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Organisation internationale de normalisation
International Organization for Standardization
Международная Организация по Стандартизации



Our ref. TS/P 238

TO THE ISO MEMBER BODIES

Date 2013-03-04

ISO/TS/P 238 – Cookstoves and clean cooking solutions

Dear Sir or Madam,

Please find attached a proposal for a new field of technical activity on *Cookstoves and clean cooking solutions* submitted by ANSI (USA).

According to subclause 1.5.6 of Part 1 of the ISO/IEC Directives, you are kindly invited to complete the ballot form ([Form 02](#)) which can be downloaded at www.iso.org/forms - *please note that votes must include a justifying statement in Form 02*. Forms should be sent (preferably in Word format) to the Secretariat of the ISO Technical Management Board at tmb@iso.org before **4 June 2013**.

Yours faithfully,

A handwritten signature in black ink, appearing to read 'S. Clivio', written in a cursive style.

Sophie Clivio,
Secretary of the Technical Management Board

Encl.: TS/P 238

Form 1

Attachment 1

Attachment 2



PROPOSAL FOR A NEW FIELD OF TECHNICAL ACTIVITY	
Circulation date:	Reference number (to be given by Central Secretariat)
Closing date for voting:	
Proposer ANSI	ISO/TS/P

A proposal for a new field of technical activity shall be submitted to the Central Secretariat, which will assign it a reference number and process the proposal in accordance with the ISO/IEC Directives (part 1, subclause 1.5). The proposer may be a member body of ISO, a technical committee or subcommittee, the Technical Management Board or a General Assembly committee, the Secretary-General, a body responsible for managing a certification system operating under the auspices of ISO, or another international organization with national body membership. Guidelines for proposing and justifying a new field of technical activity are given in the ISO/IEC Directives (part 1, Annex C).

The proposal (to be completed by the proposer)

<p>Title of the proposed new committee (The title shall indicate clearly yet concisely the new field of technical activity which the proposal is intended to cover.)</p> <p>Cookstoves and clean cooking solutions</p>
<p>Scope statement of the proposed new committee (The scope shall precisely define the limits of the field of activity. Scopes shall not repeat general aims and principles governing the work of the organization but shall indicate the specific area concerned.)</p> <p>Standardization in the field of cookstoves and clean cooking solutions.</p>
<p>Proposed initial programme of work (The proposed programme of work shall correspond to and clearly reflect the aims of the standardization activities and shall, therefore, show the relationship between the subject proposed. Each item on the programme of work shall be defined by both the subject aspect(s) to be standardized (for products, for example, the items would be the types of products, characteristics, other requirements, data to be supplied, test methods, etc.). Supplementary justification may be combined with particular items in the programme of work. The proposed programme of work shall also suggest priorities and target dates.</p> <p>The first item for standardization will be to develop an International Standard based on ISO IWA 11:2012, which provides a framework for rating cookstoves against tiers of performance for a series of performance indicators, including fuel use (efficiency), emissions (carbon monoxide and particulate matter, indoor emissions (carbon monoxide and particulate matter), and safety.</p> <p>In addition to the IWA performance indicators (efficiency, emissions (total and indoor), (safety), other indicators for stoves for consideration in the programme of work include:</p> <ul style="list-style-type: none">• Black carbon or other emissions• Durability• Field-based indicators• Factors that will affect usability <p>Future standards development may address:</p> <ul style="list-style-type: none">• Fuels<ul style="list-style-type: none">o Environmental impacts (for example lifecycle GHG emissions, soil quality, water consumption)o Energy content, calorific value• Heat-retention devices<ul style="list-style-type: none">o Maintaining temperature for a minimum period of time
<p>Indication(s) of the preferred type or types of deliverable(s) to be produced under the proposal (This may be combined with the "Proposed initial programme of work" if more convenient.)</p> <p>International Standards</p>

A listing of relevant existing documents at the international, regional and national levels. (Any known relevant document (such as standards and regulations) shall be listed, regardless of their source and should be accompanied by an indication of their significance.)

