



# Standard Practice for Managing Sustainability in Dentistry<sup>1</sup>

This standard is issued under the fixed designation E3014; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon ( $\epsilon$ ) indicates an editorial change since the last revision or reapproval.

## 1. Scope

1.1 This practice provides a set of generally recognized activities governing management of sustainability in dentistry and related dental service practice and a management system framework that assists dentists and dental service organizations to enhance their respective organizational performance and effectiveness. It offers an integrated framework to managing social, economic and environmental aspects of an organization's activities. While this practice is intended to be adopted and used by dental professionals and dental service organizations of any size and specializations including those being a part of large healthcare service organizations, the scope of this practice addresses the expectations of and is relevant to dental service provider organizations' stakeholders.

1.2 This practice is intended to be used with pertinent dental office management principles and guidance documents published by professional dental association in which dental services are delivered.

1.3 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.*

## 2. Referenced Documents

2.1 *BS Standard:*<sup>2</sup>

**BS 8900-1:2013** Managing sustainable development of organizations—Part 1: Guide

## 3. Terminology

3.1 *Definitions:*

3.1.1 *context of dental service organization, n*—business environment; combination of internal and external factors and conditions that can have an effect on dental service organization's approach to its dental service, investments, and stakeholder.

<sup>1</sup> This test method is under the jurisdiction of ASTM Committee E60 on Sustainability and is the direct responsibility of Subcommittee E60.80 on General Sustainability Standards.

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<sup>2</sup> Available from American National Standards Institute (ANSI), 25 W. 43rd St., 4th Floor, New York, NY 10036, <http://www.ansi.org>.

3.1.2 *dental professional, n*—individual person who provides and performs dental services within a dental service organization.

3.1.2.1 *Discussion*—Within the context of this practice, dental professional may include dentists, registered dental assistants, licensed oral hygienists, dental technicians, and dental laboratory technicians.

3.1.3 *dental service, n*—intangible output that is the result of at least one activity or procedure necessarily performed at the interface between the dental professional and his/her patient.

3.1.4 *dental service organization, n*—person or group of people holding proper and recognized dental service accreditation, license, or certification that has its own functions with responsibilities, authorities, and relationships to achieve its objectives.

3.1.5 *evidence-based dentistry, n*—approach to oral health care that requires the judicious integration of systematic assessments of clinically relevant scientific evidence relating to the patient's oral and medical condition and history with the dentist's clinical expertise and the patient's treatment needs and preferences.

3.1.6 *management system, n*—set of interrelated or interacting elements of a dental service organization to establish policies, objectives, and processes to achieve those objectives.

3.1.7 *policy, n*—intentions and direction of a dental professional or a dental service organization as formally expressed by the person or group of people who directs and controls its dental service activities at the highest level.

3.1.7.1 *Discussion*—Throughout this practice, “activity” is used to refer collectively to activities, products, and services rendered through or directly by a dental professional or an affiliated dental service provider organization.

3.1.8 *sustainability, n*—degree of sustainable development in the context of a dental professional or dental service organization.

3.1.9 *sustainable development, n*—development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

3.1.9.1 *Discussion*—Sustainable development is about integrating the goals of a high quality of life, health, and prosperity with social justice and maintaining the earth's capacity to support life in all its diversity. These social, economic, and

environmental goals are interdependent and mutually reinforcing. Sustainable development can be treated as a way of expressing the broader expectations of society as a whole.

