

hesasa

**Household Energy Safety
Association** South Africa

HOUSEHOLD ENERGY SAFETY SHOULD BE A NATIONAL PRIORITY

FIRE PREVENTION INDABA, SOUTHERN SUN HOTEL, CAPE TOWN
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Presented by:

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Outline

- Origins of HESASA
 - Our Work
- Illustrating the Problem, Exploring Underlying Causes & Understanding the Impact
- Expanding our Mandate: Introducing HESASA
- Proposals
 - Need for a Household Energy Policy



1. About HESASA

About HESASA

- ❑ Established in May 2013, in the place of Paraffin Safety Association of SA
- ❑ Expanded focus on household energy safety, rather than paraffin only – whatever is used at home for cooking, heating and lighting
- ❑ Focus on all income areas, but remaining grounded in communities
- ❑ Independent Non Profit with a new and diverse Board of Directors

HESASA Board members

- Ms Buyelwa Sonjica – Former Minister of Energy
- Prof Ashley van Niekerk, leading academic and researcher from MRC
- Prof Heinz Rode, Leading Surgeon at Red Cross Hospital and academic at UCT
- Ms Kgomotso Matsunyane, Media personality, business woman and communications specialist
- Prof Harold Annegarn, Senior Research and Lecturer at University of Johannesburg

Our Work

COMMUNITY ENGAGEMENT



Trainer training
Door to door
Winter Safety
Campaigns
School based
Clinic based
Media campaigns

SCIENTIFIC RESEARCH, SURVEILLANCE & EDUCATION



Educational Resource
Development
Household energy
surveys
Fire and injury
Surveillance
Appliance
Surveillance

POLICY



Lobbying &
Advocacy
Standards &
Regulation
Consumer
Protection

Community mobilisation



Paraffin Safety Association
Southern Africa



Paraffin Users Household Energy Summit

Final Declaration concluded at Kopanong Conference Centre – Johannesburg, 28th June 2007

We, the participants attending the Paraffin Users Household Energy Summit hosted by the Paraffin Safety Association of Southern Africa in Durban on 29th May 2007, Port Elizabeth on the 5th June 2007 and in Rustenburg on 12 June 2007, have had the opportunity to deliberate on a number of issues related to our energy needs.

WE ARE ALARMED BY:

1. the many energy related incidents, injuries and deaths that take place in the home on a regular basis;
2. the many paraffin-related fires, burns, ingestions, asphyxiation, and respiratory complications due to indoor air pollution;
3. the unacceptable burden borne by children, especially those under the age of five years old who are most at risk of drinking paraffin thinking that it is water;
4. the unacceptable burden borne by women, especially in rural areas and informal settlements;
5. the number of injuries by hot liquids or foods irrespective of the energy source used;
6. the costs to households and to the economy due to paraffin related incidents which is estimated to be in the region of R100 billion a year;
7. the emotional effects and financial implications that low income households experience; and
8. the lack of counselling services provided to survivors of paraffin related incidents and injuries.

3. Establish an energy injury/accident compensation fund (disability grants) similar to the road incident fund to provide financial support for paraffin related incident victims and survivors.
4. Recognition and planning for the multiplicity of household energy use in South Africa.
5. The Department of Minerals and Energy must take leadership and accelerate interdepartmental, intersectoral and stakeholder collaboration to address household energy safety problems. It must also:
 - a. accelerate the establishment of paraffin policy within the broader context of other energy options for low-income households. The policy must clearly outline the stand of government on whether paraffin will be phased out or not;
 - b. ensure the prevention and reduction of the negative health, economic and environmental damage through long-term risk reduction strategies, in particular the regulation of the paraffin industry, including wholesale and retail sectors which are a key portal for safety;
 - c. register all sellers of paraffin and related appliances;
 - d. as a matter of urgency, subsidise appliances that are safe to use;
 - e. ensure that our communities (including children) are empowered to recognise energy hazards and are educated about best practices

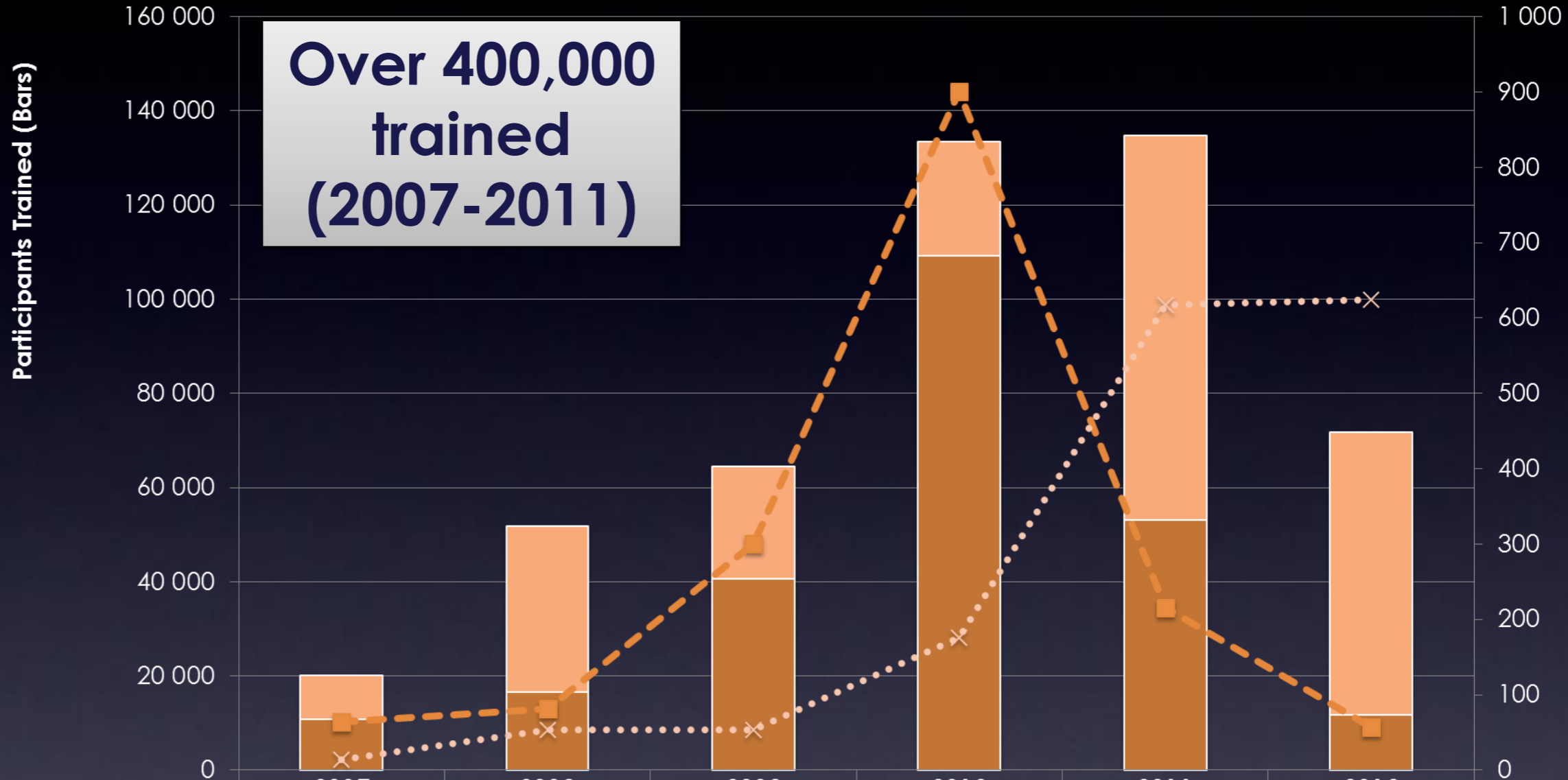
6. Price increases for paraffin must be regulated and the indigent household free basic energy policy must also apply to the informal settlement paraffin users.

FURTHERMORE, PENDING REGULATION, WE STRONGLY URGE THAT:

1. government leads a national energy safety media campaign
2. the media (and relevant stakeholders) join forces with communities and the Paraffin Safety Association to highlight the issues related to household energy provision and safety.
3. the single national emergency number 10177 is widely publicised
4. the petrochemical industry:
 - a. implements a pre-packaged solution for paraffin;
 - b. take responsibilities in educating "Spaza" shops and the "Spaza" shops can then educate the end-users; and
 - c. contributes to the 3rd party insurance for contamination accidents.
5. manufacturers of paraffin appliances produce safe appliances compliant with government regulations;
6. retailers and wholesalers take responsible steps to increase and improve safety;
7. dedicated counselling support be provided for survivors;
8. provision is made by local authorities to supply fire victims with temporary shelter in addition to

Safety Education and Training

PASASA People Trained and Training Opportunities - 12 Months



	2007	2008	2009	2010	2011	2012
Partner Organisation - Participants	9 297	35 375	23 742	24 262	81 583	60 003
Our Training - Participants	10 747	16 510	40 710	109 138	53 180	11 786
Our Training - Opportunities	64	81	301	900	216	57
Partner Organisation - Opportunities	14	53	53	176	617	624