Standards:

Zimbabwe, Ref. 05/03/2012 S. Control No. 354594 – Method of Tests and Compliance with SANS 1906-2006.

Kenya, Standards for Durability

Bolivia, NB 83001

South Africa, Safety for non-pressurized kerosene stoves

South Africa, Developing safety for pressurized kerosene stoves

China, Beijing City Local Standard DB11/T 540-2008 – General technical specification of domestic biomass stove/boiler

India, Indian Standard 13152 – Solid Bio-mass Chula Specification, Bureau of Indian Standards

Uganda Standards (US 761:2007 Energy efficiency stoves — Household biomass stoves — Performance requirements and test methods)

Uganda Standard 765 Wood charcoal

Related Alliance/PCIA Test Protocols:

The Water Boiling Test

The Controlled Cooking Test

The Kitchen Performance Test

Iowa State Safety Rating Protocol

A statement from the proposer as to how the proposed work may relate to or impact on existing work, especially existing ISO and IEC deliverables. (The proposer should explain how the work differs from apparently similar work, or explain how duplication and conflict will be minimized. If seemingly similar or related work is already in the scope of other committees of the organization or in other organizations, the proposed scope shall distinguish between the proposed work and the other work. The proposer shall indicate whether his or her proposal could be dealt with by widening the scope of an existing committee or by establishing a new committee.)

This proposal is intended to expand on the dialogue begun during the ISO workshop held in Feb 2011 which resulted in publication of the IWA 11:2012 Guidelines for evaluating cookstove performance.

The solid biofuels standards (TC 238 Solid biofuels) are going to be quite relevant for clean fuels for cooking. There are also liquid biofuel standards (TC 28/SC 7 Liquid Biofuels) may be relevant for cooking (ethanol, possibly palm oil).

A listing of relevant countries where the subject of the proposal is important to their national commercial interests.

See Attachment 1, Relevant ISO member countries where cookstoves and clean cooking solutions is important to national interests.

A listing of relevant external international organizations or internal parties (other ISO and/or IEC committees) to be engaged as liaisons in the development of the deliverable(s). (In order to avoid conflict with, or duplication of efforts of, other bodies, it is important to indicate all points of possible conflict or overlap. The result of any communication with other interested bodies shall also be included.)

Global Alliance for Clean Cookstoves

United Nations Foundation

Shell Foundation

World Bank

World Health Organization

Groupe Energies Renouvelables, Environnement et Solidarites (GERES)

SNV Netherlands Development Organisation

World Food Programme

UN High Commissioner for Refugees

Global LPG Partnership

World LPG Association

Global Bioenergy Partnership

Roundtable for Sustainable Biofuels

Asian Development Bank

Inter-american Development Bank

A simple and concise statement identifying and describing relevant affected stakeholder categories (including small and medium sized enterprises) and how they will each benefit from or be impacted by the proposed deliverable(s).

The cookstoves design and manufacturing community is continually improving the performance of their technologies. Thus, different cookstove technologies can vary in their performance and all are constantly improving. The lack of an international agreement on standards has made it challenging for stove manufacturers, distributors, investors as well as users to rate the quality of cook stoves. Having a set of standards that clearly defines how technology impacts fuel use, emissions, durability and safety can benefit:

- Consumers and users by providing information to make informed choices and purchases
- Designers and manufacturers by affirming their product quality and driving innovation
- Policy makers, donors, programs, investors by establishing a credible basis for comparing stove performance and safety
- All stakeholders by providing common terminology for communicating, understanding, and improving stove performance and adoption

An expression of commitment from the proposer to provide the committee secretariat if the proposal succeeds.

ANSI (US) is prepared to provide resources to support the technical committee secretariat. ANSI and KEBS (Kenya) have agreed to enter into a twinning arrangement on the secretariat.