#### 4. Significance and Use

4.1 There have been growing interests from dental professionals and dental service organizations in the United States and elsewhere in the world calling for a consensus-based practical guidance document in support of the cost-efficient integration of generally recognized sustainable development principles into day-to-day management of dental practices both for individual dental professionals as well as dental service organizations. Formation of ASTM Subcommittee E60.80.7 and development of this practice recognizes and fulfills such demand. While it is recognized that current interests expressed by most dental professionals are primarily limited to environmental impacts attributable to existing dental practices, or so-called “green dentistry,” it remains to be unclear as to what constitutes sustainable dentistry practice in principle and presents a challenge to incorporate a systematic and pragmatic management framework identifying, prioritizing, supporting, and addressing relevant sustainable development issues in a dental service provider’s practice. Given the breadth and extent of management commitment, this practice embodies emerging comprehension and procedural feasibility of practical realization of measurable sustainability performance in daily dental service activities without given preferential considerations or uneven weight to one or more existing claim of “green” in dental practice nor does it give favor to any particular group of dental equipment or product. Aligned with generally recognized principles of sustainable development, this practice provides a comprehensive guidance on managing sustainability issues in dental practices and offers a system approach and management framework assists dental professionals and dental service organizations to improve overall performance and effectiveness in their products and deliveries. It offers a concerted approach to managing social, economic, and environmental aspects of dental practice; stipulates minimum sustainability considerations and requirements; and provides a framework for embedding sustainable development issue management into day-to-day decision making and dental service activities. This practice is intended to be adopted and used by dental professionals and dental service organizations of any size and specializations including those being a part of large healthcare service organizations. Further, the scope of this practice addresses the expectations of, and is relevant to, dental service organizations’ stakeholders starts with identification of possible benefits and desirable outcomes of managing for sustainability in dentistry. The approach stipulated in this practice is to provide a framework for embedding sustainability management in everyday decision making and is necessarily challenging, provoking, and continually evolving. Effective and continuing stakeholder engagement is essential in sharpening understanding of real issues and broadening buy in. It is recognized that building confidence in processes and sustainable outcomes is an important part of this practice and that certain dental service organizations may wish to use some forms of independent verification. This practice shall not be viewed in isolation as there are many pertinent helpful texts,

conventions, codes, and publications available; it acts as a guide to connect various existing “green” dental practices and services and offers a system approach to embedding sustainable development thinking that fits and is readily realizable for dental service organization of any size or specialization.

#### 5. Dental Service Organization

5.1 *Understanding the Context of Dental Service Organization:*

5.1.1 The dental service organization shall determine external and internal issues that are relevant to its purpose and affect its ability to achieve the intended outcome(s) of its management system for sustainability in dentistry.

5.1.2 *Understanding the Needs and Expectations of Stakeholders*—The dental service organization shall determine:

5.1.2.1 Stakeholders who are relevant to the management system for sustainability in dentistry;

5.1.2.2 Relevant requirements of these stakeholders; and

5.1.2.3 Applicable legal and other requirements to which the dental service organization subscribes.

5.1.3 *Determining the Scope of the Management System for Sustainability in Dentistry:*

5.1.3.1 The dental service organization shall determine the boundaries and applicability of the management system for sustainability in dentistry to establish its scope. When determining this scope, the dental service organization shall consider:

(1) The external and internal issues referred to in 5.1,

(2) The requirements referred to in 5.2, and

(3) The type and extent of dental services offered.

5.1.3.2 The scope shall be available as documented information.

5.2 *Management System for Sustainability in Dentistry*—The dental service organization shall establish, implement, maintain, and continually improve a management system for sustainability in dentistry, including the processes needed and their interactions, in accordance with the requirements of this practice.

5.3 *Leadership and Commitment*—The leadership shall ensure that the defined principles of sustainable development are reflected and communicated in its policy. They shall also ensure the vision’s delivery leads to long-term success of the dental service organization. Top management shall demonstrate leadership and commitment with respect to sustainable dentistry management system by:

5.3.1 Ensuring that the sustainability policy and objectives are established and are compatible with the strategic direction of the dental service organization;

5.3.2 Ensuring the integration of the management system for sustainability in dentistry requirements into the dental service organization’s business processes;

5.3.3 Ensuring that the appropriate financial, human, and organizational resources needed for the management system for sustainability in dentistry are available;

5.3.4 Communicating the importance of effective management of sustainability in dentistry and conforming to the management system for sustainability in dentistry requirements throughout the organization;

5.3.5 Ensuring that the management system for sustainability in dentistry achieves its intended outcome(s);

5.3.6 Directing and supporting persons to contribute to the effectiveness of the management system for sustainability in dentistry;

5.3.7 Promoting continual improvement; and

5.3.8 Supporting other relevant management roles to demonstrate their leadership as it applies to their areas of responsibility.

