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Foreword

Sustainability is a core consideration for many successful businesses around the world. Translating strategic sustainability principles into actions continues to be a tough challenge, while a KPMG Sustainability survey in 2011 shows that two in three organizations are reporting on their progress. One of the main problems preventing a wider take-up of sustainable practices is the need for common metrics, and underlying systems that produce credible information, to analyze the impact of sustainability programs.

When compared to financial reporting processes, it is an understatement to note that there is room for improvement for sustainability reporting processes. New tooling and systems may be helpful in achieving the same level of cutting-edge sustainability reporting. This market review provides insight into the market for these reporting systems and confirms our notion that this market is still maturing. However, our market review also shows that the current software solutions are looking promising to support organizations in providing reliable and credible information to the financial market.

We would like to thank everybody who has taken part in this market review, especially the software vendors who gave their time to let us hear their views and capabilities.

Wim Bartels
Partner
KPMG Sustainability
The Netherlands
Introduction

**Background**
In recent years, sustainability has become a strategic topic for companies. The IT market has catered to this trend. As a result, software companies now offer a wide range of sustainability reporting tools. New players have entered the market and various suppliers of ERP packages offer new add-ons and tools for sustainability reporting.

KPMG carried out a review of the key characteristics of a wide range of various reporting options and methods available, and how they respond to the latest developments in the sustainability landscape. It gives you an insight into the nature and extent of the differences between the various packages and can serve as a basis for your software selection strategy. To gain a proper insight, suppliers were given the opportunity for a brief explanation of how their system addresses current developments. We would like to thank them for their openness and their useful contributions. Without their assistance, we would not have been able to carry out this review.

The need for a market review
When considering buying a sustainability reporting tool, chances are you will get lost because many factors need to be taken into account. This market review is intended to be a guide in this process. If you are planning a project for the replacement of your spreadsheet-based system, our report can assist you with the preparation of a long list of suitable packages.

KPMG is an independent party. We are in no way affiliated with any of the reviewed packages or suppliers. This means that we can give you an objective assessment of what the market has to offer. The data concerning the packages in this publication have been provided and confirmed by the suppliers.

**Methodology**
The survey is based on a questionnaire that captures many key features and capabilities of each package in the field of Sustainability Reporting. Furthermore, it provides insight into functional features, reporting possibilities and some specific sustainable compliance entry features.

**Target group**
The target group primarily consists of company officials responsible for sustainability, financial reporting and IT and, obviously, any members of the executive team that want more
insight into how IT can support their company’s sustainability objectives.

Note to the reader
This publication is a useful source of information during the first stage of your selection process, when you are exploring the IT systems that are available for sustainability reporting. Selecting a vendor requires further analysis on how the package matches your organization, sustainability processes, IT organization and developments on your sustainability strategy. Obviously these insights are not included in this market review.

Furthermore, our insights were gained on the basis of a questionnaire among suppliers. Their response and information has not been subject to checks and audits on the correctness and completeness.

In conclusion
Selecting a sustainability reporting package is not a routine project for organizations, and clients appreciate our contribution in supporting them in the selection and implementation processes. Our experience can help them make a sound and well-considered choice, both from a sustainability and an IT perspective.

Engaging KPMG as an independent advisor, offers several potential benefits, including:

• Warranting balanced attention to sustainability and IT opportunities and challenges;
• Serving as a mirror to suppliers and clients to show them inadequate basic conditions that hamper a successful implementation;
• Critical assessment of the selection process: are you making rational choices?
• A focus on some aspects that may be neglected, such as the reliability of data processing, internal control, the design of an appropriate authorization structure, reliable data conversions;
• Business process optimization thanks to new (system) capabilities.

“Selecting a sustainability reporting package is not a routine project for organizations.”
Management summary

This market review provides an overview of the key characteristics of sustainability reporting systems. In July 2011 we sent out an questionnaire by email. We received feedback on our questionnaire from 17 software vendors. The questionnaire was based on the GRI reporting set and provides an overview of the basic requirements for the sustainability reporting process. Key findings of the characteristics in this market review are listed below.

