

ISO Central Secretariat

1, ch. de la Voie-Creuse
Case postale 56
CH - 1211 Genève 20
Switzerland

Telephone + 41 22 749 01 11
Fax + 41 22 733 34 30
E-mail central@iso.org
Web www.iso.org

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



Our ref. TS/P 211

TO THE ISO MEMBER BODIES

Date 2010-01-29

ISO/TS/P 211 *Biogas*

Dear Sir or Madam,

Please find attached a proposal for a new field of technical activity on *Biogas* submitted by SAC (China).

You will note that this is not issued on the usual Form 01. The Technical Management Board, by its Resolution 80/2009, approved a pilot project to begin in October 2009 for a period of 6 months which involves committees from both ISO and IEC that have been asked to apply recommendations of the ISO/IEC Market Relevance Task Force (MRTF) to new work item proposals received during this period. The TMB agreed to participate in the pilot project in relation to any new fields of activity and new work item proposals submitted directly to the TMB Secretariat. This explains why a Form 01 proposal form is not used.

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 and send it (preferably in Word format) to the Secretariat of the ISO Technical Management Board at tmb@iso.org before **29 April 2010**.

Yours faithfully,

A handwritten signature in black ink, appearing to read 'M.A. Smith', with a long horizontal stroke extending to the right.

Michael A. Smith
Secretary of the Technical Management Board

Encl:
TS/P 211



**ISO MEMBER BODY PROPOSAL FORM
(ISO/IEC MRTF PILOT TESTING)**

Proposal for new field of work (TSP)
or
New work item proposal (NWIP)

TC/SC Number (if NWIP)	Document Number	TS/P 211
Date of circulation 2010-01-29	Closing date of voting	2010-04-29
Proposer	SAC	Secretariat

REQUIRED PROPOSAL INFORMATION

Note 1:

Proposals for new fields of ISO or IEC work or for new work item proposals within committees shall include the following fields of justification information (to be developed and submitted by the proposer) when relevant to the proposal (please note that the proposer is not required to provide all of this information if elements of it are not relevant to the proposal).

1. The issue

(A simple and concise statement describing the business, technological, societal or environmental issue that the proposal seeks to address, preferably linked to the Strategic Business Plan of the concerned ISO or IEC committee in the case of a NWIP.)

Biogas is a combustible mixture of gases produced by micro-organisms when manure and other biological wastes are allowed to ferment in the absence of air. Through harnessed anaerobic digestion, biogas can become an important source of fuel. There are currently no International Standards in the field of biogas, which is slowing its development and economic use. The purpose of this new committee would be to create standards in the field of biogas, the effect of which would be to promote its use by companies and individuals in developed and developing countries.

2. The scope of the issue

[Relevant global metrics that demonstrate the extent or magnitude of the economic, technological, societal or environmental issue, or the new market. This may include an estimate of the potential sales of the resulting standard(s) as an indicator of potential usage and global relevance.]

Since biogas is produced through waste, it is a globally available and cheap source of renewable energy. Though biogas is currently used as a source of fuel, its full potential has yet to be exploited. Biogas development contributes to environment protection, sanitary improvement, nuisance-free agriculture and recycling economy development. It also plays a most effective role in helping rural women and poverty alleviation.

Standards in this field, including the design, construction, check and acceptance of installations, plants, equipments and products, the integrated utilization, the development and application models, the technical and economic assessment and environment benefits assessment, would help to significantly broaden its use.

3. Technological benefit(s)
(A simple and concise statement describing the technological impact of the proposal to support coherence in systems and emerging technologies, convergence of merging technologies, interoperability, resolution of competing technologies, future innovation, etc.)

Given the increase in the development and use of biogas-related technology, the international technological exchanges and cooperation in this field are increasing day by day. The international market for biogas technology and equipments is growing and would be facilitated through international standardization.

4. Economic benefit(s)
(A simple and concise statement describing the potential of the proposal to remove barriers to trade, improve international market access, support public procurement, improve business efficiency, result in a flexible, cost-effective means of complying with international and regional rules/conventions, etc.)