5.4 *Organizational Roles, Responsibilities, Accountabilities, and Authorities*—Top management shall ensure that respective responsibilities, accountabilities, and authorities for relevant roles to realize its sustainability policy and achieve its objectives are assigned and communicated within the dental service organization. Top management shall assign the responsibility and authority for:

5.4.1 Requirements of this practice, and

5.4.2 Reporting on the performance of the management system for sustainability in dentistry to top management.

5.5 *Planning:*

5.5.1 *Actions to Address Risks and Opportunities:*

5.5.1.1 When planning for the management system for sustainability in dentistry, the dental service organization shall consider, assess, and prioritize the issues referred to in 5.1, the requirements referred to in 5.2, and determine the risks and opportunities that need to be addressed to:

(1) Give assurance that the management system for sustainability in dentistry can achieve its intended outcome(s);

(2) Prevent or reduce undesired effects;

(3) Enhance desired business outcomes; and

(4) Achieve continual improvement.

5.5.1.2 When determining the risks and opportunities that need to be addressed, the dental service organization shall also include considerations for risks associated with organizational integrity, inclusivity, transparency, and stewardship as well as opportunities related to the practice of evidence-based dentistry.

5.5.2 The dental service organization shall plan:

5.5.2.1 Actions to address these risks and opportunities;

5.5.2.2 How to integrate and implement the actions into its management system for sustainability in dentistry processes; and

5.5.2.3 How to evaluate the effectiveness of these actions and develop corresponding countermeasures.

5.5.3 Documented information shall be retained on the outcomes of planning for the management system for sustainability in dentistry.

5.6 *Sustainability in Dentistry Objectives and Planning to Achieve Them:*

5.6.1 The dental service organization shall establish sustainability objectives at relevant functions and levels. The sustainability in dentistry objectives shall:

5.6.1.1 Be consistent with the sustainability in dentistry policy,

5.6.1.2 Be measurable (if practicable),

5.6.1.3 Take into account applicable legal and other requirements as well as technical feasibility,

5.6.1.4 Be measurable and monitored,

5.6.1.5 Be communicated, and

5.6.1.6 Be updated as appropriate.

5.6.2 The dental service organization shall retain documented information on the sustainability in dentistry objectives. When planning how to achieve its sustainability in dentistry objectives, the dental service organization shall determine:

5.6.2.1 What will be done,

5.6.2.2 What resources will be required,

5.6.2.3 Who will be responsible,

5.6.2.4 When it will be completed, and

5.6.2.5 How the results will be evaluated.

5.7 *Support:*

5.7.1 *Resource*—The dental service organization shall determine and provide the resources needed for the establishment, implementation, maintenance, and continual improvement of the management system for sustainability in dentistry and to demonstrate enhanced performance.

5.7.2 *Competence*—The dental service organization shall:

5.7.2.1 Determine the necessary competence of person(s) doing work under its control that affects its sustainability performance;

5.7.2.2 Ensure that these persons are competent on the basis of appropriate education, training, or experience;

5.7.2.3 Where applicable, take actions to acquire the necessary competence and evaluate the effectiveness of the actions taken; and

5.7.2.4 Retain appropriate documented information as evidence of competence.

5.7.3 *Awareness*—Persons doing work under the dental service organization's control shall be aware of:

5.7.3.1 The sustainability in dentistry policy;

5.7.3.2 Their contribution to the effectiveness of the management system for sustainability in dentistry, including the benefits of improved sustainability performance; and