Partnerships

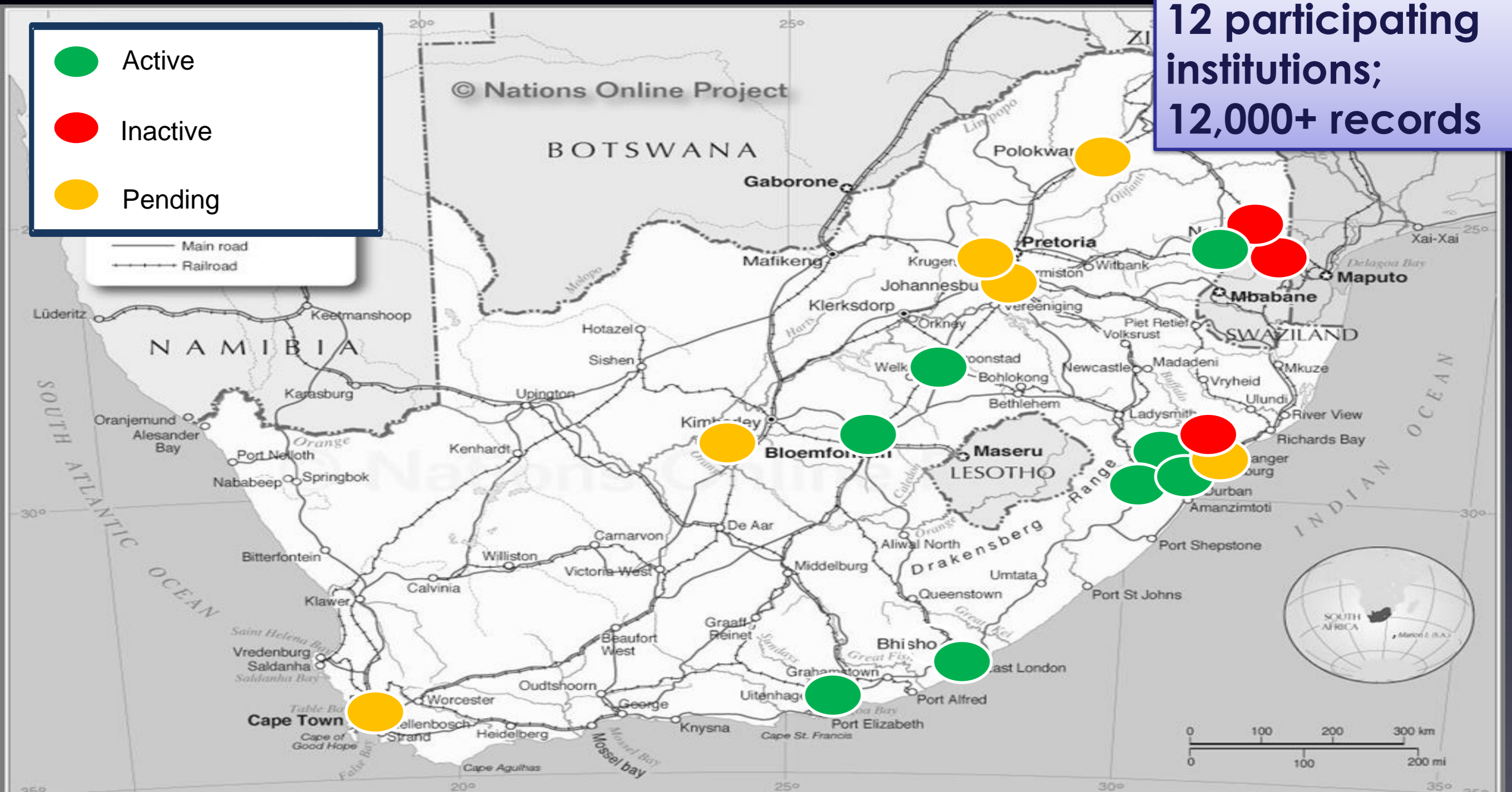
- Local & Provincial Government
- South African Bureau of Standards
- South African Broadcasting Cooperation
- National Disaster Management Centre – provinces
- Offices on Consumer Protector
- National Consumer Forum
- Cities
- Oil company CSI departments
- Mind-set
- Media

Research & Surveillance

In addition to household surveillance of low-income households, we developed the **Injury Surveillance System** in 2007 to understand **the nature, occurrence and frequency** of paraffin- and energy-related morbidity and mortality in South Africa.

- Active
- Inactive
- Pending

12 participating institutions;
12,000+ records



2. Illustrating the Problem

Energy safety as Public policy problem

- “ A policy problem is an unrealised need, value, or opportunity for improvement attainable through public action” (Dunn, 2012:5)
- “Information about the circumstances that gave rise to a problem is essential for producing information about expected policy outcomes” (ibid)
- The fatal error of policy analysis is **defining a wrong problem**
 - Fires are part of a bigger energy safety problem



Illustrating the Problem

Shack fire leaves **WARD T**

Three killed as fire destroys 529 shacks

Katlego Moeng

THREE people died in shack fires in Durban and Johannesburg yesterday. Two men were burnt to death when a fire destroyed more than 500 shacks in an informal settlement in Kennedy Road, Durban. In Alexandra, Johannesburg, residents were left baffled about

why a woman failed to notice that a shack she was sleeping in was on fire. Police believe the fire started in the shack while she was sleeping. The woman's charred remains were removed at daylight. Emergency Management Services spokesperson Percy Morokane said the fire, which started just before 3am, reduced

29 shacks to rubble and left people destitute. In Durban, a pensioner a 30-year-old man perished after midnight yesterday when fire swept through an informal settlement, leaving more than 2 000 shack dwellers homeless. Residents said the fire started when a candle fell while one claimed that it was a paraffin stove that led to the disaster.

while she was busy collecting clothes from the washing line. She quickly went to the outside toilet and, less than five minutes later, the house was engulfed in thick smoke. She threw a bucket of water on the fire in an attempt to extinguish it, but it was too late. She says it was as if she was fighting the fire with petrol. Her neighbour tried to help her but without success. "By that time my baby was not crying anymore," Maleke says.

Maleke says that she lit a candle, positioned it in a plastic container and left it burning while she was outside. There was also a paraffin stove burning. Emfuleni social workers tried to help the young mother, but apparently she has no Identity Book. Apart from that, her child does not have a birth certificate and they are not living on a Government Grant. The Ward councillor says it might be difficult for the municipality to assist if the mother of the deceased does not have the proper documentation to prove that she is in fact a South African citizen. Police spokesperson Warrant Officer Mzimkhulu Mthimkulu says an inquest docket has been opened.

longing to Phembelani Mgedu on Wednesday. He said his brother was baking bread and quickly went to the shop, only to find that the curtain had caught fire as the prima stove was left burning, upon his return. Mgedu said that his kitchen was reduced to a burnt frame and that his generator was also destroyed in the fire. Mgedu lives with his wife, brother, brother-in-law and two-year-old son.

community had stones and had to put out the fire. "Fortunately arrived within 10 minutes assisted in putting out the fire. Fourie added of the house had vage their identity. "I will engage with the Social I the Sol Plaatje M

Home, 16 people between the ages of two months and 27 years stayed. "According to information received, the fire started in a shack next to Miriam's Home and a two-year-old girl was burnt to death.

Associati between 4944 par recorded. "Child far the m

Pippie Kruger is 'n brose ou bondeltjie, maar sy's ook 'n vegtertjie soos min. Haar ouers, Erwin en Anicé, bring byna elke oomblik langs hul dogtertjie se bed deur.



FOTO VERSKAF

LINKS: Pippie voor die ongeluk. REGS: Erwin verduidelik hoe die vuur aansteekjêl in sy hande ontplof en hul lewe omvergewerp het. NAASREGS: Anicé sê die Pippie se Gessigie-fonds gaan later ook vir ander brandslagoffers gebruik word.



Police Co ko inside old baby and was Photo: L

ONS KIND IN VLAMME

Wat 'n lekker kuier moes wees, het in 'n oogwink in 'n nagmerrie ontaard toe 'n vleisbraaivuur hul dogtertjie begin verswelg

Deur DANÉL BLAAUW Foto's: FANI MAHUNTSI

SY LÊ agter 'n glasafskorting. 'n Klein bondeltjie mens toegedraai in wit verbande. Tussen die buise en monitors is die hande van 'n kleuter sigbaar. Rou wange, 'n neus en mond steek tussen die verbande uit. Isabella Kruger (2) van Lephalale het in 'n fratsongeluk op Oujaarsand derdegraadse brandwonde oor 80 persent van haar lyf opgedoen. 'n Perfekte regtervoetjie wat bo-op die hospitaaldekens lê, is een van die min dele van haar lyf wat nie deur die vlamme verteer is nie. Twee maande nadat 'n bottel vuuraansteekmiddel tydens 'n braai ontplof en haar getref het, is elke dag steeds vir Isabella 'n stryd om eendag weer heel te wees. "Dis elke keer 'n risiko om haar onder narkose te sit omdat sy so klein is. Hulle kan haar ook nie teater toe vat nie omdat sy 'n infeksie kan opdoen. Daarom word alles in haar kamer gedoen," sê haar ma, Anicé (27).

Underlying Causes

Poverty & Unemployment

Limited access to safe resources and ability to invest in safer systems

Unsafe, cramped living conditions

Unsupervised children

Overcrowding

Violence & alcohol abuse

Lack of education

Systemic Issues

Dangerous, illegal appliances

No capacity to regulate or monitor.