Standards in this field would facilitate the exchange, transfer and provision of biofuels in an economically sustainable manner. It would also improve distribution of income and create employment opportunities.

5. Societal benefit(s)
(A simple and concise statement describing any societal benefits expected from the proposal.)

The potential societal benefits through increased use of biogas are potentially broad, particularly in developing countries. Reduced pollution of rivers, lakes and air will contribute to improved health. In addition, easier access to fuel can lead to profound changes in the way in which families integrate in the cultural and educational sectors since biogas lighting can facilitate access to education. Women and children who are often expected to gather fuel have more free time and children are therefore more likely to attend school. Biogas systems give parents more time to devote to the upbringing of their children.

6. Environmental benefit(s)
(A simple and concise statement describing any environmental or wider sustainability benefits expected from the proposal.)

One of the key reasons for using biofuels is to treat wastes. These wastes are precious resources if used properly, but constitute a major pollutant when discharged into the rivers and lakes. Biogas also contains methane. The negative effect on the planet's temperature is approximately 21 times higher from methane than from CO₂. Methane accounts for approximately 18% of harmful greenhouse gases. Standards in this area would help to reduce greenhouse gas emissions while also responding to the ever increasing need for fuel and reducing the dependence on fossil fuels.

7. Intent of the work
[A simple and concise statement clearly describing the intended use(s) of the proposed deliverable(s), 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 a management system standard; 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 intent of the work is to create standards that will broaden and facilitate the commercial and private use of biogas as a source of fuel. As indicated by the suggested work programme provided in

section H below, the standards are intended to address a broad range of issues related to biogas, including manufacturing, testing, inspection, quality management, etc.

8. Metrics

(A simple and concise statement of metrics for the committee to track in order to assess the impact of the published standard over time to achieve the benefits detailed under the four bullet points immediately above.)

Due to the high potential benefit of standards in this area, the metrics needed to assess their impact would need to be broad. The following elements could be considered: improvement of sanitary and health conditions, increased distribution of income, effects on regional employment, betterment of living conditions, reduction of dependence on fossil fuels, diminished deforestation and reduced pollution of air, lakes and rivers.

9. Beneficiaries

(A simple and concise statement identifying and describing affected stakeholders and how they will each benefit from the proposal.)

The list of potential beneficiaries of the standards includes:

- Public policy holders: International Standards in this important area will help to address a global problem of great interest to public policy holders.
- Companies: International Standardization in this area will standardize biogas related to technologies thereby creating increasing accessibility to companies who produce and use biogas technologies.
- Consumers: Improved and streamlined technology will improve access to consumers.
- General public: As indicated in items 5 and 6 above, there potential societal benefits include improved health, reduced pollution, increased employment and improved integration in the cultural and educational sectors.

ADDITIONAL PROPOSAL INFORMATION (RECOMMENDED BUT NOT REQUIRED)

Note 2:

It is recommended that the following information items be included in proposals for new fields of ISO or IEC work or for new work item proposals within committees to facilitate their consideration by NSBs/NCs:

- A. The proposer's assessment on the prospect of the resulting deliverable(s) being compliant with the ISO or IEC Global Relevance Policies and the ISO Sustainability Policy where relevant.

The Global Relevance Policies and ISO Sustainability Policy are both met by virtue of the fact that these standards would help to address a global problem (i.e. pollution created by waste) while also providing a solution that promotes sustainable development (i.e. a readily accessible, affordable and renewal source of energy). As the secretariat for this new TC, SAC is committed to ensuring that the projects comply with the ISO Global Relevance Policies.

- B. The proposer's assessment on compliance with the ISO/IEC Policy Principles on the Relationship of ISO and IEC Standards to Public Policy and the possible relation of the resulting deliverable(s) to public policy, including a statement regarding the potential for easier market access due to conformity with appropriate legislation.

This would be of great interest to public policy holders given the number of public policy initiatives that are driving the diversification of fuels and in particular increased use of renewal fuel. As the secretariat for this new TC, SAC is committed to ensuring that the projects comply with the ISO/IEC Policy Principles on the Relationship of ISO and IEC Standards to Public Policy.

