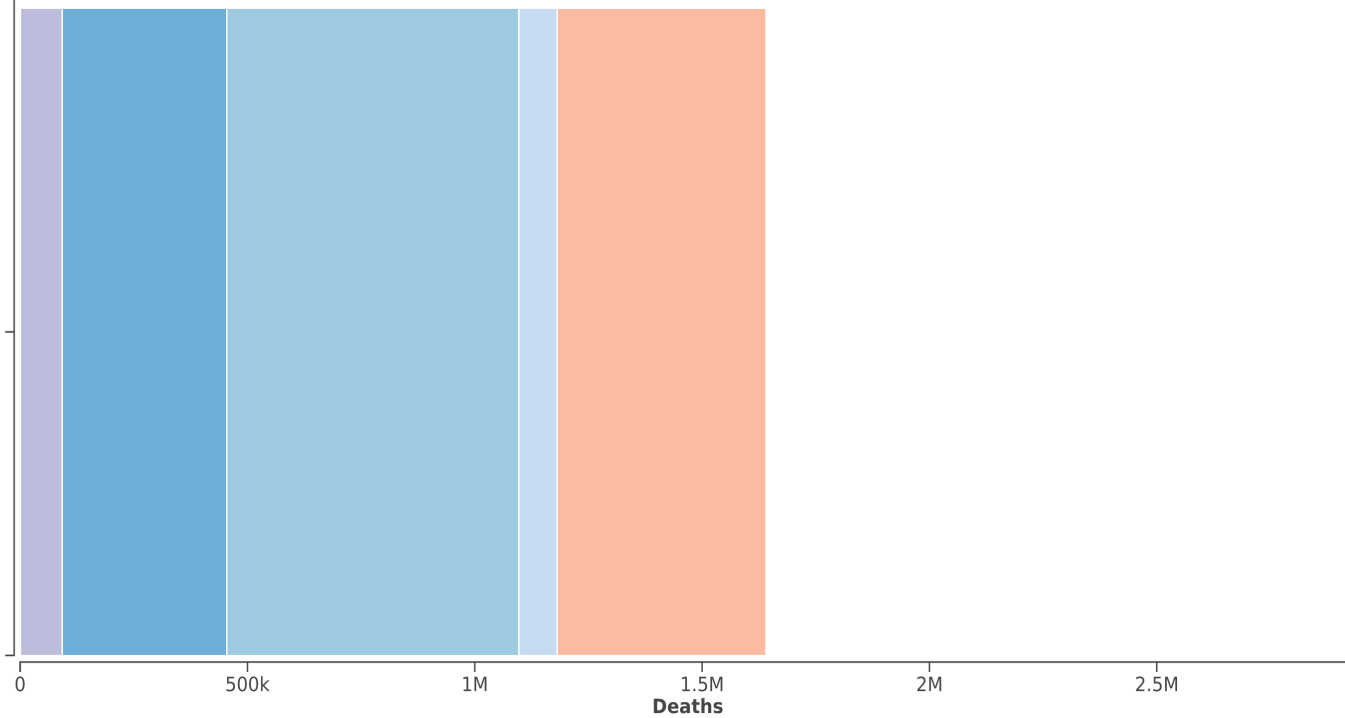
**You have the fuel that can save
millions of lives every year among
the world's poor**