Lack of safe packaging and labeling

Lack of safe, affordable appliances

Point of Consumption

Informal housing is made from combustible materials

Poor Ventilation

Multiple energy sources in confined spaces



Impact

Emotional:

- Loss of loved ones
- Uncertainty and fear
- Loss of belongings and shelter
- Survivors of burn injuries are subject to stigmatization, discrimination, and social exclusion.

Socio-economic:

- Loss of one's home & possessions
- Impact on one's ability to generate income (absenteeism, loss of employment)
- Catastrophic costs of seeking medical treatment
- State resources required to care for patients and put out fires are high: health, human settlements, labour, emergency services, social development
- Externality costs of Paraffin fuel to the economy estimated to be R104 billion (treasury report)

Physical impacts of energy-related injuries

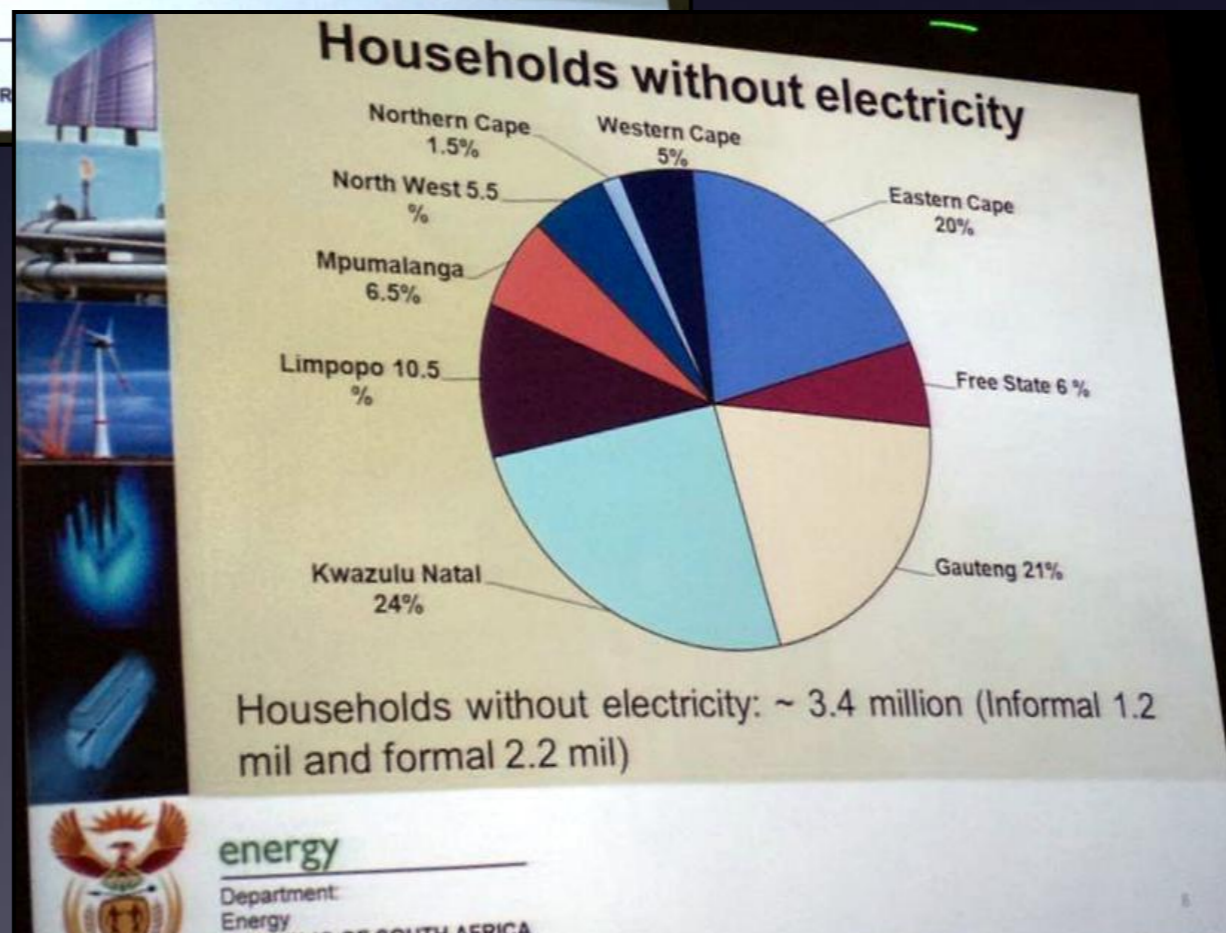
- Death and Disability
- Reduced mobility and capacity to engage in employment
- Reduced functionality in basic day-to-day activity
- Long-term physical therapy and treatment



Energy Use & South Africa's Poor



Despite the successes of South Africa's electrification program, the South African Department of Energy has indicated that 3.4 million households currently do not have access to electricity across South Africa

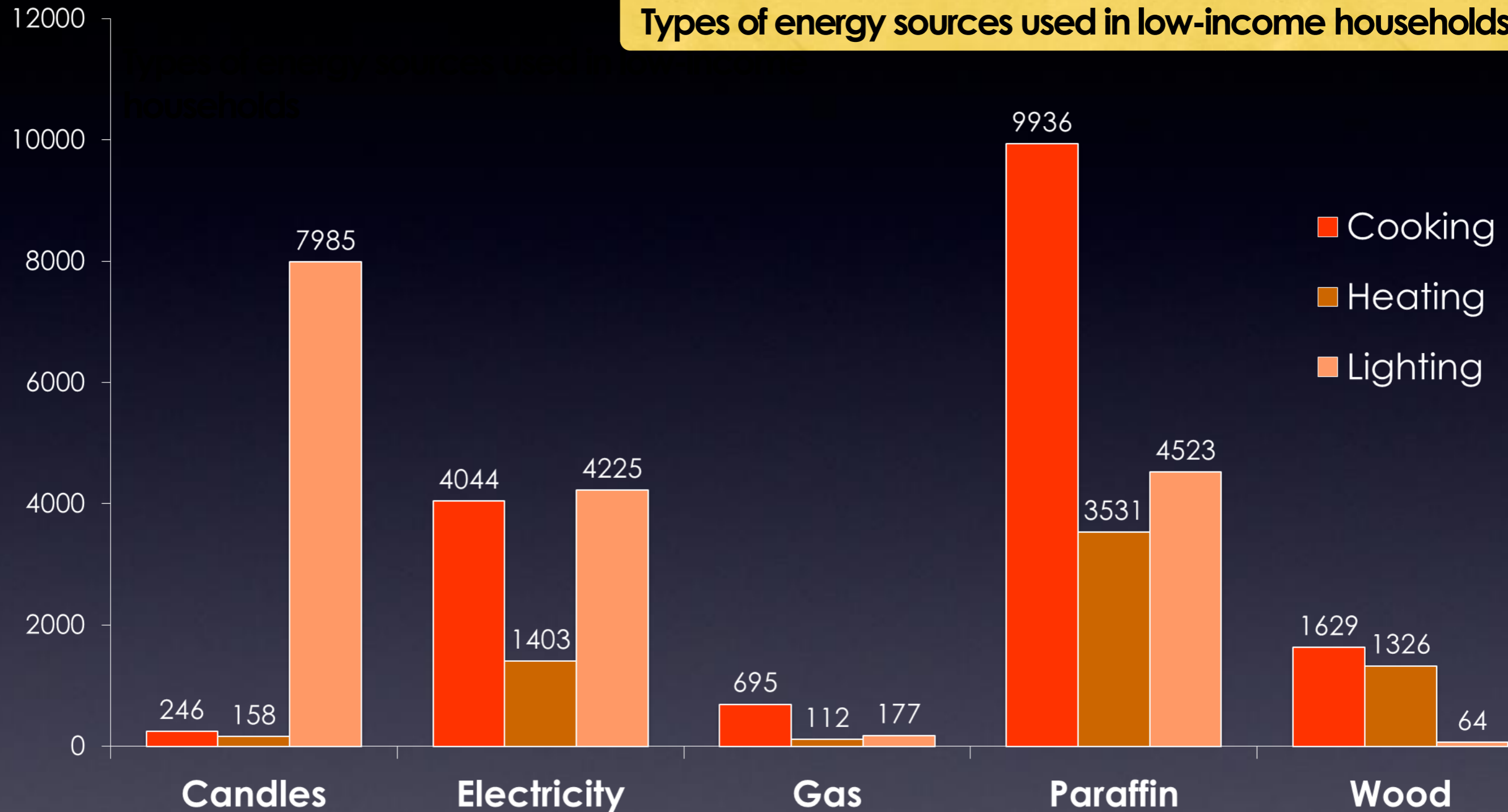


An excerpt from proceedings at the 2012 conference for domestic use of energy [1].