5.7.3.3 The implications of not conforming with the management system for sustainability in dentistry requirements.

5.7.4 *Communication*—The dental service organization shall determine the need for internal and external communications relevant to the management system for sustainability in dentistry, including:

5.7.4.1 On what it will communicate,

5.7.4.2 When to communicate,

5.7.4.3 With whom to communicate,

5.7.4.4 How to communicate, and

5.7.4.5 Why the communication takes place.

5.7.5 *Documented Information:*

5.7.5.1 *General*—The dental service organization's management system for sustainability in dentistry shall include:

(1) Documented information required by this practice;

(2) Documented information required by pertinent certification, accreditation, and regulation; and

(3) Documented information determined by the dental service organization as being necessary for the effectiveness of the management system for sustainability in dentistry.

**5.7.5.2 Creating and Updating**—When creating and updating documented information, the dental service organization shall ensure appropriate:

- (1) Identification and description (for example, a title, date, author, or reference number),
- (2) Format (for example, language, software version, graphics) and media (for example, paper, electronic), and
- (3) Review and approval for suitability and adequacy.

**5.7.5.3 Control of Documented Information:**

(1) Documented information required by the management system for sustainability in dentistry and by this practice shall be controlled to ensure:

- (a) It is available and suitable for use where and when it is needed, and
- (b) It is adequately protected (for example, from loss of confidentiality, improper use, or loss of integrity).

(2) For the control of documented information, the dental service organization shall address the following activities, as applicable:

- (a) Distribution, access, retrieval and use;
  - (b) Storage and preservation, including preservation of legibility;
  - (c) Control of changes (for example, version control); and
  - (d) Retention and disposition.
- (3) Documented information of external origin determined by the dental service organization to be necessary for the planning and operation of the management system for sustainability in dentistry shall be identified, as appropriate, and controlled.

**5.7.6 Dental Service Operation:**

**5.7.6.1 Operational Planning and Control**—The dental service organization shall plan, implement, and control the processes needed to meet requirements and implement the actions determined in **5.6.1** by:

- (1) Establishing criteria for the processes;
- (2) Implementing control of the processes in accordance with the criteria; and
- (3) Keeping documented information to the extent necessary to have confidence that the processes have been carried out as planned.

**5.7.6.2 Change Management:**

(1) The dental service organization shall plan for and manage changes to its management system for sustainability in dentistry to ensure they do not cause or lead to undesired business performance, including:

- (a) Changes to work processes, procedures, equipment, organizational structure, staffing, as well as scale and extent of dental services offered;
- (b) Changes in newly established knowledge, techniques, or technology; and
- (c) Changes to legal or other requirements.

(2) The dental service organization shall control planned changes and review the consequences of unintended changes, taking action to mitigate any adverse effects as necessary before implementation of changes. The dental service organization shall ensure that outsourced processes are controlled.

**5.7.6.3 Procurement of Dental Equipment, Services, and Supplies:**

(1) The dental service organization shall ensure procured equipment, services, and supplies conform to specified procurement requirements and sustainability criteria. When procuring dental equipment, services, and supplies, the dental service organizations shall:

(a) Define and establish procurement requirements and sustainability criteria consistent with the outcomes of planning (see **5.5**) and objectives (see **5.6**);

(b) Communicate to suppliers that procurement decision is partly evaluated on the basis of sustainability performance; and

(c) Evaluate and select suppliers based on their ability to furnish dental equipment, service, and supplies in accordance with the procurement requirements and sustainability criteria.

(2) Documented information of established procurement requirements and criteria as well as the results of evaluation and any consequent procurement decision derived shall be maintained.

**5.7.7 Performance Evaluation:**

**5.7.7.1 Monitoring, Measurement, Analysis, and Evaluation**—The dental service organization shall determine:

- (1) What needs to be monitored and measured;
- (2) Who will be responsible for monitoring, measurement, analysis, and evaluation;
- (3) The methods for monitoring, measurement, analysis, and evaluation, as applicable, to ensure valid results;
- (4) When the monitoring and measuring shall be performed; and
- (5) When the results from monitoring and measurement shall be analyzed and evaluated.