Global, Both sexes, All ages, 2017

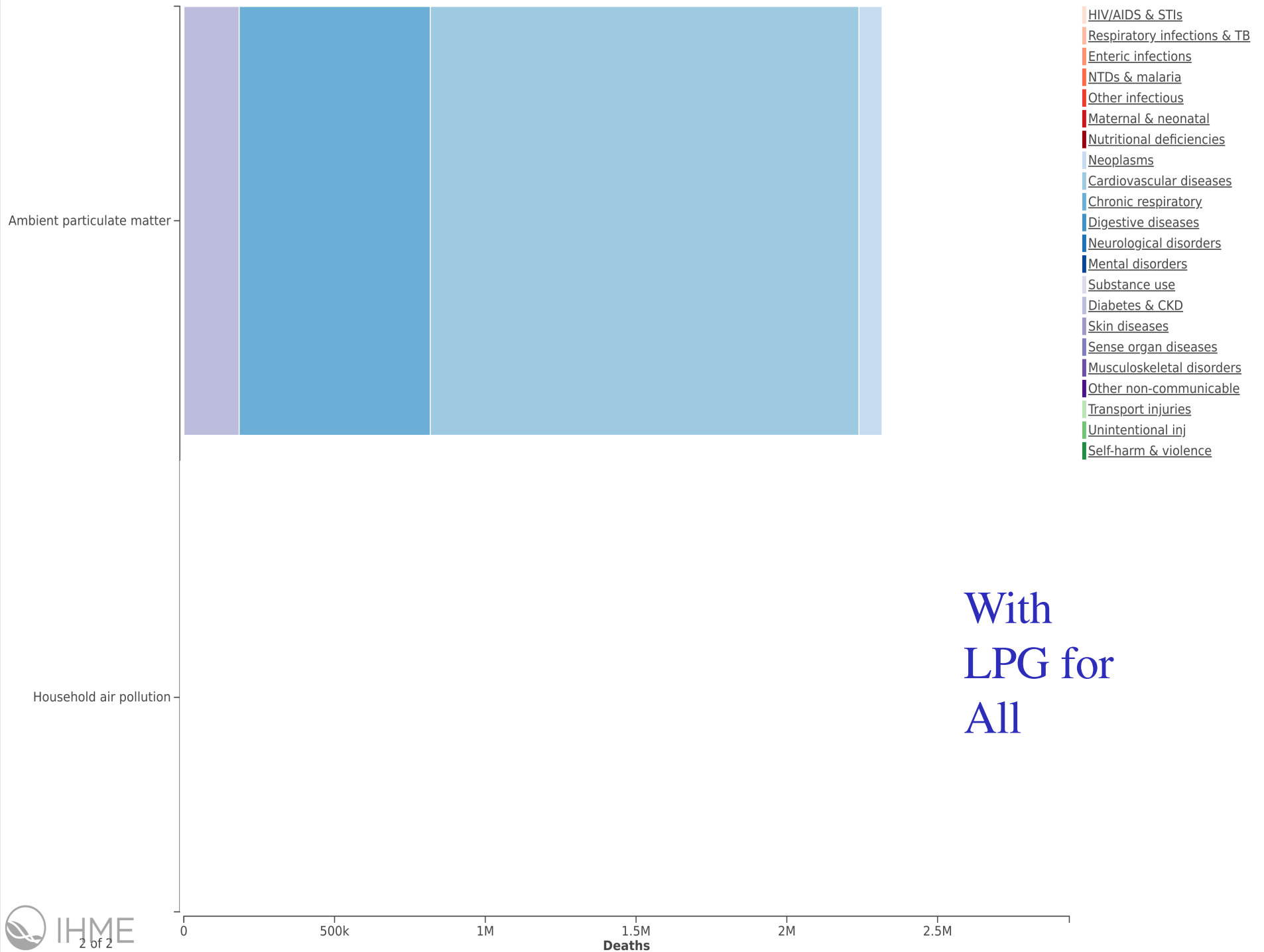
Ambient particulate matter



Household air pollution



Global, Both sexes, All ages, 2017



Health impacts of household air pollution, i.e. not having LPG

- Chronic lung disease
- Heart Disease
- Stroke
- Lung Cancer
- Diabetes
- Pneumonia in children
- Low birthweight in babies

Effect of reduction in household air pollution on childhood pneumonia in Guatemala (RESPIRE): a randomised controlled trial

Kirk R Smith, John P McCracken, Martin W Weber, Alan Hubbard, Alisa Jenny, Lisa M Thompson, John Balmes, Anaité Diaz, Byron Arana, Nigel Bruce

The Lancet, Nov 2011



If you claim credit for the health
benefits of LPG, however,

**You need to support
national and international
efforts to make LPG
universally available to the
poor**

PAHO – WHO region of the Western Hemisphere

- Many global firsts among WHO Regions:
 - Smallpox – eliminated in 1971
 - Polio – eliminated in 1994
 - Rubella and congenital rubella syndrome – eliminated in 2015
 - Endemic measles – eliminated in 2016
- Now seriously considering target to eliminate primary use of solid fuel for cooking
- Target a risk factor, not a disease
- First risk factor in the world to be targeted after tobacco