Purpose and justification for the proposal. (The purpose and justification of the standard to be prepared shall be made clear and the need for standardization of each aspect (such as characteristics) to be included in the standard shall be justified. Clause C.4.12.1 through C.4.12.10 of Annex C of the ISO/IEC Directives, Part 1 contain a menu of suggestions or ideas for possible documentation to support and purpose and justification of proposals. Proposers should consider these suggestions, but they are not limited to them, nor are they required to comply strictly with them. What is most important is that proposers develop and provide purpose and justification information that is most relevant to their proposals and that makes a substantial business case for the market relevance and the need for their proposals. Thorough, well-developed and robust purpose and justification documentation will lead to more informed consideration of proposals and ultimately their possible success in the ISO IEC system.)

See Attachment 2, Purpose and Justification Statement for TSP on Cookstoves and clean cooking solutions.

Signature of the proposer
Steven P. Cornish
Senior Director - International Policy
American National Standards Institute

Further information to assist with understanding the requirements for the items above can be found in the Directives, Part 1, Annex C.

Comments of the Secretary-General (to be completed by the Central Secretariat)

Signature

Attachment 1

ISO member countries where cookstoves and clean cooking solutions is important to national interests

	% of Population Using Solid Fuels for Cooking	Cookstoves Implementation Projects	Location of Major Testing Center	Participation in ISO IWA
ISO Member Bodies				
Azerbaijan	49%			
Bangladesh	89%	✓		
Belarus	19%			
Botswana	65%			
Bosnia-Herzegovina	50%			
Brazil	13%	✓		
Cameroon	83%	✓		
China	80%	✓	✓	✓
Congo, Democratic Republic	85%			
Colombia	20%	✓		
Costa Rica	23%	✓		
Cuba	21%			
Croatia	12%			
Côte d'Ivoire	74%			
Ethiopia	95%	✓		
Estonia	16%			
Fiji	40%			
Gabon	28%			
Ghana	87%	✓		
India	82%	✓	✓	
Jamaica	45%			
Kenya	63%	✓		✓
Mali	95%	✓		
Mexico	14%	✓		
Mongolia	51%	✓		
Namibia	65%	✓		
Pakistan	81%	✓		
Nigeria	67%	✓		✓
Panama	33%			
Philippines	45%	✓		
Peru	33%	✓	✓	✓
Saint Lucia	63%			
Senegal	53%	✓		
Slovenia	8%			
South Africa	18%	✓	✓	✓
Sri Lanka	67%	✓		
Sudan	95%			
Syria	32%			
Thailand	72%			
Tanzania	95%	✓		✓
Macedonia	30%			
Trinidad and Tobago	8%			
Turkey	11%			

Ukraine	6%			
Uzbekistan	72%			
Viet Nam	70%	✓		
Yemen	42%			
Zimbabwe	72%	✓		
ISO Correspondent Members				
Afghanistan	95%	✓		
Albania	50%			
Angola	95%			
Benin	95%	✓		
Bhutan	67%			
Bolivia	34%	✓	✓	✓
Burkina Faso	95%	✓		✓
Burundi	95%			
Cambodia	95%	✓	✓	✓
Congo	85%			
Dominican Republic	15%	✓		
El Salvador	33%	✓		
Eritrea	80%			
Gambia	95%	✓		
Georgia	43%			
Guatemala	62%	✓		✓
Guinea	95%			
Guyana	59%			
Kyrgyzstan	76%			
Lesotho	83%	✓		
Liberia	95%	✓		
Madagascar	95%			
Malawi	95%	✓		✓
Mauritania	56%	✓		
Mozambique	80%	✓		
Myanmar	95%			
Nepal	81%	✓		✓
Nicaragua	64%	✓		
Niger	95%	✓		
Papua New Guinea	90%			
Paraguay	53%			
Rwanda	95%	✓		
Sierra Leone	92%	✓		
Swaziland	64%	✓		
Tajikistan	75%			
Togo	87%	✓		
Uganda	95%	✓	✓	✓
Zambia	72%	✓		
ISO Subscriber Members				
Dominica	21%			
Honduras	57%	✓	✓	✓
Laos	95%	✓		
Saint Vincent and the Grenadines	31%			

