

AS 3598—1990

Australian Standard[®]

**Energy management programs—
Guidelines for the preparation of
an energy audit brief**

This Australian Standard was prepared by Committee EN/1, Energy Auditing. It was approved on behalf of the Council of Standards Australia on 8 February 1990 and published on 7 May 1990.

The following interests are represented on Committee EN/1:

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Australian Construction Services, Department of Administrative Services
Australian Gas Association
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Australian Institute of Petroleum
Australian Institute of Refrigeration, Air Conditioning and Heating
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Ministry of Housing and Construction, Victoria
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Department of Industry, Technology and Resources, Victoria
Energy Managers Group, Melbourne

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PREFACE

This Standard was prepared by the Standards Australia Committee on Energy Auditing, following a request from the Association of Consulting Engineers, Australia, and the Energy Managers' Group, (Melbourne) Inc. The requirement was for a Standard to codify the briefing of consultants to execute energy audits, as part of energy management programs in government, institutional, commercial, and industrial applications.

This Standard recognizes that the nature of the above applications and the requirements of different organizations for the services of consultants often vary, and that in many cases the latter may be required to cover different facets of the energy management program over a long period. Accordingly, users may occasionally find it necessary to adapt the guidelines to suit individual projects.

This Standard does not cover the requirements of a walk-through audit, which may be required in some cases to prepare proposals for the preparation of a brief for a more comprehensive audit, nor does it cover the quality of the auditors who may undertake this work.

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STANDARDS AUSTRALIA

Australian Standard

**Energy Management Programs —
Guidelines for the preparation of an energy audit brief**

1 SCOPE. This Standard provides guidelines for preparation of a brief for undertaking energy audits as part of an overall energy management program.

2 REFERENCED DOCUMENTS. The following documents are referred to in this Standard.

AS

2725 Guidelines for reporting energy use as part of the energy audit

3595 Energy Management Programs — Guidelines for financial evaluation of a project.

3 DEFINITIONS. For the purpose of this Standard, the definitions given in AS 2725 and those below apply.

3.1 Energy audit — the periodic survey, measurement, reporting, analysis and examination of an energy system (or part of the energy system).

3.2 Energy auditor — the person or organization, responsible for carrying out the energy audit.

3.3 Energy audit brief — the specific requirements for the energy audit to be carried out by the energy auditor for the particular application.

4 OBJECTIVES. The objectives of this Standard are —

- (a) to assist organizations in specifying requirements for energy audits to be carried out by auditors; and
- (b) to assist the auditors in developing appropriate proposals for energy audits to meet the requirements of different organizations.

5 AIMS OF AN ENERGY AUDIT.

5.1 General. The brief should set out, for the guidance of the energy auditor, the primary purpose of the work which he will be commissioned to undertake.

5.2 Specification of aims. The brief should contain a precise, unambiguous description, of the aims of the audit. For example, it may be required to specify points in the distribution or use of energy, where wastage occurs, and to recommend and to cost means by which such wastage could be reduced or eliminated.

5.3 Background information. The brief should contain a definitive account of the background of the project, and should describe briefly, the process or installation where energy is used, its history and development to the present stage, and define as precisely as possible, management forward plans for the future of the process or installation.

6 METHODOLOGY.

6.1 General. As shown in AS 2725—1984, an energy audit comprises, at least, the first three steps of an energy management program as follows:

- (a) Step 1 — survey and measurement of energy use.
- (b) Step 2 — reporting of energy use.
- (c) Step 3 — analysis of the reported data.

6.2 Extended audits. An energy audit may occasionally be extended to include one or more of the other steps identified in AS 2725; in such circumstances the brief should specify the additional work required. The extra steps in an energy management program are:

- (a) Step 4 — selection of a plan of action.
- (b) Step 5 — implementation of selected measures.
- (c) Step 6 — monitoring of energy use.

6.3 Specific tasks. The brief should include a precise description of specific tasks which the auditor will be expected to perform. These may include, but need not be limited to, the following:

- (a) Energy survey of plant, processes, equipment, buildings and services on the site.
- (b) Identification of energy usage patterns.