EDITORIALS



Clean household air for the Americas



OPEN ACCESS

We should be aiming to eliminate polluting cooking fuels from the PAHO region

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Pan American
Health
Organization



World Health
Organization
REGIONAL OFFICE FOR THE Americas

164th SESSION OF THE EXECUTIVE COMMITTEE

Washington, D.C., USA, 24-28 June 2019

Provisional Agenda Item 4.5

CE164/16
2 May 2019

Source: PAHO

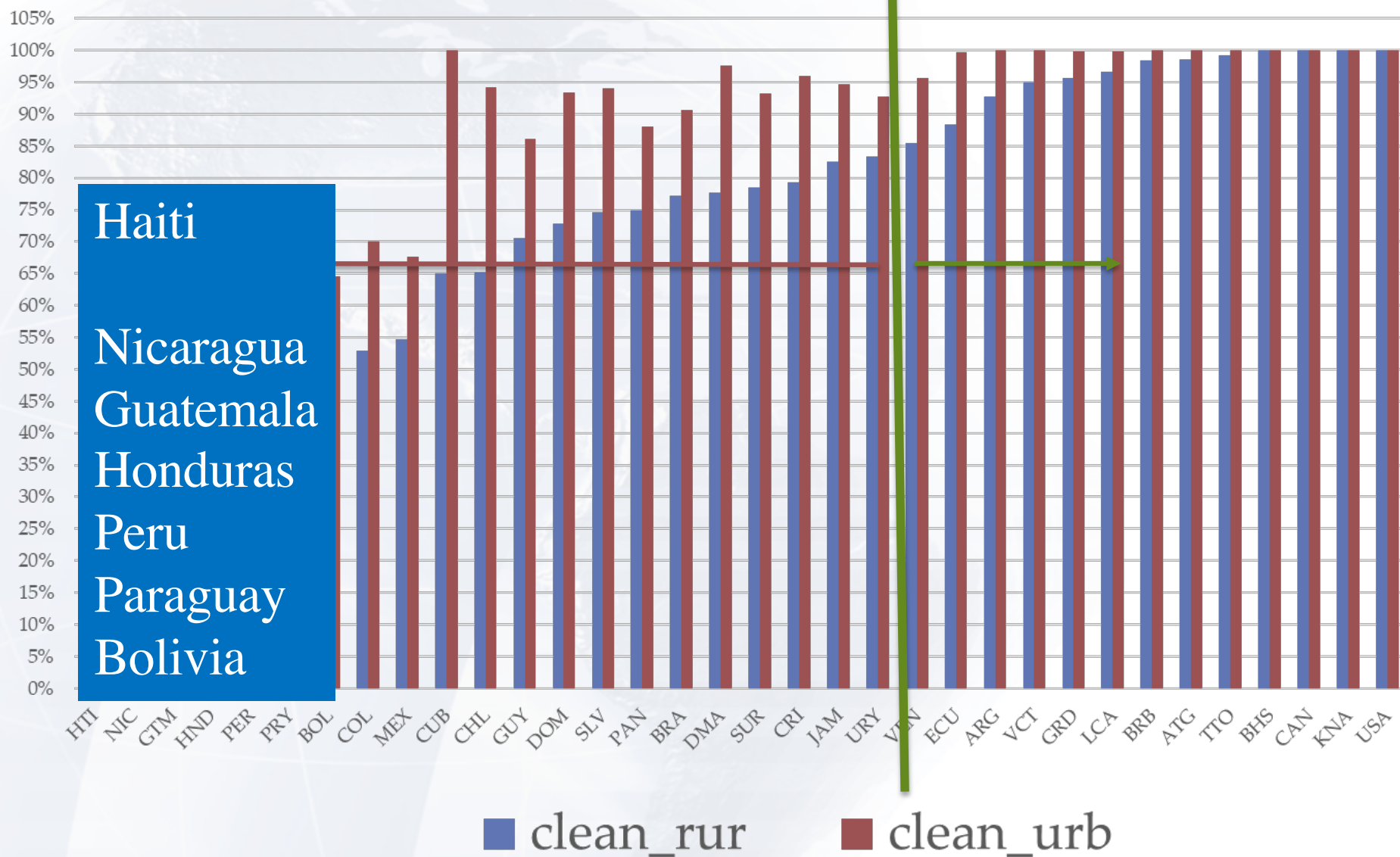
57th DIRECTING COUNCIL

71st SESSION OF THE REGIONAL COMMITTEE OF WHO FOR THE AMERICAS

Washington, D.C., USA, 30 September-4 October 2019