**5.7.7.2** The dental service organization shall retain appropriate documented information as evidence of the results. The dental service organization shall evaluate the sustainability performance and the effectiveness of the management system for sustainability in dentistry.

**5.7.8 Internal Audit**—The dental service organization shall conduct internal audits at planned intervals to provide information on whether the management system for sustainability in dentistry:

**5.7.8.1 Conforms to:**

- (1) The organization's own requirements pertain to sustainability in dentistry, and
- (2) The requirements of this practice;

**5.7.8.2** Complies with applicable certification, accreditation, and regulatory requirements; and

**5.7.8.3** Is effectively implemented, maintained, and improved.

**5.7.9** Top management shall review the dental service organization's management system for sustainability in dentistry, at planned intervals, to ensure its continuing suitability, adequacy, and effectiveness. The management review shall include consideration of:

**5.7.9.1** The status of actions from previous management reviews;

**5.7.9.2** Changes in internal and external issues that are relevant to the management system for sustainability in dentistry;

5.7.9.3 Information on the sustainability in dentistry performance, including trends in:

- (1) Nonconformities and corrective actions;
- (2) Risks;
- (3) Monitoring and measurement results;
- (4) Audit results; and

5.7.9.4 Opportunities for continual improvement.

5.7.9.5 The outputs of the management review shall include decisions related to continual improvement opportunities and any need for changes to the management system for enhanced sustainability in dentistry. The dental service organization shall retain documented information as evidence of the results of management reviews.

5.7.10 *Improvement:*

5.7.10.1 *Nonconformity and Corrective Action:*

(1) When a nonconformity occurs, the dental service organization shall:

(a) React to the nonconformity and, as applicable:

- (1) Take action to control and correct it, and
- (2) Deal with the consequences;

(b) Evaluate the need for action to eliminate the causes of the nonconformity so that it does not recur or occur elsewhere by:

- (1) Reviewing the nonconformity,

(2) Determining the causes of the nonconformity, and  
(3) Determining if similar nonconformities exist or could potentially occur;

(c) Implement any action needed;

(d) Review the effectiveness of any corrective action taken; and

(e) Make changes to the management system for sustainability in dentistry, if necessary.

(2) Corrective actions shall be appropriate to the effects of the nonconformities encountered.

(3) The dental service organization shall retain documented information as evidence of:

(a) The nature of the nonconformities and any subsequent actions taken, and

(b) The results of any corrective action.

5.7.10.2 *Continual Improvement*—The dental service organization shall continually improve the suitability, adequacy, and effectiveness of the management system for sustainability in dentistry.

## 6. Keywords

6.1 dental service; management; sustainable dentistry; sustainable development; sustainability; sustainability in dentistry

## APPENDIXES

### (Nonmandatory Information)

#### X1. DISCUSSION AND APPLICATION OF SUSTAINABILITY MANAGEMENT MODELS

X1.1 The foundation of this practice governing management of sustainability in dentistry and related dental services is based on the proven concept of “plan, do, check, act” (PDCA).

X1.2 The PDCA management model is an iterative process used by organizations in a myriad of industrial sectors to attain continual improvement and enhanced organizational maturity. Each of the four interconnected and iterative stages is briefly described in the following:

X1.2.1 *Plan*—Define organizational vision and policy and establish operational objectives and processes necessary to realize results.

X1.2.2 *Do*—Implement and maintain operational processes as planned.

X1.2.3 *Check*—Monitor and measure processes against defined performance indicators including management commitment, policy expectations, objectives, and control metrics and document and report results.

X1.2.4 *Act*—Review results and take actions to improve identified performance continually.

X1.3 The following process map in Fig. X1.1 depicts interrelationships of various clauses of this practice.