Attachment 2

Purpose and justification statement for TSP on Cookstoves and clean cooking solutions

Nearly half of the world's population – three billion people in the developing world – cook their food by burning coal and biomass, including wood, dung and crop residues over open fires or on rudimentary, often unvented stoves. Indoor burning of these solid fuels releases dangerous particulate matter, carbon monoxide and other toxic pollutants. This practice can lead to indoor air pollution levels that are 20 to 100 times greater than the World Health Organization's (WHO) air quality guidelines and release greenhouse gases and black carbon into the air. The Global Burden of Disease Study 2010 (Lancet 2012) estimates that 4 million premature deaths each year are due to exposure to indoor smoke from these cooking practices. Open fires and rudimentary cookstoves also increase pressures on local environmental resources (e.g., forests, habitat) and fuel use and emissions contribute to climate change at the regional and global levels.

The Global Alliance for Clean Cookstoves is working with more than 600 Partners in 117 countries to achieve the adoption of 100 million clean and efficient stoves and fuels by 2020. Developing globally recognized standards that are widely accepted by the stove community and adopted by country governments could spur wider deployment of clean cookstoves in a number of ways, including: defining what is an "clean" or "efficient" for users, stove makers, and policy makers; and enabling the rating of stoves by efficiency, safety, durability, affordability and cleanliness, while allowing for differences in local conditions and user behavior. National standards have been developed and implemented in a few countries, but no international standard has been found to contain commonly agreed upon and accepted criteria by which to define performance levels for cookstoves and fuels. Such international standards would significantly enhance efforts to see clean cookstoves adopted at scale.

Based on these considerations, and the fact that no ISO Technical Committee currently exists to address clean cookstoves, ISO took the first step toward creating a global reference document addressing clean cookstoves by developing an IWA in 2012. It is time to take the next step and form a Technical Committee to build on the success of the IWA 11:2012 and turn it into an International Standard and develop a family of standards supporting clean cooking solutions. Participation is encouraged from all stakeholder categories, including stove manufacturers, implementers, researchers, academics, stove testers and other cookstove community members. A special effort will be made to encourage participation from developing countries in the ISO activity.

· *What are the business, technological, societal or environmental issues that the proposal seeks to address?*

Business - Standards for cookstoves can enable the development of thriving markets and business opportunities and drive investment to improve quality and performance and scale up production for widespread sale and adoption of clean cooking technologies.

Technological - Clean, efficient, durable, safe, and affordable stoves are – along with clean fuels and other products like chimneys and heat retention cookers – central to most solutions to the health, environmental, and other risks inherent in cooking with fire. Where solid

biomass must be used, advanced clean cookstoves are most likely to achieve significant health and climate benefits. Other technologies achieve important, but more modest progress and therefore may best be thought of as intermediate or transitional solutions as the market for more advanced solutions is developed. The type of fuel or level of processing can also impact stove performance. Thus, there can be trade-offs with performance, durability, usability, and affordability, and international standards can help consumers, investors, and donors evaluate these trade-offs based on their priorities.

Environment - Nearly 3 billion people each day cook on open fires or rudimentary cookstoves that are fueled by coal or solid biomass such as wood. Reliance on polluting cookstoves and fuels leads to a wide variety of environmental problems. Using solid biomass as fuels depletes forests, a condition that weakens the soil causing mudslides and destroying agricultural land; and jeopardizes human health and household and community air quality and the global climate through smoke emissions.

Health - Chronic exposure to smoke from traditional cooking practices is one of the world's biggest – but least well-known – killers. Penetrating deep into the lungs of its victims, the smoke causes a range of deadly chronic and acute health effects such as child pneumonia, lung cancer, chronic obstructive pulmonary disease, and heart disease, as well as low birth-weight in children born to mothers whose pregnancies are spent breathing smoke from open fires and traditional cookstoves.