What we have found regarding:

Energy Use in South Africa

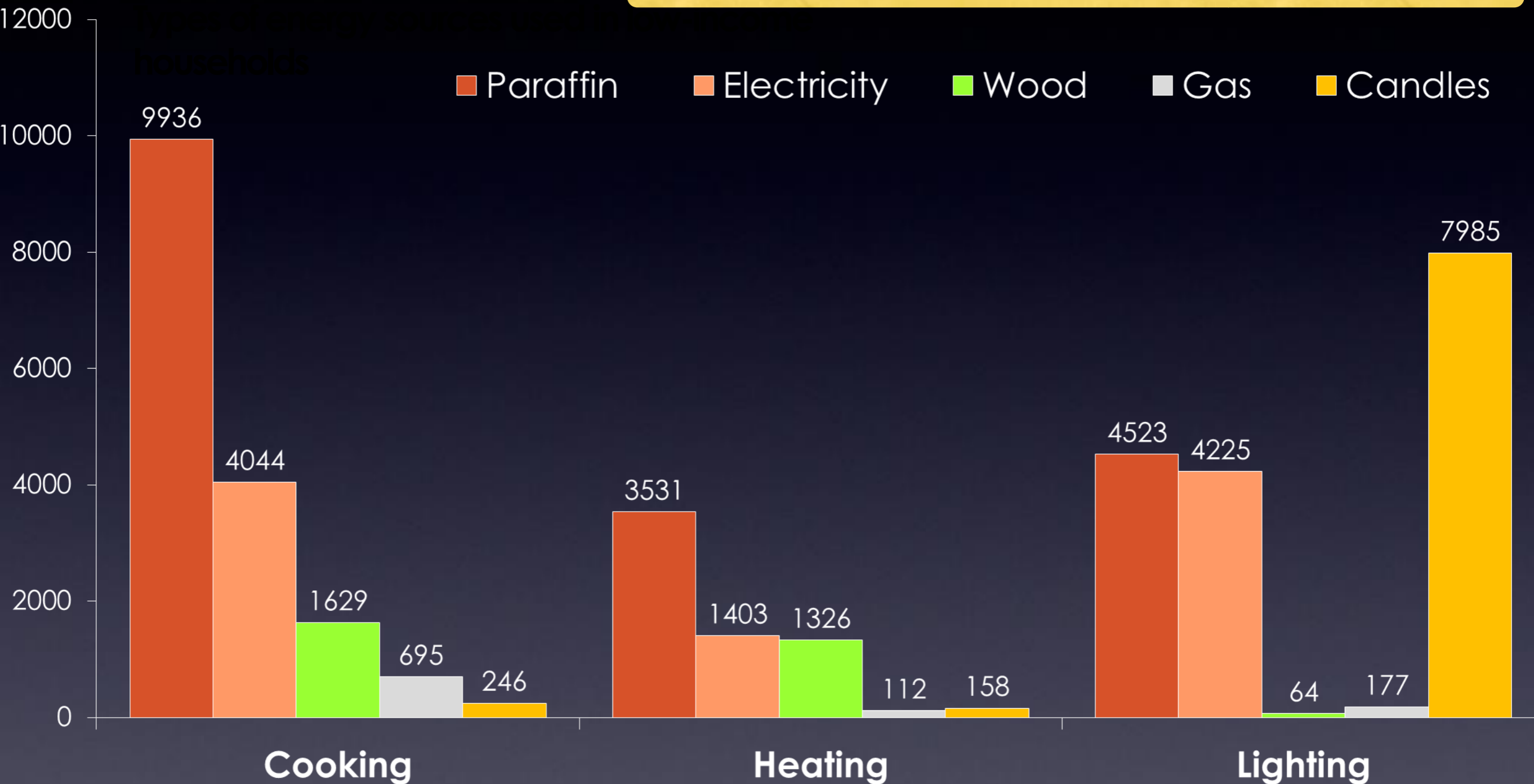
Types of energy sources used in low-income households



What we have found regarding:

Energy Use in South Africa

Types of energy sources used in low-income households

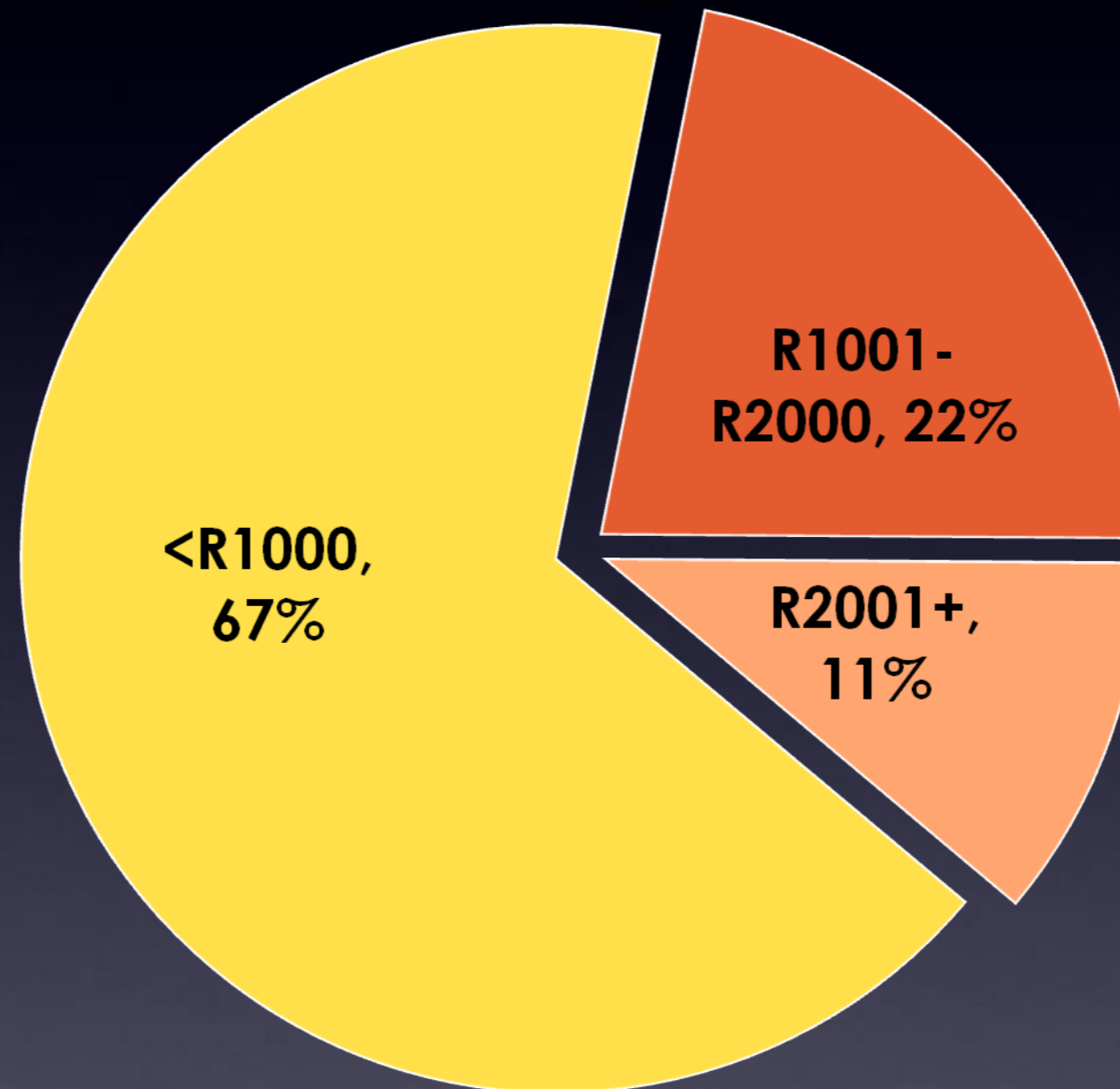


What we have found regarding:

Energy Use & South Africa's Poor

Monthly Household Income

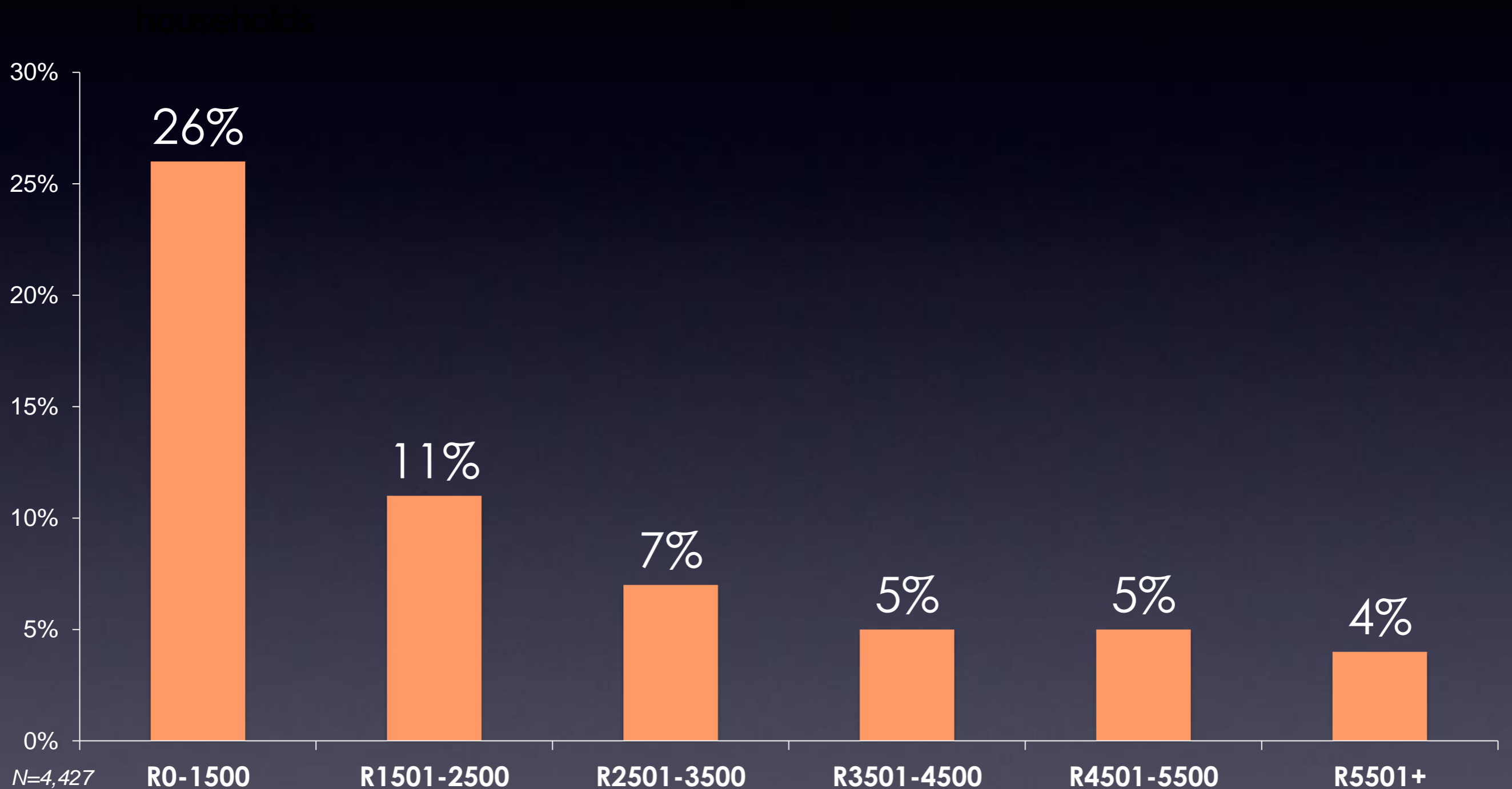
households



What we have found regarding:

Energy Use & South Africa's Poor

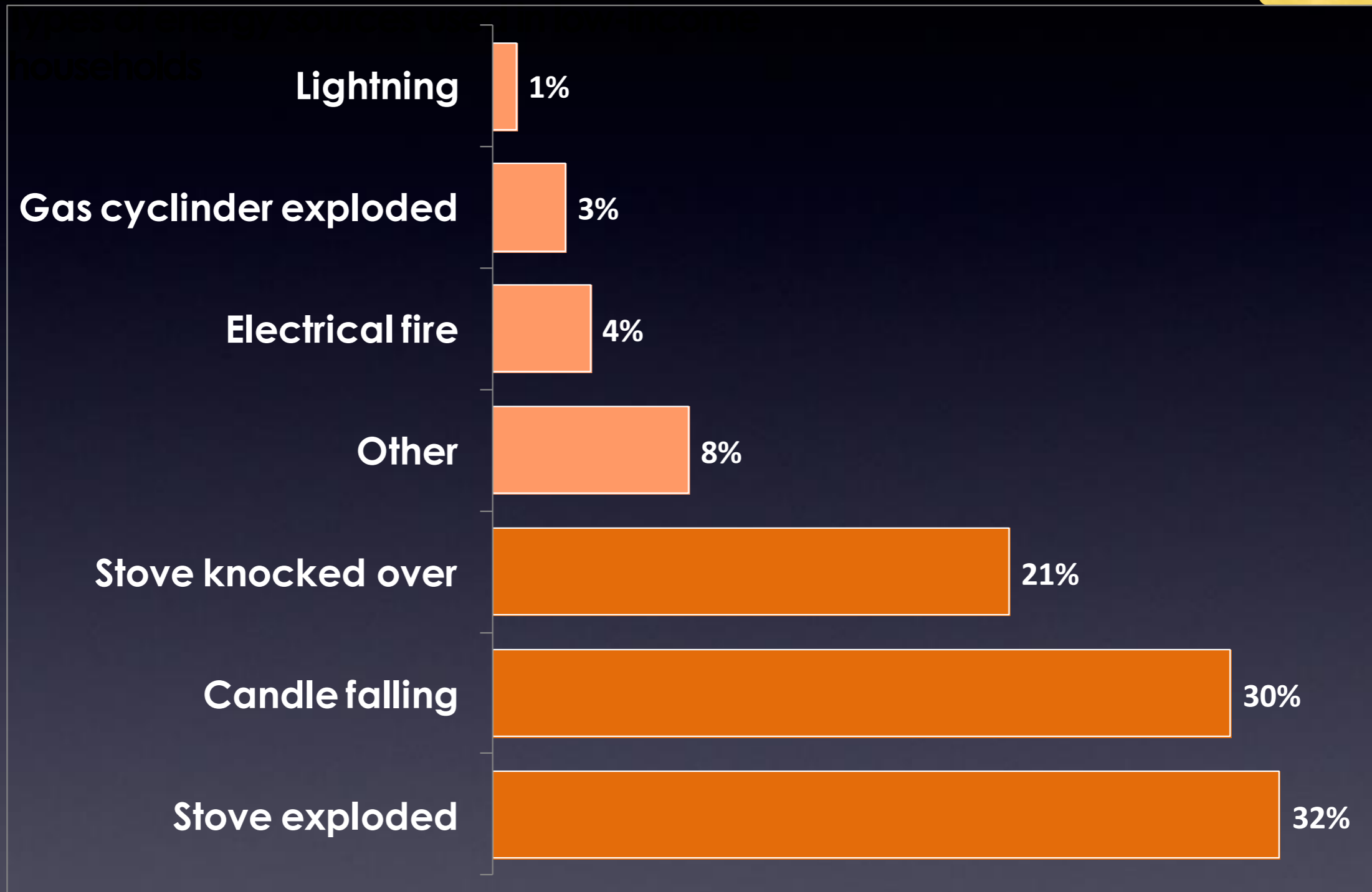
Average monthly expenditure on energy as a percentage of monthly household income



What we have found regarding:

Energy-Related Fires in South Africa

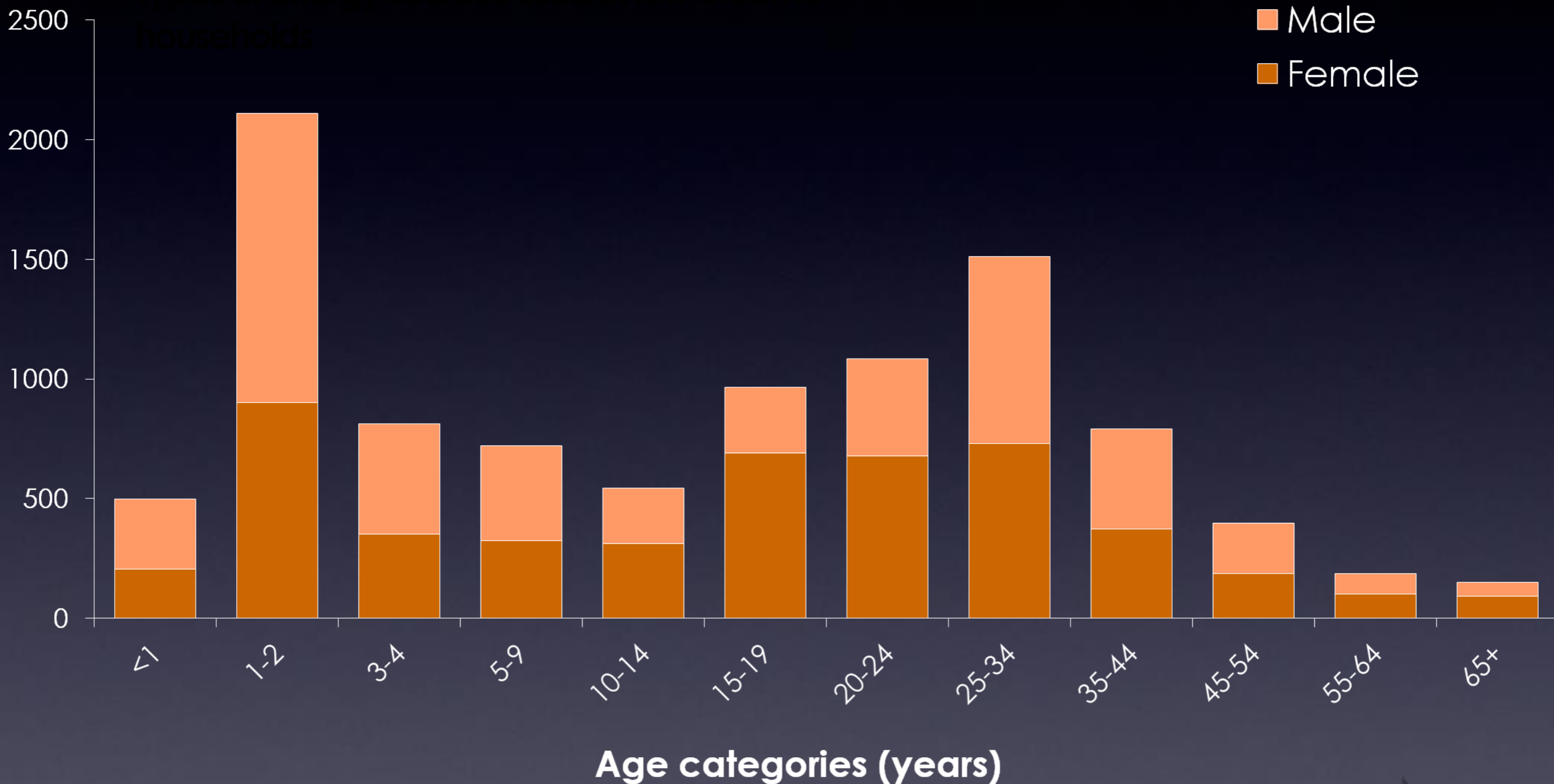
Causes of Fires



What we have found regarding:

Energy-Related Injuries in South Africa

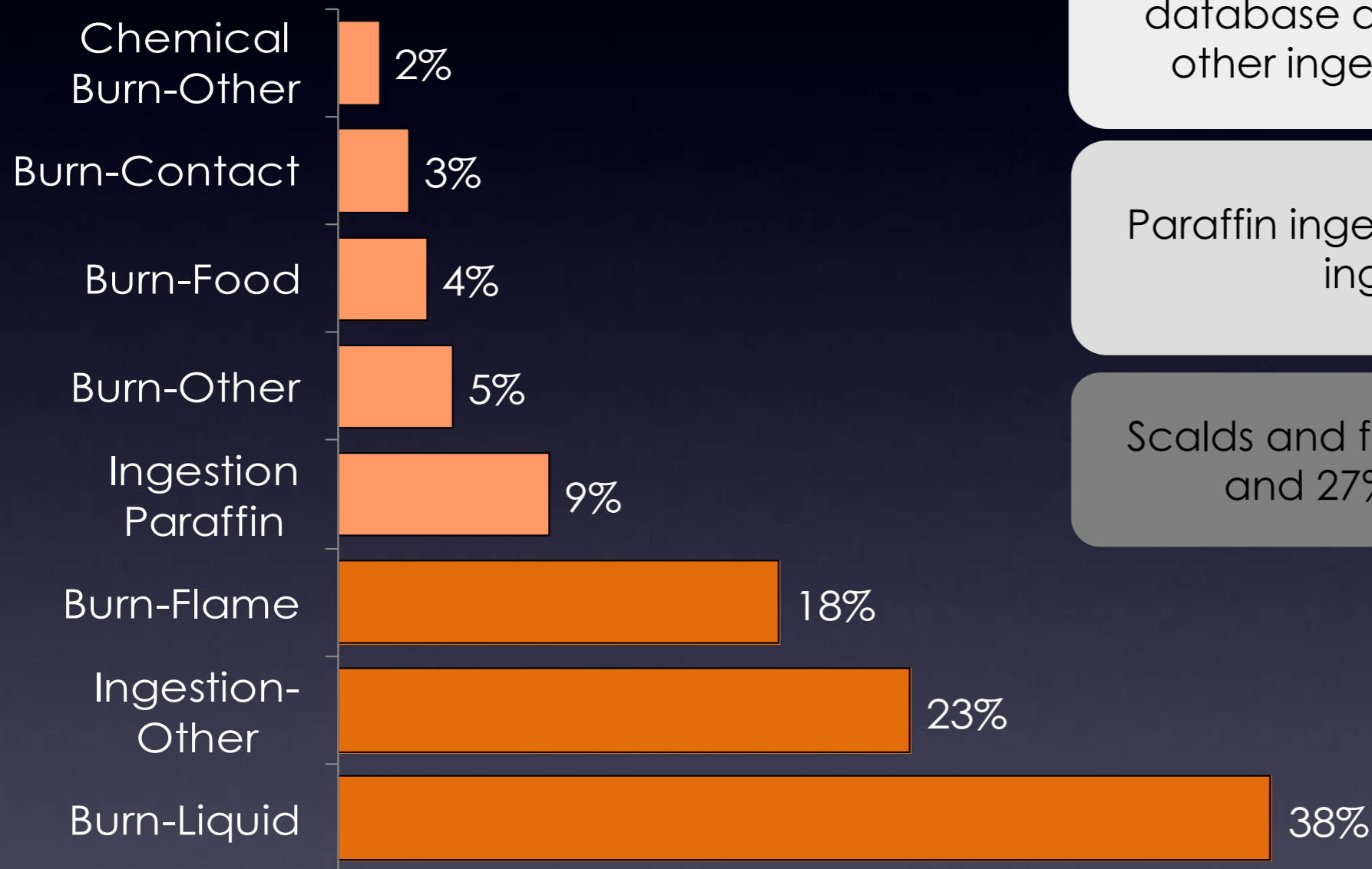
Age & Demographics of Energy Related Injuries



What we have found regarding:

Energy-Related Injuries in South Africa

Prevalence of Energy Related Injuries



The top three injury types recorded in the database are 1) scalds/liquid burns, 2) other ingestions, and 3) flame burns

Paraffin ingestions account for 25% of all ingestions recorded!

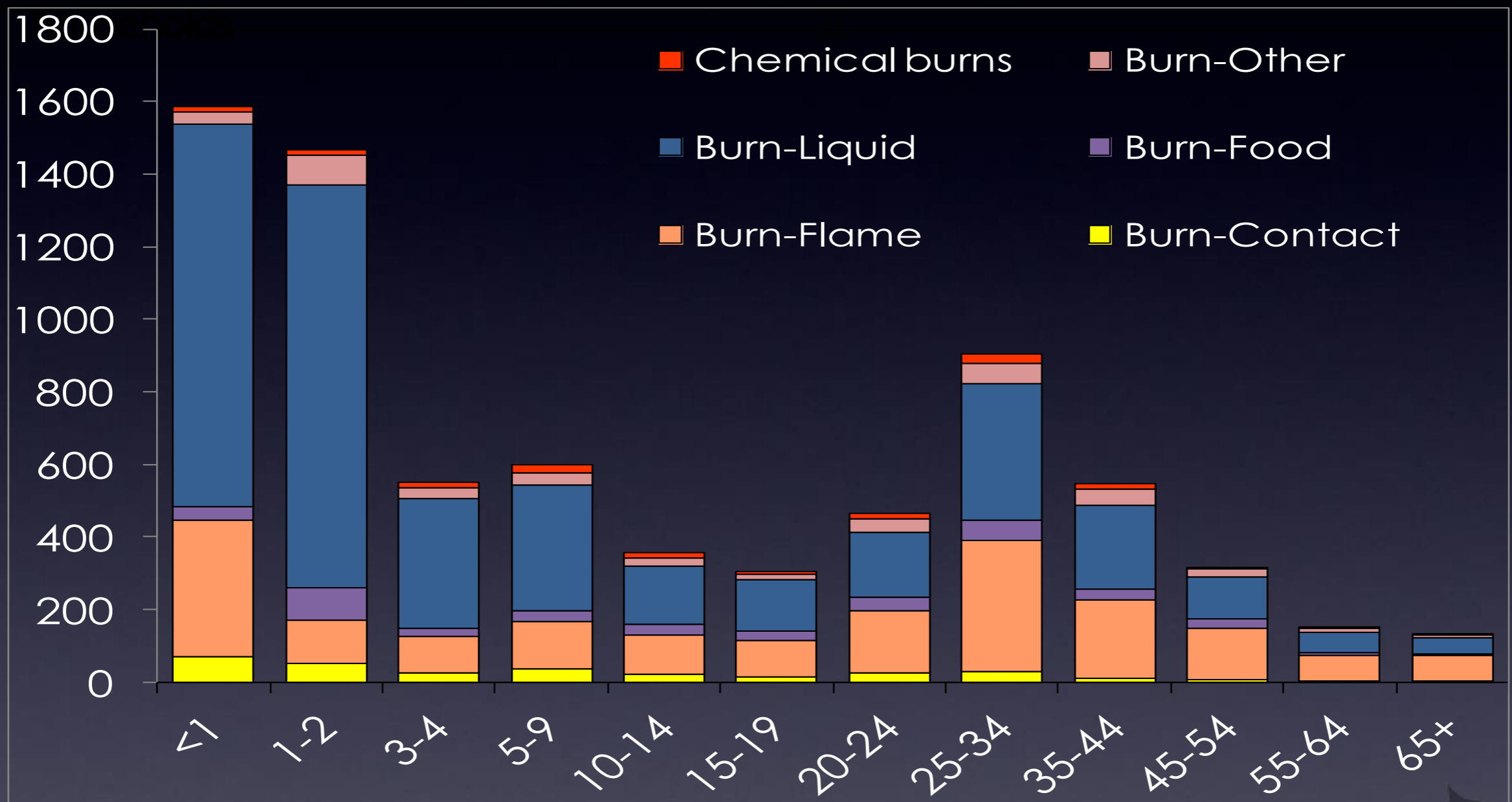
Scalds and flame burns account for 56% and 27% of all burns recorded.