Market
In general, sustainability reporting software can be divided into stand-alone packages (focusing on a dedicated solution for sustainability reporting) and packages that are part or a module of a larger ERP system (focusing on an integrated solution including sustainability). In the long run, we expect that the trend towards integrated reporting will also be a driver towards integrated solutions. Currently, however, many organizations still find it tough to define a proper business case for an integrated solution and therefore tend to select dedicated solutions.

The market for sustainability reporting software is young. The majority of available packages (76%) have been introduced since 2008; the remaining 24% were introduced between 2005 and 2008. Compared with financial reporting and ERP packages, this market is certainly still maturing. The solutions are globally oriented as 82% of the systems can be implemented in all markets and geographies.

Infrastructure
Infrastructure techniques have various characteristics. Although all packages have a web interface, 24% of the solutions are entirely in ‘the cloud’.

“In the long run, we expect that the trend towards integrated reporting will also be a driver towards integrated solutions.”

In addition, 82% of the packages can also be accessed on mobile devices. Especially new players on the market are focusing on this new cloud trend, which also brings differences in the license fee structures.

We expected differences in implementation time between cloud solutions and on-site packages. However, the majority of the suppliers claim an implementation time between one and three months based on the size of the organization. Based on our experience, we find this fairly ambitious, especially in cases where organizations require tailored solutions to client-specific functional requirements and reporting requirements.

Many packages offer all the expected functionality, either as part of a standard package or as part of a tailor-made solution. Differences are found in the standard (GRI) reporting possibilities available, although the majority of the solutions offer additional reporting options that can be used without having the in-depth knowledge of the underlying data model.

All packages support the English language and the majority has local language options. All of the solutions provide the functionality of audit trails and (basic) validation checks.

Sustainability functionality
The solutions offer standard sustainability functionality, such as annual assessments (for example on carbon footprint) and reporting. Nearly all systems offer the possibility to implement a range of indicators and accompanying data. More than half of them offer specific functionalities, such as supply-chain analysis and carbon offsetting.

There are many other reporting topics, such as economic, environmental, social, human rights, society and product responsibility. Although the Global Reporting Initiative (GRI) is the leading standard output format and CDP is also commonly used, not all solutions are equipped to report on all the standard disclosure indicators.

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“The market for sustainability reporting software is young. The majority of available packages (76%) have been introduced since 2008.”
Sustainability reporting process

A sustainability reporting process can be seen as a road trip in which many choices need to be made before arriving at the final destination. Although the trip will be different for every organization, the final destination should be the same for all, i.e. a well-balanced, complete and accurate report. Such a report should fulfill the information needs of stakeholders and serve as an important instrument for management.

There is a wide diversity of sustainability reports. Some of these enable organizations to have a stakeholder dialogue and to stimulate internal improvements. Other reports have more of an accounting nature with limited direct impact on external and internal stakeholder dialogues. The GRI recommends seeing the sustainability reporting process not as the final purpose, but seeing it as a ‘tool of change’:

“Sustainability reporting is a living process and tool, and does not begin or end with a printed or online publication. Reporting should fit into a broader process for setting organizational strategy, implementing action plans, and assessing outcomes. Reporting enables a robust assessment of the organization’s performance and can support continuous improvement in performance over time. It also serves as a tool for engaging with stakeholders and securing useful input to organizational processes.”

Stakeholders have diverse needs in terms of issues, detail requested, format and timing of reporting, which brings about complex choices on scope and the level of detail of topics to report on. Choosing topics logically results in a decision process for indicators, definitions and a system to collect the required underlying data. In order to use a sustainability report as a tool of change, organizations need to make clear choices upfront. Wrong choices at the start of the process are difficult to rectify in later stages. GRI has identified an overview of core indicators, which are assumed to be material for most organizations.