Social and Gender - Reliance on inefficient cookstoves and fuels leads to health (emphysema, cataracts, cancer, heart disease, etc.) and economic burdens that impact women and girls, particularly because cooking and fuel collection largely remain a woman's responsibility. As noted in the recent Global Burden of Disease study, men also have significant health impacts from household air pollution.

· *Are there relevant global metrics that demonstrate the extent or magnitude of the economic, technological, societal or environmental issue, or the new market? Is there documentation that supports the metric? This may include an estimate of the usage of the IWA as an indicator of potential usage and global relevance of International Standards.*

Number of people dependent on traditional stoves and Global Burden of Disease is already listed in current purpose/justification. Additionally, 2 billion tons of biomass are burned each year, up to 40% of household income is spent on fuel for those at the base of the pyramid, one quarter of global black carbon emissions are from cookstoves, and women and children can spend up to 8 hours a day on chores related to cooking (collecting firewood and facing risk of attack particularly in conflict areas and exposure to smoke during cooking).

· *What are the benefits?*

o Economic

Clean cookstoves and fuels provide livelihood and income opportunities for those involved in design, testing, manufacturing, and distribution. Especially in developing countries, local

production or assembly of stoves, or production or processing of fuels, and lead to economic development.

Women can play a unique role within the cookstove and fuel value chains, as they often excel in entrepreneurial activities and can leverage their existing networks for distribution, marketing, and sales, and the Alliance has included the empowerment of women as an explicit goal in its mission statement. Further, the Alliance's partners recognize that they cannot design clean cookstove and fuels solutions without the full participation and input of women.

- o Societal benefit(s)

Clean cooking solutions are those clean cookstove technologies, fuels, equipment, and practices that address the health and environmental impacts associated with traditional cookstoves. In addition to reducing emissions and fuel use to benefit health and the environment, a clean cooking solution or a new technology that meets the needs of the users and is culturally appropriate can reduce income and time spent on collecting fuel, and increasing time for education and income-generating activities.

- o Environmental benefit(s)

Reducing fuel use and emissions from cooking can reduce greenhouse gas emissions and reduce deforestation. In cases where agricultural residue or dung is used for cooking, reducing fuel use can also lead to improved soil quality and agricultural productivity.

- *What is the intended use of the proposed standard? For example, whether the deliverable is intended as requirements to support conformity assessment or only as guidance or recommended best practices; whether the deliverable is intended for use or reference in technical regulation; whether the deliverable is intended to be used to support legal cases in relation to international treaties and agreements.*

The ISO standards will be used to communicate performance and quality to users and investors. The ISO standards may also include minimum and best practices to ensure that technologies are high performing and address user needs. The ISO standards, or their national adoptions, and related certification activities, may be used for regulatory purposes.

- *Are there metrics that the committee can use to assess the impact of the published standard over time to achieve the benefits to stakeholders?*

The Global Alliance for Clean Cookstoves will have a monitoring and evaluation (M&E) framework to track the number of clean and efficient cookstoves that are sold and adopted. A variety of other indicators relating to environment, health and market development will also be included. This M&E framework can also be used to assess the impact of the published standard.

- *Statement assessing the prospect of the resulting deliverable(s) being compliant with ISO's Global Relevance Policy*

This work will consider how it addresses essential differences in markets around the world, that is, factors that are not expected to change over time, such as imbedded technological infrastructures, climatic, geographical or anthropological differences.

Any International Standard shall to the extent possible represent a unique international solution. In cases where unique international solutions are not possible for specific provisions of an International Standard at the current time due to legitimate market and essential differences, International Standards may present options to accommodate these differences, where justified.

This ISO committee will ascertain at the outset of each project whether:

- a globally relevant International Standard presenting one unique international solution in all of its provisions is feasible;
- an International Standard is feasible that presents options in specific provisions to accommodate existing and legitimate market differences, where justified; or
- the preparation of a globally relevant International Standard is not feasible and work should not be undertaken in such circumstances.