What we have found regarding:

Burn Injuries in South Africa

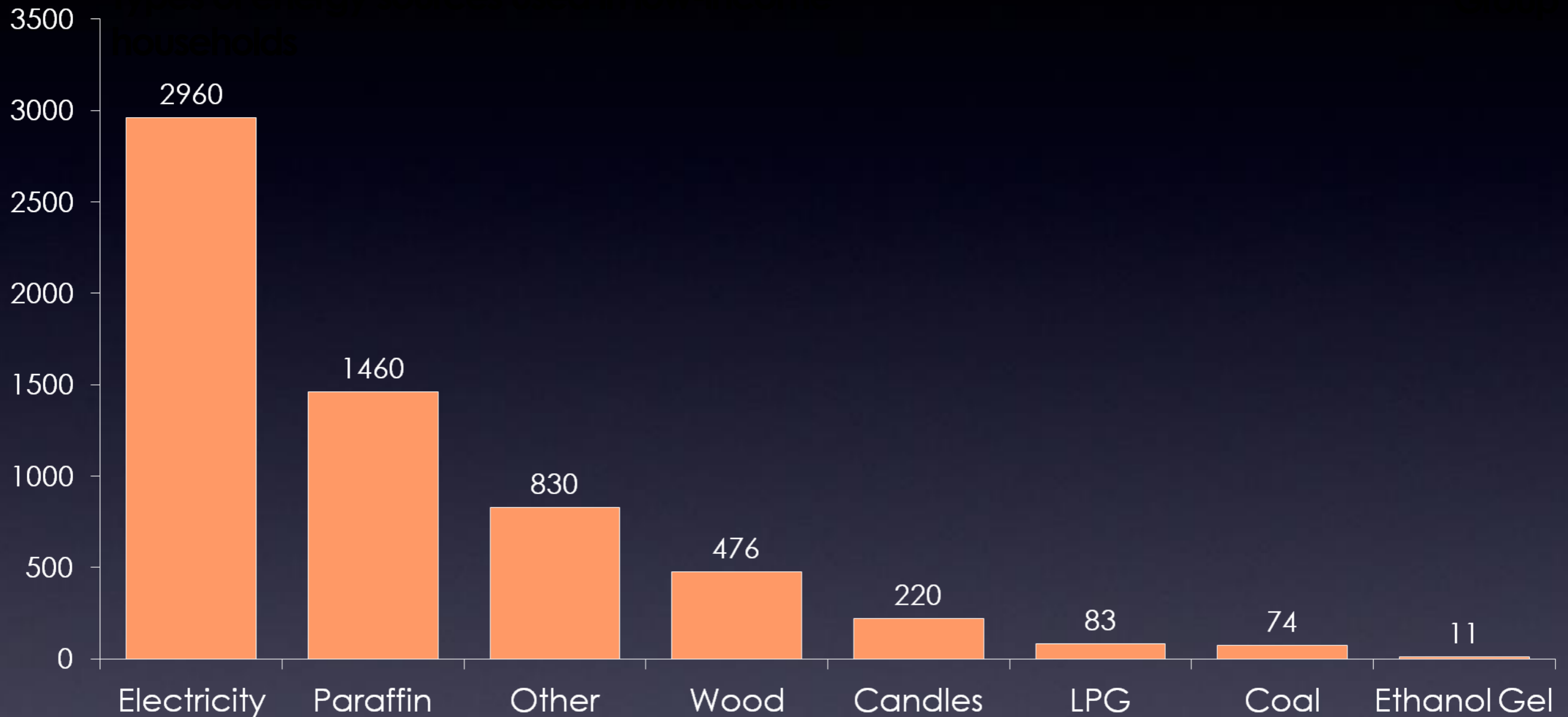
Prevalence of Burn Injuries by Age Group



What we have found regarding:

Burn Injuries in South Africa

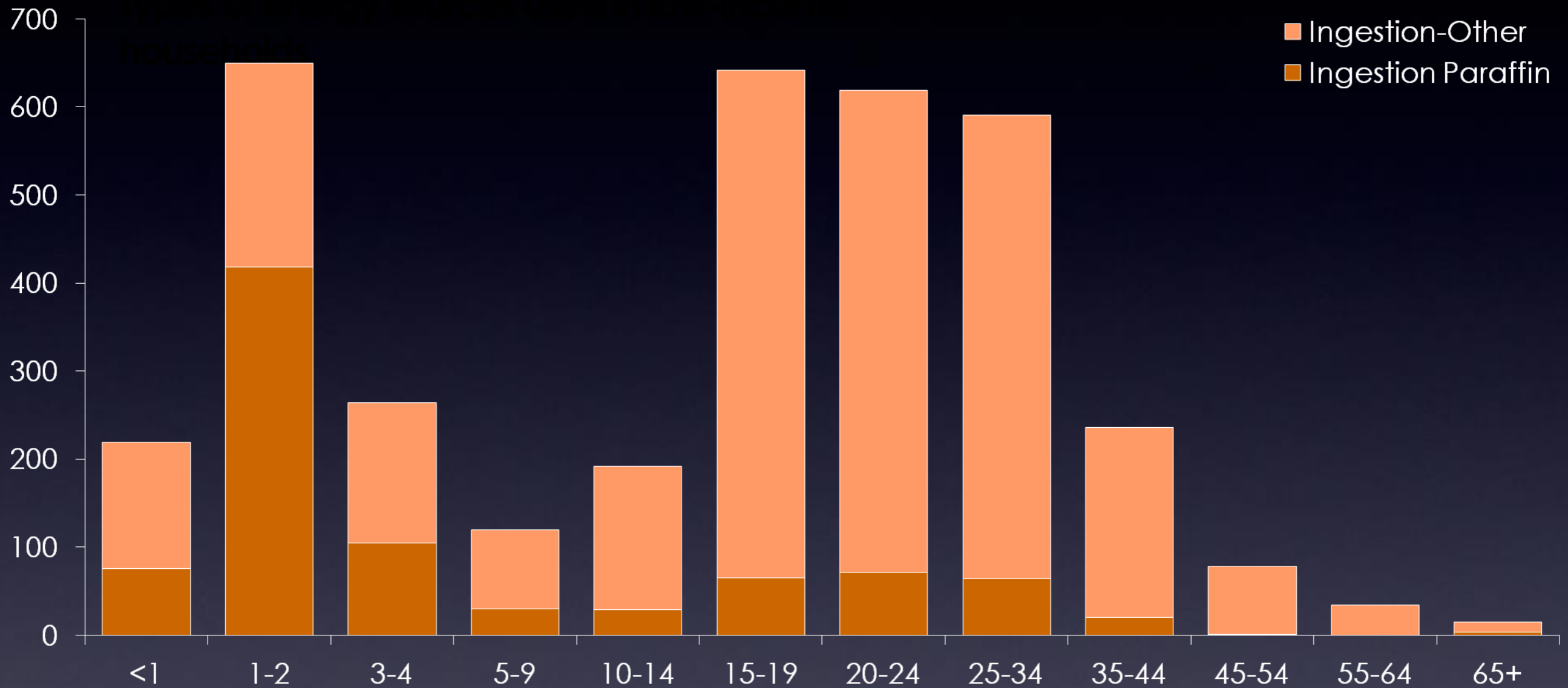
Energy Source involved in Burn Injury



What we have found regarding:

Poison Ingestion Injuries in South Africa

Poison Ingestions by Age Group



3. Expanding our mandate

Expansion of Our Mandate

Burns result from the use of other energy sources such as candles, gas, electricity, matches, wood fire etc.

People use multiple energy sources depending on a variety of issues.

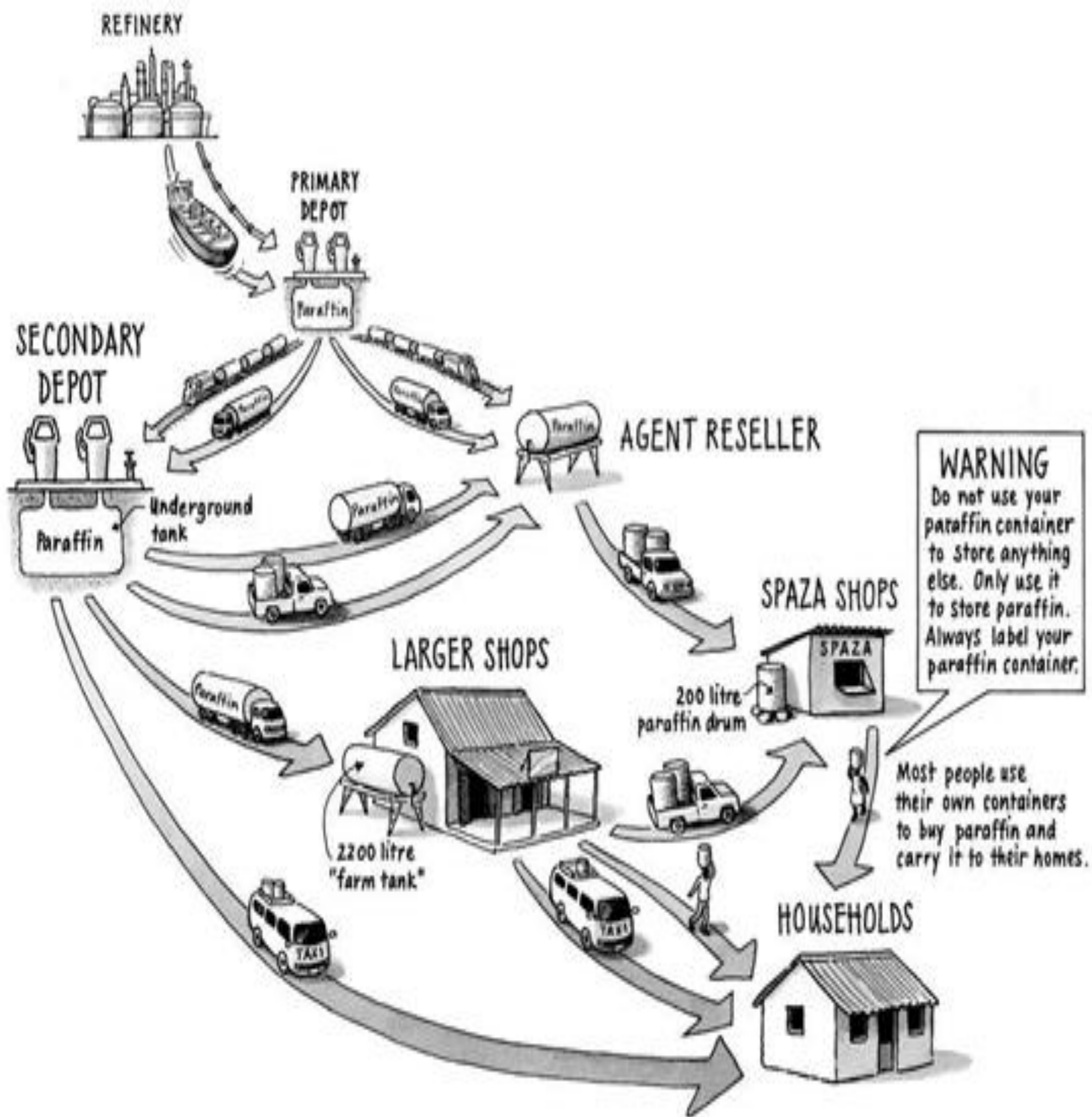
Energy use is changing, however the need for a civil society watch dog which will ensure the safety of communities remains.