- C. The proposer's assessment on how the proposal may be related to, or may appear to be similar to, existing work in other international or regional organizations (including other ISO and IEC committees). The proposer should explain how the work differs from identified apparently similar work, or explain how duplication will be minimized.

(Not relevant to this proposal.)

- D. A simple cost/benefit analysis relating the cost of producing the deliverable(s) to the expected economic benefit to businesses worldwide.

See answers to questions 3, 4, 5, 6 and 8 above.

- E. Title of the proposed new committee (in the case of a proposal for a new field) or title of the proposed deliverable (in the case of a NWIP within a committee).

Biogas

- F. Scope statement the proposed new committee (in the case of a proposal for a new field).

The standards on biogas subject will address the following areas:

- Biogas Glossary;
- Designing, Construction, Commissioning, Check and Test of Small Biogas Facilities (Household Biogas Pool);
- Designing, Construction, Commissioning, Check and Test of Large and Middle Scale Biogas Plants;
- Designing, Manufacturing, Installation, Inspection of Biogas Equipments;
- Designing, Manufacturing, Inspection of Products for Biogas Application;
- Designing, Manufacturing, Installation, Inspection of Equipments and Facilities for Biogas Power Generation;
- Comprehensive Use of Digested Solid and Liquid;
- Appraisal on Technical, Economical and Environmental Benefit of Biogas Facilities.

- G. The preferred type or types of ISO deliverables to be produced under the proposal.

The majority of the ISO deliverables will be International Standards, though other deliverables are possible.

- H. Proposed initial program of work (in the case of a proposal for a new field).

Biogas Glossary

Biogas Criterion on Household Biogas Pool Design

Biogas Operational Regulations on Household Biogas Pool Construction

Biogas Criterion on Quality Inspection of Household Biogas Pool
Biogas Technical Requirement, Test Method and Inspection Rules on Biogas Burner
Biogas Design and Installation Criteria on Biogas Pool Gas Pipe System
Biogas Operational Procedures of Biogas Fermentation Techniques
Biogas Technical Requirement, Test Method, Inspection Method and others on Biogas Lamps
Biogas Analysis Method on Methane and Carbon Dioxide in Biogas
Biogas Design Criteria on Biogas Tank for Living Waste Water Purification
Biogas Biogas Plant Scale Classification
Biogas Technical Criteria on Biogas Project

- I. A listing of relevant existing documents at the international, regional and national levels.

In China, there are 27 standards on biogas that have been implemented and another 17 standards are currently under development. These relate to: technical criteria, inspection and others on biogas techniques, design, construction, machine equipment, products and facilities. India and Nepal also have their own standards on biogas burner. Finally, European Directive 98/30/EC addresses common rules for the internal market in natural gas.

SAC would welcome input from Member bodies on any additional relevant existing documents at the international, regional and national levels.

- J. A listing of relevant countries to be actively engaged as the subject of the proposal is important to their national commercial interests.

SAC welcomes the expression of interest from member bodies who wish to be actively engaged.

- K. 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).

The Global Bioenergy Partnership (GBEP)

SAC would welcome input from Member bodies on any additional external international organizations or internal parties (such as other ISO and/or IEC committees) that could be engaged as liaisons in the development of these standards.

- L. Preferably an existing document to serve as an initial basis for the ISO or IEC deliverable or a proposed outline or table of contents.

《Domestic biogas stove》 (GB/T 3606-2001)

《Collection of standard design drawings for household anaerobic digesters》 (GB/T 4750-2002)

《Specification for check and acceptance of the quality for household anaerobic digesters》 (GB/T 4751-2002)

《Operation rules for construction of household anaerobic digesters》 (GB/T 4750-2002)

《Standard on design of biogas pipelines for peasant household》 (GB/T 7636-87)

《Operation rules of construction and installation of biogas pipelines for peasant household》 (GB/T 7637-87)

M. An expression of commitment from the proposer to provide leadership if the proposal succeeds.

If the proposal succeeds, SAC is committed to providing leadership and undertake the secretariat.