X1.4 Further, a practical guide managing sustainable development issues within organizations was published in 2006 as a British Standard and it has recently been revised in which the four minimum principles of sustainable development were introduced, namely integrity, inclusivity, stewardship, and transparency (BS8900-1:2013 3.2-3.5). This practice draws learning from these and other recognized international and national standards and extends to the practice of dentistry in general and management of dental service organizations in particular.

**Context of Dental Service Organization ( 5.1)  
Management System for Sustainability in Dentistry (5.2)**

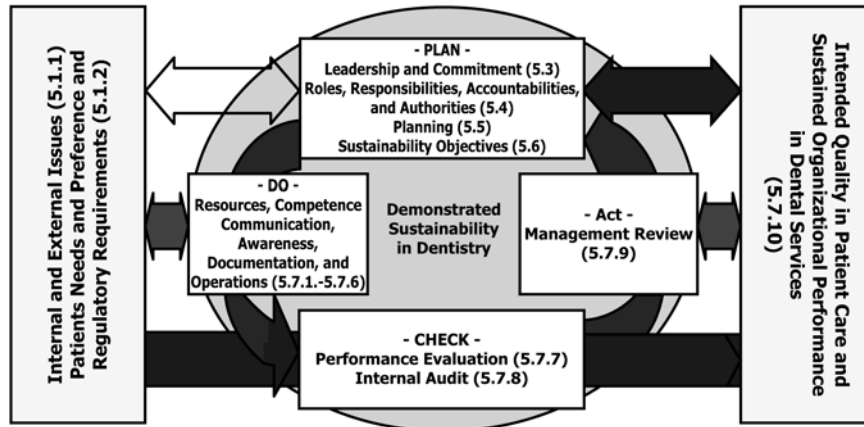


FIG. X1.1 Interrelationship of Clauses

**X2. EXAMPLE OF AN APPROACH FOR INTEGRATING SUSTAINABILITY INTO THE CULTURE OF A DENTAL SERVICE ORGANIZATION**

X2.1 One of the first and most challenging things top management in a dental service organization shall do is make a commitment toward sustainability in dentistry and understand how to integrate sustainability throughout the culture of the dental service organization. Using the five Ps as a guide, as represented in Fig. X2.1 (ref. Margolis and Oviedo),<sup>3,4</sup> dental professionals can understand the scope for change and plan and implement an effective management system for implementing sustainability. To begin at the top of the figure, the dental service organization first commits to having sustainability as a guiding principle that is part of its core culture. Sustainability can be the organization’s purpose, its distinctive philosophy, or a strategic priority. (See questions in Fig. X2.1 to make that determination.) Then, to facilitate incorporating sustainability throughout the dental service organization, a systems approach with a systematic and pragmatic management framework is used. The five Ps serve as a guide for embedding sustainability throughout the practices and projections of the organization (4.1).

X2.2 With sustainability as a guiding principle, management and all internal stakeholders seek to align practices and projections with the sustainability objectives. The five Ps model guides decision making on the scope for implementation. Internal practices within the organization can begin with creating a sustainability policy (5.3). Risks and opportunities are evaluated and addressed (5.5). Sustainability objectives are

determined by functions and levels and used to guide the dental service organization (5.6). Top management clarifies roles, responsibilities, and accountabilities to ensure the policy is implemented effectively and objectives are clear (5.4). Systems and processes are developed to support sustainable development (5.7.6.1). Support through resources, training, and information are provided to ensure employee performance and competence in achieving objectives (5.7). Appropriate documentation is required and updated (5.7.5). Internal monitoring, measurement, evaluation (5.7.7), and internal audits are conducted (5.7.8). Ongoing review is required of top management (5.7.9) with a focus on continual improvement (5.7.10). External practices such as working with like-minded businesses and all facets of the supply chain are important for achieving sustainability objectives. Procurement practices shall align with requirements and sustainability criteria (5.7.6.3). Adequate communication with and evaluation of suppliers is necessary to achieve objectives. Building a patient base that values the sustainability focus promotes loyalty to the organization and support for the objectives. Products and services can also align with sustainability objectives. Projections are the images of the organization projected to the public. When images such as the appearance of the office; community philanthropy activities; and the organization’s public relations, marketing, and advertising are aligned with the principles of sustainable dentistry, the organization projects its focus on sustainability to the broader public. Sustainability reports, awards, and certifications further a sustainability image to others, enhancing the organization’s brand. This five Ps model exemplifies how issues related to sustainability in dentistry as well as operational practices and projections may be systematically identified, evaluated, developed, and maintained in a dental service organization.