The government needs to take this seriously



HOUSEHOLD
ENERGY SAFETY
ASSOCIATION
OF SOUTH
AFRICA
(HESASA)





WARNING
Do not use your paraffin container to store anything else. Only use it to store paraffin. Always label your paraffin container.

Most people use their own containers to buy paraffin and carry it to their homes.

HOUSEHOLD ENERGY SAFETY ASSOCIATION OF SOUTHERN AFRICA

(HESEASA)

Collaborate with Governments on Household Energy Safety Issues

Consumer Champion for Household Energy Safety Systems

Research

Vision
HESEASA is recognised as the leading champion of household energy safety and efficiency in Southern Africa.

Safety & Efficiency Education

Clearinghouse of Household Energy Safety Information

Mission
HESEASA exists to prevent premature injuries, death, disabilities and loss of property resulting from the use of household energy-related carriers and appliances. It also exists to promote household energy efficiency.

Prevent & Reduce Household Energy Related Injuries

Resource Mobilization

Lobbying & Advocacy

Mobilize partnerships to Implement Household Energy Safety Programmes

Raise Awareness of the Importance of Household Energy Safety

Strategic partnerships

4. Some proposals



Setting the HH energy scene

- Policies impacting household energy usage are disparate, no overarching framework
- Most implementation has been related to access to electricity or subsidies to address affordability.
- Government policy targets electrification as ultimate goal of access
- Electrification doesn't target all households in terms of numbers, nor is it likely to in the medium term. It also doesn't fully displace other fuels
- As a result issues (eg safety) related to other fuels get neglected, we might not be achieving access goals in most efficient way

The context for the flame

- Lack of household energy safety is a public policy problem
- However, problem is addressed in a **fragmented and siloistic fashion**
- Example:
 - Fires and injuries are a drain to the city coffers, public health system, economy and provincial resources, yet there is no single approach at policy level focussed on prevention.
 - There is no sharing of statistical info
 - Lack of collaboration among players

The context for the flame

- **Systemic nature of the problem**
 - Faulty appliances
 - Combustible houses
 - Congested environments
 - Lack of awareness
 - unregulated supply chain of paraffin
 - Illegal connections

Proposals & Concluding Remarks

- **Household energy safety policy**
- **Focus on prevention**
- **Buy-in and action by government departments**
- **Intervene through public education – Grade 7**
- **Collaboration in planning and interventions**
- **Enforcement regulations and standards**
- **Forensics**
- **Statistics collection and publications**
- **Centrally coordinated Winter Campaigns – our theme for 2014 is Don't Burn Alive**
- **We want to collaborate with you in all provinces**

The Need for a Household Energy Policy

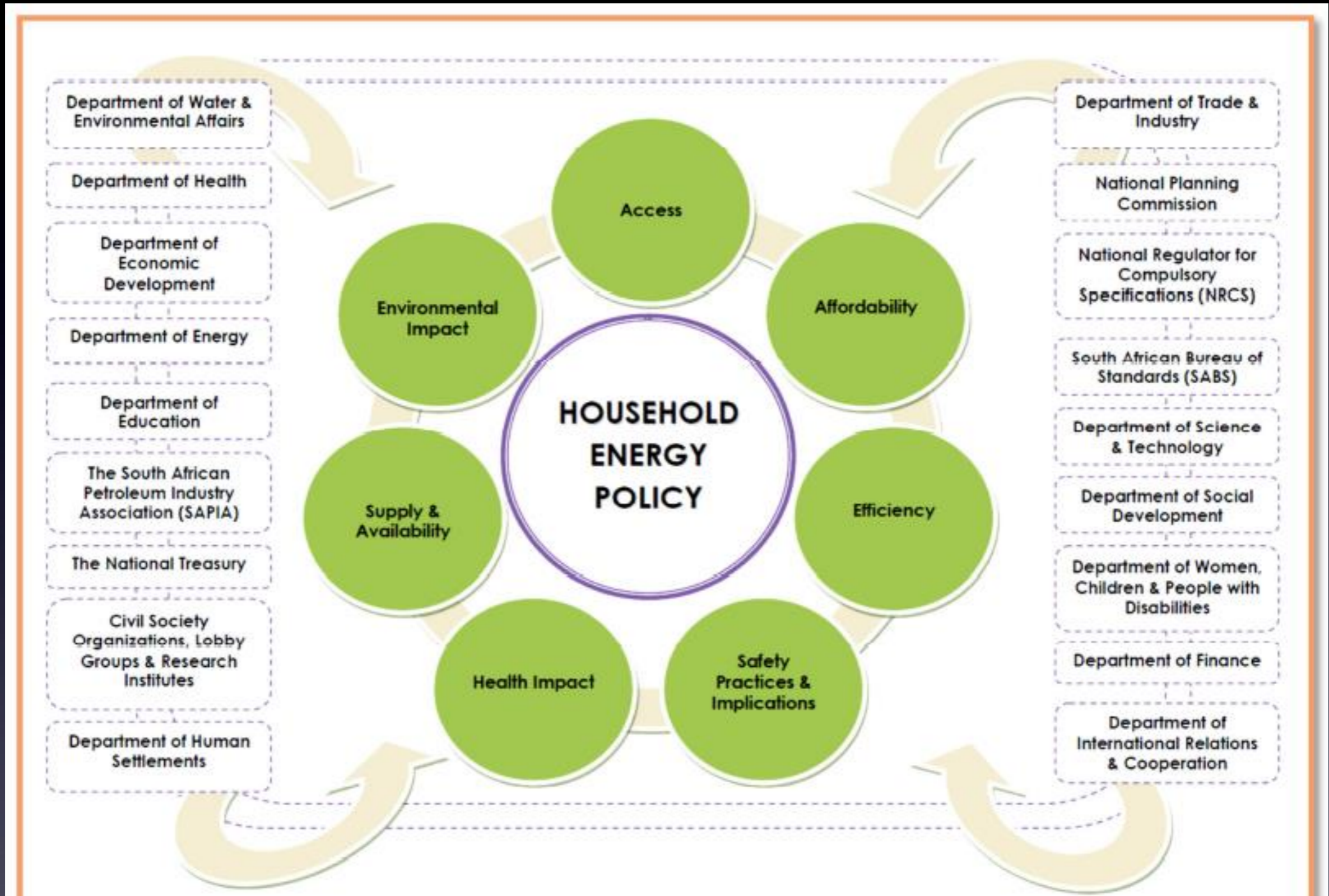
Outcomes of a Household Energy Policy “Panel of Experts”

A Household Energy Policy “Panel of Experts”, jointly hosted by the Paraffin Safety Association of Southern Africa (PASASA) and the South African National Energy Development Institute (SANEDI) of the Central Energy Fund (CEF), was held in Johannesburg on 3rd May 2012.

- The solution to the household energy crisis must be **multifaceted and policy-based**.
- There is currently **no framework to support the current energy policies** and **efforts thus far have been reactionary** to electrification initiatives.
- In order to effectively tackle the problem, proactive efforts need to take place through collaborative efforts of key stakeholders and the government.



Proposed Framework





HESASA Strategy

Mission: We promote household energy safety to prevent household energy related injury, disability, death and property loss

Vision: A continent where all homes experience and enjoy the right to safe energy use

Core values: Accountability, Integrity, Excellence, Innovation

Strategic Theme:
Build A Successful Organisation

Strategic Result:
HESASA is established as a visible, financially stable, effective, credible, respected & well run organisation

Strategic Theme:
Provide Excellent Service

Strategic Result:
We provide credible, evidence-based information, good quality education & training services and informed input on policy, regulations and standards

Strategic Theme:
Establish Partnership Excellence

Strategic Result:
Our partnerships help us to dramatically extend and deepen mission reach



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Joe Slovo Informal Settlement, Cape Town, January 2005

