a practical guide

for SMEs

ISO 14001:2015

Environmental management systems

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Foreword

Awareness of environmental problems is growing in most countries and it is believed that current development patterns cannot be sustained in the long term. Governments are increasingly enacting legislation aimed at protecting the environment, and customers are requiring their suppliers to incorporate best practices and demonstrate compliance with environmental requirements.

The publication of the ISO 14001 standard for environmental management systems (EMS) has proved to be very successful, as it is now implemented in more than 159 countries and has provided organizations with a powerful management tool to improve their environmental performance. More than 324 000 organizations have been certified worldwide against ISO 14001 at the end of 2014, which is an increase of 7 % compared to 2013. Many companies have improved their operations by reducing the adverse impact their activities, processes, products and services have on the environment using a systematic approach embodied in ISO 14001.

The benefits of positively addressing environmental issues therefore not only cover the protection of the environment, but are also linked to business performance and profitability. These can include improving the corporate image, enhancing access to export markets, and improving relationships with customers, regulators, the public and other stakeholders, etc.

One major advantage of implementing ISO 14001 is that it can be done in an organization of any size or type, since the requirements of an EMS are the same for all — although the manner of implementing one will vary according to the size and activity of the organization.

Experience shows that small and medium-sized enterprises (SMEs) can implement an effective EMS and realize a variety of benefits. However, EMS implementation can present some challenges. This guide aims to help organizations understand the requirements for an environment management system and for them to identify areas for improvement. It will be of value in preparing the organization for third party certification of its EMS should the organization wish to do so.

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We hope that this revised guide to help achieve the benefits of ISO 14001:2015 will be of practical use to small businesses whatever their activity and wherever they may be, but especially in developing countries and economies in transition.

Nicolas Fleury
Acting Secretary-General
ISO

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Introduction

This guide guides the user through the establishment of an environmental management system (EMS), in accordance with the requirements specified in ISO 14001:2015, *Environmental management systems — Requirements with guidance for use*.

There are many benefits to implementing an EMS. These include a potential for:

- improved control and management of emissions, effluents and wastes;
- avoidance and safe handling of hazardous or potentially polluting materials;
- reduction in generated wastes;
- energy efficiency improvements and cost savings;
- conservation of natural resources, including water, land and precious minerals;
- a comprehensive approach to satisfying legal and other requirements;
- operational efficiency and cost savings;
- pursuing environmental initiatives that are aligned with business priorities.

Other benefits can include increased profitability, better access to markets and improved relationships with stakeholders (e.g. customers, regulators, investors, insurers, neighbours). In some cases it may be of further value to organizations and their stakeholders to have the EMS assessed for conformity in order to demonstrate that it meets the requirements of ISO 14001:2015 [1)].

This guide is aimed at small and medium-sized enterprises (SMEs), both in developed, transitioning economy and developing countries, but can be used by an organization of any size. It provides an overview of the ISO 14001:2015 requirements and promotes the guidance offered in ISO 14004:2016, *Environmental management systems — General guidelines on implementation*. It seeks to provide practical help that assists organizations in establishing an EMS that can address its particular needs.

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1) Section 10, *Demonstrating conformity*, describes the various options for assessing and demonstrating conformity to ISO 14001.

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The guide has twelve sections, seven of which cover a particular stage in the EMS implementation process. Each of these sections provides an explanation of the relevant requirement(s), as well as guidance on how to get started, helpful implementation techniques, examples and a self-assessment checklist to verify conformance. Other sections provide useful information on the environmental management system model, guidance on integrating management systems, conformity assessment options and additional reference materials. A fictional case study is also included. The information included in this guide, however, should not be misconstrued as modifying or adding to the ISO 14001 requirements.

ISO 14001:2015 and other management system standards like ISO 9001:2015, *Quality management systems — Requirements*, are closely related. The structures are identical and several elements of these two management systems contain the same requirements. However, there are also significant technical differences. If an organization has either implemented or is already certified to any of the ISO management system standards such as ISO 9001, it should have in place many of the components common to most management systems, for example, context of the organization, competence, documented information, internal audit, nonconformity and corrective action, to name a few. The task for organizations wishing to adapt their management system to address environmental issues will be to expand the scope of these common components, and address the remaining environment-specific requirements in ISO 14001:2015.

Since this guide does not include the text of ISO 14001:2015, users are recommended to obtain a copy from their national standards body or from ISO, either directly via sales@iso.org or via the Internet from www.iso.org.

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1 Pursuing an environmental management system

1.1 Environmental management

Societal expectations for sustainable development continue to evolve due to growing pressures on the environment from pollution, natural resource scarcities, and global warming. Governments responded with increasingly stringent legislation. Organizations answered back by controlling their environmental impacts, primarily through pollution prevention and managing their waste streams. More recently, emphasis and positive efforts toward conserving natural resources and reducing use of fossil fuels for energy generation have been made. But expectations continue to mount for organizations to be more proactive in protecting the environment from harm and degradation.

Environmental management encompasses an organizations' efforts to control its interaction with and effect on the environment in order to minimize adverse environmental impacts and leverage positive environmental impacts. It is a core responsibility of all organizations. Stakeholder groups exerting pressure and holding organizations accountable for their environmental footprint is increasing: these stakeholders include board of directors, insurance companies, investors, customers, community members, regulators, and employees. Nongovernmental organizations are extending these pressures, holding countries, sectors and indeed organizations accountable for reducing pollutants.

An environmental management system (EMS) is an approach used by organizations since the 1990s to manage its interactions with the environment in a planned and systematic way. It comprises a comprehensive set of processes