<sup>3</sup> Oviedo, B. and Margolis, S., "Embedding Corporate Social Responsibility in Your Culture: Aligning Performance Using the Five Ps," ISPI (International Society for Performance Improvement) *Performance Express*, Online, Available: <http://performanceexpress.org/0812/#CSR>, December 2008.

<sup>4</sup> Margolis, S., *Building a Culture of Distinction: Facilitator Guide for Defining Organizational Culture and Managing Change*, Workplace Culture Institute, Atlanta, GA, 2010, Section A, pp. 5-12

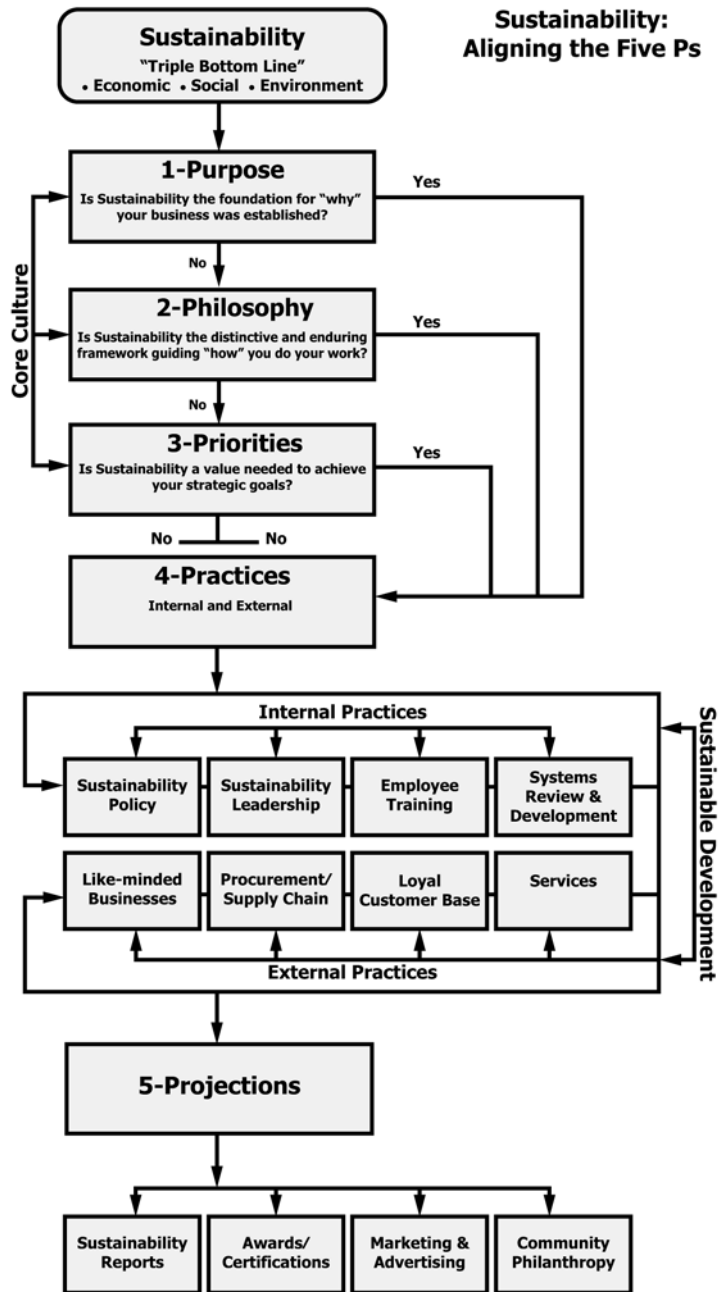


FIG. X2.1 Example of an Approach Linking Organizational Purpose and Sustainability