Figure 1: Stages in Sustainability Reporting Process

<table>
<thead>
<tr>
<th>1. Define report content</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Ensure report quality</td>
</tr>
<tr>
<td>3. Set report boundaries</td>
</tr>
<tr>
<td>4. Include standards</td>
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<tr>
<td>5. Focused sustainability report</td>
</tr>
</tbody>
</table>

1 GRI, Sustainability Reporting Guidelines, version 3.1, 2011
Additional indicators that may be material for some organizations, but not material for others, have also been developed. The main stages in this process are summarized in figure 1, which is based on the GRI approach (figure 2). The considerations in all different stages will have an impact on the indicators selected to report on.

**Define report content**
The road trip starts by defining the report content. Topics need to be identified; corresponding indicators and definitions should be formulated and checked in an iterative process with the stakeholders. As the relevant topics and indicators will differ per company, the GRI provides companies with principles to ensure that the process will result in a tool of change. In addition, possible indicators with definitions are provided in the GRI guidance.

**Materiality**
The information in a report should cover topics and indicators that reflect the organization’s significant economic, environmental, and social impacts or that would substantively influence the assessments and decisions of stakeholders.

**Stakeholder inclusiveness**
The reporting organization should identify its stakeholders and explain in the report how it has responded to their reasonable expectations and interests.

**Sustainability context**
The report should present the organization’s performance in the wider context of sustainability.

“Stakeholders have various needs in terms of topics, format, granularity and timing of reporting. This requires many complex choices to define a robust reporting process”

**Completeness**
Coverage of the material topics and indicators and definition of the report boundary should be sufficient to reflect significant economic, environmental, and social impacts and to enable stakeholders to assess the reporting organization’s performance in the reporting period.
Ensure report quality
After determining topics, indicators and definitions, transforming these items into information requires a certain level of reporting quality. GRI has formulated principles to ensure report quality:

**Balance**
The report should reflect positive and negative aspects of the organization’s performance to enable a reasoned assessment of overall performance.

**Comparability**
Issues and information should be selected, compiled, and reported consistently. Reported information should be presented in a manner that enables stakeholders to analyze changes in the organization’s performance over time, and could support analysis relative to other organizations.

**Accuracy**
The reported information should be sufficiently accurate and detailed for stakeholders to assess the reporting organization’s performance.

**Timeliness**
Reporting occurs on a regular schedule and information is available in time for stakeholders to make informed decisions.

**Clarity**
Information should be made available in a manner that is understandable and accessible to stakeholders using the report.

**Reliability**
Information and processes used in the preparation of a report should be gathered, recorded, compiled, analyzed, and disclosed in a way that could be subject to examination and that establishes the quality and materiality of the information.

Set report boundaries
A specific element to consider is the decision concerning the boundaries of the organization. Which entities will be covered by the report and which will not? The report should offer a clear explanation and motivation of the boundaries. The GRI guidelines state that entities in which the reporting organization exercises control or significant influence both in and through its distribution and customers should be included.

**Control**
The power to govern the financial and operating policies of an enterprise so as to obtain benefits from its activities.

**Significant influence**
The power to participate in the financial and operating policy decisions of the entity but not the power to control those policies.

“The GRI guidelines state that entities in which the reporting organization exercises control or significant influence both in and through its distribution and customers should be included”
“Publication tends to coincide with the financial reporting process, making complete information available for both financial and many other stakeholders at the same time.”

**Include standard disclosures**
GRI defines several other standard disclosures which are useful for stakeholders and could therefore be reported on.

**Strategy and profile**
Disclosures that set the overall context for understanding organizational performance, such as its strategy, profile, and governance.

**Management approach**
Disclosures that cover how an organization addresses a given set of topics in order to provide a context for understanding performance in a specific area.

**Performance indicators**
Indicators that elicit comparable information on the economic, environmental, and social performance of the organization.