Polluting biomass cooking fuels	Elimination as a public health problem	Use of biomass cooking fuels reduced to less than 5% of population in each country by 2030	In five countries in the Region, more than 30% of the population uses household solid fuels (Haiti, Guatemala, Nicaragua, Honduras, and Paraguay). One-third of the total exposed population lives in Mexico and Peru, and another 11% lives in Brazil. Overall, in 14 of the 35 countries in the Region, 10% or more of the population still use polluting cooking fuels.
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Source: PAHO

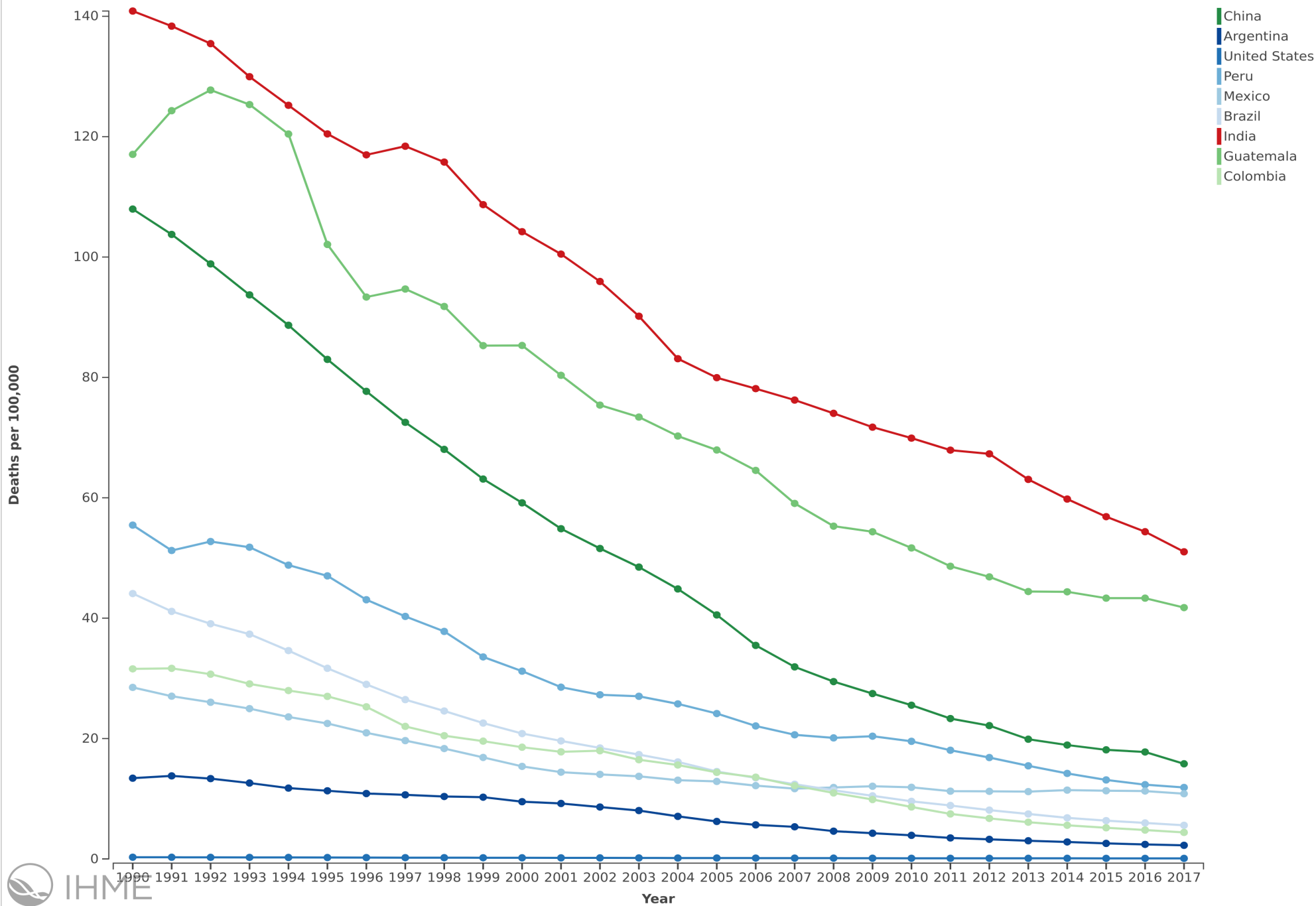


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**All causes attributable to Household air pollution from solid fuels
Both sexes, Age-standardized**