**X3. EXAMPLE OF ISSUES RELATED TO SUSTAINABILITY IN DENTISTRY AND ASSOCIATED METRICS**

X3.1 There are a myriad of strategic, tactical, and operational issues a dental service organization shall face and manage on a day-to-day basis. Many of which have direct and profound impacts on the overall sustainability of the organization and the underlying delivery of dental services. Certain material sustainability topics and accounting metrics associated with healthcare industry have recently been identified (see Sustainable Industry Classification System (SICS),<sup>5</sup> HC0301). Salient sustainability issues internal and external to dental

<sup>5</sup> SICS is a trademark of Sustainability Accounting Standards Board (SASB), 75 Broadway, Suite 202, San Francisco, CA 94111, <http://www.sasb.org>.

service organization may include the following:


X3.1.1 *Internal Issues:*

- X3.1.1.1 Quality of dental care and patient satisfaction,
- X3.1.1.2 Employee recruitment and development,
- X3.1.1.3 Pricing and billing, and
- X3.1.1.4 Continuing professional development.

X3.1.2 *External Issues:*

- X3.1.2.1 Access to dental services,
- X3.1.2.2 Community outreach and services,
- X3.1.2.3 Equipment and technology, and
- X3.1.2.4 Material selection and equipment utilization efficiency.

**X4. EXAMPLE OF A SUSTAINABLE DEVELOPMENT MATURITY MATRIX FOR DENTAL SERVICE ORGANIZATIONS**

| Principles              | Practices                              | Stages of a Dental Service Organization’s Approach<br>to Sustainable Development   |  |  |
|-------------------------|--|--|--|--|
|                         |  |  |  |  |
| Inclusivity             | Patient Consultation and Participation |  |  |  |
| Integrity               | Community Outreach and Services        |  |  |  |
| Transparency            | Fair Pricing and Billing Transparency  |  |  |  |
| Stewardship             | Energy Efficiency and Conservation     |  |  |  |
| Additional Principle... | Additional Practice...                 |  |  |  |

**FIG. X4.1 Example of a Sustainable Development Maturity Matrix for Dental Service Organizations**

X4.1 An individual dental service organization should consider periodically assessing and determining its position along a sustainable development progression path. A useful tool for this purpose is the sustainable development maturity matrix shown in Fig. X4.1. The concept of sustainable development maturity model was initially proposed and developed in the

publication of BS8900: 2006. Subsequently, in response to growing calls from organizations around the globe for a clear and practical guidance integrating sustainable development principles into business management practice, the first major revision of BS8900 was published in 2013. This example shows how the matrix structure may be applied to any



organization. Further, it is not an exhaustive fixed list. Practices and finer details should be added according to each organization's needs and expectations. When a dental service organization is developing its matrix, it is important to involve a number of internal as well as external stakeholders with various focal issues seeking consensus on the most appropriate and meaningful practices and stages. Each stage described in a cell of the matrix should, as far as possible, be specific, objective, and measurable achievements. A dental service organization should appraise its current position in respect of each stage, noting any need with particular attention to restore balanced progression along its sustainable development path. Specific objectives should be identified and action plans

devised to secure both balance and broad general advancement. A periodic review should be conducted of the organization's position along its sustainable development path and of the continued relevance of the stages in the matrix. From time to time, updates and revisions to the matrix may be necessary to reflect changing circumstances, stakeholder priorities, and regulatory obligation, inter alia. The position depicted by the matrix (for example, by shading already accomplished cells) can serve as an input to the organization's communications to stakeholders. The sustainable development maturity matrix links the foundation sustainable development principles with the tangible actions, deliverable dental services, and realizable organizational goals.

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