

## **Chapter XXII**

# **Environmental Reporting in Print and Electronic Media**

Klaus Tochtermann

Research Institute for Applied Knowledge Processing (FAW), Germany

Andree Keitel

Institute for Environmental Protection Baden-Württemberg, Germany

Thomas Schütz

German Federal Environmental Agency, Germany

## **INTRODUCTION**

Reporting to and providing the public with information on the environment is becoming increasingly important for governmental environmental agencies at the regional, national and international levels. In the private sector, a growing number of companies are now voluntarily disclosing environmental information, both as stand-alone corporate reports and as special environmental or sustainability sections within corporate annual reports.

An environmental report of a public administration serves the purpose to inform the public about the state of the environment in their country or region. While formerly such reports were structured along environmental objects, such as air, forests, water resources and traffic, one can observe a new trend towards a structure along environmental topics such as climate change, mobility and biodiversity.

Corporate environmental reporting has traditionally been a voluntary method of communicating environmental performance to an organization's stakeholders. Corporate environmental reports aim: to empower people with the information they need to hold corporations accountable; to allow companies and their stakeholders to measure the adherence to the standards set forth in the companies statements on environmental principles; to help illuminate weaknesses and opportunities; and to set new environmental goals. More recently there has been a debate over whether corporate environmental reporting should be made mandatory. Denmark, New Zealand and the Netherlands have already started introducing legislation on environmental reporting. Also the voluntary European Eco Management and Audit Scheme

(EMAS) requires environmental statements to be produced. Another international standard, ISO 14001, however, does not specify that these statements have to be made publicly available.

Today environmental reporting is still dominated by print reports. Even when electronic environmental reports exist, they are often electronic copies of the print report, and thus, do not exploit the great potential electronic media provides. Relevant studies show that fully featured electronic reports are still a relatively new topic for any type of organization (UNEP, 1999). In fact, in comparison to print reports the experience with electronic reports is lagging about five years behind. However, there are several incentives to publish environmental reports in both print and electronic media:

1) Due to the limited budget only a certain number of printed copies can be produced. As a consequence, the public hardly has the free and unlimited access as intended by the environmental agencies and departments that publish the reports; 2) with electronic reports a broader public can be reached without a significant increase in cost. 3) The means for the illustration of complex environmental topics are not restricted by the limited possibilities of print media any more. 4) Many of the data used in environmental reports already exist electronically in background databases which can be connected to the environmental report. This dramatically improves the possibilities of keeping reports up-to-date. 5) Electronic reports are not only more environmentally friendly but also more user-friendly than print reports. Intelligent navigation and presentation features can efficiently support readers in searching for the information they are interested in. 6) Consumers of reports are not primarily interested in the product (i.e. the printed copy) but in the service (i.e., the provision of data on the environment) provided by an environmental report. Modern information and communication technologies enable organizations to perform this shift from products to services, helping them to become more consumer-oriented.

Instead of providing a broad and general overview of the topic, the aim of this chapter is to narrow down the scope of environmental reporting to a specific context, namely environmental reporting in public administrations in Germany. This context-specific analysis allows detailed descriptions of both a typical workflow and a toolbox for environmental reporting. With this level of detail, the chapter can serve as a valuable case study for instructional purposes for other organizations and countries interested in developing an environmental reporting tool for both print and electronic media (World Wide Web and CD-ROM).

To achieve this objective, the chapter is structured as follows: an extensive overview of related literature. An introduction of a production process for environmental reporting which is specifically tailored to both print and electronic report production. A toolbox for producing environmental reports is then described; following that the software design of this toolbox is presented. Finally, future and emerging trends are discussed before the chapter closes with a conclusion.

## RELATED LITERATURE

In the context of environmental report production for print and/or electronic media remarkable efforts exist. Some of these efforts are discussed in more detail in this section.

12 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

[www.igi-global.com/chapter/environmental-reporting-print-electronic-media/18545](http://www.igi-global.com/chapter/environmental-reporting-print-electronic-media/18545)

## Related Content

---

### Analysis of Material and Information Flows and Formulation of an ICT Waste Management Model

Maria-Chrysovalantou Emmanouil, Emmanouil Stiakakis, Maria Vlachopoulou and Vasiliki Manthou (2015). *International Journal of Agricultural and Environmental Information Systems* (pp. 32-47).

[www.irma-international.org/article/analysis-of-material-and-information-flows-and-formulation-of-an-ict-waste-management-model/120471](http://www.irma-international.org/article/analysis-of-material-and-information-flows-and-formulation-of-an-ict-waste-management-model/120471)

### A GIS Based Methodology in Renewable Energy Sources Sustainability

Emanuela Caiaffa, Maurizio Pollino and Alessandro Marucci (2014). *International Journal of Agricultural and Environmental Information Systems* (pp. 17-36).

[www.irma-international.org/article/a-gis-based-methodology-in-renewable-energy-sources-sustainability/116541](http://www.irma-international.org/article/a-gis-based-methodology-in-renewable-energy-sources-sustainability/116541)

### Chaos Theory for Hydrologic Modeling and Forecasting: Progress and Challenges

Bellie Sivakumar (2011). *Handbook of Research on Hydroinformatics: Technologies, Theories and Applications* (pp. 199-228).

[www.irma-international.org/chapter/chaos-theory-hydrologic-modeling-forecasting/45446](http://www.irma-international.org/chapter/chaos-theory-hydrologic-modeling-forecasting/45446)

### Energy Harvesting Models and Techniques for Green IoT: A Review

Saira Muzafar (2021). *Role of IoT in Green Energy Systems* (pp. 117-143).

[www.irma-international.org/chapter/energy-harvesting-models-and-techniques-for-green-iot/272392](http://www.irma-international.org/chapter/energy-harvesting-models-and-techniques-for-green-iot/272392)

### Analysis and Comparison of Business Models of Leading Enterprises in the Chinese Hydrogen Energy Industry

Poshan Yu, Xinyi Liu, Ramya Mahendran and Shengyuan Lu (2022). *Clean Technologies and Sustainable Development in Civil Engineering* (pp. 179-216).

[www.irma-international.org/chapter/analysis-and-comparison-of-business-models-of-leading-enterprises-in-the-chinese-hydrogen-energy-industry/305594](http://www.irma-international.org/chapter/analysis-and-comparison-of-business-models-of-leading-enterprises-in-the-chinese-hydrogen-energy-industry/305594)