Tobacco vrs HAP

- HAP causes more ill-health than smoking in poor countries
- Globally, HAP causes far more ill-health than secondhand tobacco smoke
- Being smoke free needs to consider both major sources of combustion near people
 - smoking and cooking

Tobacco vs HAP in PAHO

- Countries with more impact of HAP than tobacco
 - Guatemala, Haiti
- Countries with about the same impact of HAP and tobacco
 - Honduras, Nicaragua, Peru
- Poor states in Mexico and Brazil with similar impacts of the two
 - E.g., Chiapas, and Maranhao

Needed

- To change “subsidy” to “social investment”
- Subsidy/social investment experience is substantial in this region – need to apply this knowledge
- India doing its LPG program with income of Bolivia, fifth poorest in PAHO region
- Poorer countries in region may need help to reach 95% or more
- Will a PAHO target engage this help?

LPG in India:

80 million poor households in <4 years
~500 million people

How was it done?

Three main elements

At start: LPG refills subsidized to cost everyone in country about USD\$7 per 14 kg. Government cost varies according to international price. Connecting to system (to obtain subsidized fuel) costs a household about \$22 for deposits and fees

- Pahal – engage electronic bank accounts
- Give It Up – move subsidy away from the middle class, peaceably
- Ujjwala – provide connections directly to the poor for free

PAHAL Program – 2015

- All LPG now sold at international price – no subsidy available on market
- People qualified for subsidy receive directly into their bank accounts
- Only when they purchase a refill does it put into the account for the next purchase
- Instantly won the Guinness Book of Records as the largest bank transfer in history
- Eliminated tens of millions of wasted connections

But no upfront costs provided

- People need to pay their own “connection” cost ~\$30 for stove and deposit on first cylinder
- This barrier is substantial for poor
- Needed to have source of funds for paying this cost for the poor.
- Subsidy wasted on better off households – drag on government expenditures
- But politically very difficult to remove subsidies

Give It Up campaign: 2015

- Middle class asked to give up their LPG subsidies – not taken away
- Health is the message – “make a poor woman’s kitchen clean”
- Extensive social marketing
 - Modi and other celebrities in speeches, media ads, bill boards, etc
 - SMS messages – 2 billion in first year
 - Fairs, athletic events, posters, skits, etc
 - Website linking those giving up to those receiving: middle class to poor



Feel the Joy of Giving

: Initiated by



Ministry of Petroleum & Natural Gas
Government of India



MyLPG website: Feb 24, 2016



Search By: ☒ Giveitup Champion ☐ Beneficiary

Search Name:

LPG Id:

3

SEARCH

SHOW ALL

#Giveitup CHAMPION	BENEFICIARY
MUNIAMMAL	MISHRI DEVI GURJAR
J.RAY CHOUDHARY	BALE . MALLAIAH
KALAISELVI. V. MRS.	SHIV . KUMAR
SHREE RAJA GOVIND SINGH KHANDELA	RIYAJ . AHMAD
MOHD.SHAHID	A. RASHID S/O KARIMULLA
SAFIQ	EESVAR . SINGH
MAHENDRA PRASAD TRIPATHI	VIJENDRA . JATAV

GO

By 2016, however

- About 10 million had given it up, but the rate had slowed.
- Limit subsidy to those earning less than 15,000 USD/year did not bring many more
- Something else needed

Modi Speech Feb 2016

- *“We have decided to embark upon on a massive mission to provide LPG connection in the name of women members of poor households....”*
- *“This measure will empower women and protect their health. It will reduce drudgery and the time spent on cooking. It will also provide employment for rural youth in the supply chain of cooking gas.”*

Ujjwala

- Adding 10,000 distributors to the existing 18,500
- National no fault insurance scheme for accidents – national number to call
- 1.2 billion USD earmarked for one-time connection costs
- Massive national database with every customer's refill experience
- 5 kg cylinder developed
- All transactions only to women's accounts



Every woman will get her due respect and dignity.