**Focused sustainability report**
The report can be published in hard copy and/or online formats and publication tends to coincide with the financial reporting process, making complete information available for both financial and many other stakeholders at the same time.

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2 GRI, Sustainability Reporting Guidelines, version 3.1, 2011
KPMG view on sustainability reporting systems

To be able to react and create sustainable value in a rapidly changing market and society, organizations need to have control over the necessary information. As explained in the previous chapter, the characteristics of a sustainability reporting system largely depend on an organization’s sustainability ambitions. Based upon strategic choices, relevant requirements for the reporting system can be decided upon, such as functionality, costs, implementation, flexibility.

Three phases of reporting system solutions
Organizations typically operate in three phases to capture, aggregate and transform sustainability data into information to make processes transparent and manageable:

- Office software, such as spreadsheet applications. The majority of companies start off using these easily accessible solutions, but quickly realizes the limitations of this approach.

- Dedicated sustainability reporting software. A next step is a dedicated sustainability system, focusing on capturing, aggregating and managing sustainability facts and figures.

- Fully integrated reporting in or with ERP systems linked with HR, supply chain and environment, health and safety processes.

In the pioneering phase, gaining insight into sustainability performance is the main motive for reporting on sustainability. It is often done based on standard Microsoft® Office applications (like Microsoft Excel and Access). This approach has limitations in the field of maintainability and integrity of the data when organizations change and extend their sustainability reporting.

An intermediate stage before taking the next step towards a dedicated sustainability reporting package could also be the integration of sustainability reporting in the existing financial consolidation application (e.g. Oracle® Hyperion® or OutlookSoft® SAP® BPC™). Although the sustainability reporting is then integrated with financial figures, the capturing, aggregation and transformation of the sustainability data are not fully covered in these kinds of solutions and still rely on a manual process.

In the second phase, focus extends to not only capturing, transforming and providing insights into the performance, but also acting on these insights, providing structural internal and external reports and being ranked in the leading standards (e.g. Dow Jones Sustainability Index, Carbon Disclosure Project). There is a central focus on sustainability reporting and often there is a dedicated sustainability report system or a separate ERP module in place.

The last phase focuses on integrated management reporting of CSR. Sustainability and financial performance reporting is integrated with the regular planning and control reporting cycle. Companies aim to give insight into the relationship between CSR activities and financial performance. These relationships may be shown in the form of an integrated financial and sustainability report. Often the sustainability reporting module in ERP is fully integrated with all the relevant (ERP) data and (ERP) processes for capturing and aggregating sustainability reporting requirements (HR, supply chain and environment, health and safety processes).

“The majority of companies starts off using easily accessible solutions like spreadsheets, but quickly realize the limitations of this approach.”
ERP environment. A vision on ERP and business intelligence (BI) is important input for the selection process, especially for phases two and three. Discussions on – for instance – cloud computing vs. onsite installation and ‘ERP unless’ vs. niche market should be taken into account.

Based on the sustainability reporting objectives, the to-be situation of sustainability reporting systems and the current IT infrastructure, organizations can make a translation to the sustainability reporting system which bests fits their organization.
Market review for sustainability reporting systems

The following paragraph provides more insight into the vendors that are operating in the sustainability reporting software market. Furthermore, this market review zooms in on how these players position themselves in the market and how they differentiate between their peers. This is done by providing a broad range of sustainability features in different modules and by providing high-end solutions which can be adapted in order to assess, measure, track to the specific industry, national or international standard, and treaties or protocols. Other capabilities used in order to differentiate from their peers include:

- Integration capabilities with other software or ERP systems;
- Web-based functionalities in order to have the flexibility to access the information anytime, anywhere;
- Low maintenance costs, as some vendors provide only SaaS solutions (sustainability in the cloud).

An overview of sustainability reporting packages
Our market review focuses on software packages that cover sustainability reporting features in addition to standard financial reporting functionalities. In or after 2008 76% of the packages were introduced (new players as well as new releases), while the remaining 24% was introduced between 2005 and 2008.