"You can imagine what happens to a mother's health in that home and how her children must be breathing with all that smoke." - Narendra Modi.

With the Pradhan Mantri Ujjwala Yojana, that will benefit 5 crore women belonging to below-poverty-line households.



Clean Fuel. Better Life.

The Ujjwala Yojana will be launched by the Hon'ble Prime Minister,

Shri Narendra Modi

In the gracious presence of
Shri Ram Naik
Hon'ble Governor, Uttar Pradesh

Shri Kalraj Mishra
Hon'ble Union Minister of Micro,
Small and Medium Enterprises,
Govt. of India

Shri Dharmendra Pradhan
Hon'ble Minister of State,
Petroleum and Natural Gas
(Independent charge), Govt. of India

Shri Manoj Sinha
Hon'ble Minister of Railways,
Govt. of India

At Maldepur Morh, Ballia, Uttar Pradesh, on 1st May, 2016 at 10 AM.



Ministry of Petroleum & Natural Gas
Government of India

Terms & Conditions apply. For more information, kindly visit your nearest LPG distributor.



संकल्प
से सिद्धि
न्यू इंडिया मूवमेंट 2017-2025



Ministry of Petroleum & Natural Gas
Government of India

UJJWALA BRINGS TIME FOR FAMILY & EDUCATION

3 Crore
Beneficiaries



Clean Fuel. Better Life.





**SANKALP
SE
SIDDHI**
संकल्प से सिद्धि



CHOKED LUNGS BURNING EYES **AN OLD STORY NOW**

For several generations, surviving their daily existence in the 'dodging' - a polluted hellscape with filth, noise and poisonous smoke - is a deadly task. Kashmiri Pandits, now 80% landless, are the poorest among India's 100 million rural poor. But on 1 May, 2010, in the state of Jammu and Kashmir, the Indian government announced that it would provide them with a one-time grant of Rs. 10 lakh (US\$ 1.5 million) to help them start a new life.

Clear feet,
Bright life.

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Success due to

- Efficient partly private oil marketing companies with well-developed supply chains
- Top to bottom commitment from Modi to the local LPG distributors
- Massive use of social marketing/advertising
- Intensive use of JAM – electronic bank accounts; electronic ID cards, and mobile phones
- Appeal to middle class to give up subsidies – pays for entire new program
- Politically popular with only minor complaints
- Aspirational transition for households

Final targets of Ujjwala 1.0

- 80 million new connections to poor households
- Plus 40+ million households as natural growth in middle class
- 95% of country will be covered
- Started at 60% in 2015
- To be achieved by Sep 15, 2019

Ujjwala 2.0

- **Extend:** to remainder of country
 - More difficult – more poor, remote, and disconnected communities
- **Enhance:** usage needs to be enhanced as many Ujjwala customers using only one-third of full refill numbers
- **Extinguish:** Further move middle class away from subsidies in order to pay for increased subsidy among the very poorest

Barriers to Usage

- **Information:** about program and about benefits of LPG use
 - Massive village campaign – 200,000 meetings
- **Reliability:** Supply not reliable or is slow in many areas
 - Free connection to a 5-kg second cylinder
- **Cost**
 - Upfront costs – second cylinder and stove to be added to benefits
 - Fuel cost – better target subsidies to give more to very poor and less to middle class

Considering

- Link to India's new health insurance scheme – Long-life India or “Modicare”
- Link to antenatal care system – introduce free LPG as part of pregnancy benefits
- Link to national Rural Employment Scheme, which is now engaging >40% of villages

India and China Examples

- National LPG program in India is entirely paid by shifting subsidy away from middle class to the poor. More retargeting will be needed, however
 - Change “subsidy” to “social investment” – based on health evidence
- China’s solid fuel change out in the Beijing-Tianjian-Hebei region started 2017 to reach 80% by 2022 – includes spaceheating
 - Paid by ambient air pollution control – keeping the pollution from Beijing cost-effectively
- Both approaches possible in PAHO

Many thanks

For publications
& presentations:
Just “Google”
Kirk R. Smith