Almost 89% of the packages are suitable for small-sized companies (<25 employees), while 94% of the packages are suitable for 25 - <100 users. All packages are suitable for 100 or more users.

Also, the packages are applicable within various sectors (e.g. aviation, agriculture, energy, shipping, industry, real estate and transportation).

More than 82% of the packages have worldwide coverage and all packages offer English language. Nevertheless, packages that do not have worldwide coverage do cover key markets in the Netherlands, UK, North, Central and South America.

Table 1: Packages included in our review

<table>
<thead>
<tr>
<th>Package Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CA® Technologies</td>
<td>CA® ecoSoftware</td>
</tr>
<tr>
<td>CRedit360 Ltd</td>
<td>CRedit360</td>
</tr>
<tr>
<td>CSR Nordic ApS</td>
<td>CSR-System</td>
</tr>
<tr>
<td>CSRWare,® Inc.</td>
<td>Sustainability Resource Management (SRM)</td>
</tr>
<tr>
<td>Dakota Software Corp.</td>
<td>ProActivity Suite</td>
</tr>
<tr>
<td>dmStrategists, LLC.</td>
<td>SBP360</td>
</tr>
<tr>
<td>e3 Solutions Inc.</td>
<td>Carbon Management Tools – e3CAT, e3Clip and e3 ECM</td>
</tr>
<tr>
<td>Enablon®</td>
<td>Enablon SD</td>
</tr>
<tr>
<td>Hara Software Inc.</td>
<td>Hara Environmental and Energy Management (Hara EEM)</td>
</tr>
<tr>
<td>Locus Technologies</td>
<td>Locus ePortal, Locus RMM (Resource Management Module)</td>
</tr>
<tr>
<td>Oracle®</td>
<td>JD Edwards EnterpriseOne Environmental Accounting &amp; Reporting</td>
</tr>
<tr>
<td>Oracle®</td>
<td>Oracle Environmental Accounting &amp; Reporting</td>
</tr>
<tr>
<td>Oracle®</td>
<td>Sustainability Reporting Starter Kit for Oracle® Hyperion® Financial Management</td>
</tr>
<tr>
<td>SAP®</td>
<td>Sustainability Reporting and Analytics Solutions</td>
</tr>
<tr>
<td>SAS®</td>
<td>Sustainability Reporting</td>
</tr>
<tr>
<td>Systar Pty Ltd</td>
<td>iSystain™</td>
</tr>
<tr>
<td>WeSustain GmbH</td>
<td>WeSustain Enterprise Sustainability Management (ESM)</td>
</tr>
</tbody>
</table>

"More than 82% of the packages have worldwide coverage and all packages offer English language."
A small number of vendors were not able to participate in the market review. In total 17 packages are included in our review, which are found in table 1.

**Functionality**
Data on sustainability performance can be used by various stakeholders. Internally, the data can be used to provide management with information on progress on annual targets and strategic decisions, HSE departments with quarterly performance updates and procurement with insights into the performance of suppliers.

External stakeholders can be informed about possible future scenarios and projections, including current and historical facts and figures. Functionalities of a system can be designed to provide output that suits these needs. We found that the majority of the packages cover at least the basic functionalities within sustainability reporting.

Detailed annual assessment is supported by all the packages. Also, strategic implementation, monitoring & reporting, scenario analysis projections and decision and engagement tools are supported by more than 82% of the packages. An explanation for this can be that these functionalities cover the general needs for the majority of the stakeholders.

More specific functionalities are covered by fewer packages. Automatic data collections from meters can be useful for e.g. the chemical sector, linking daily performance on sites directly with continuous monitoring at various levels. For other sectors, in which meter readings are not primary input, this functionality is less applicable. As a result, more specific needs are covered by fewer packages. Bottom of the list contains the most specific functionalities. Weather event recording is only supported by 24% of the packages.

In addition, life cycle assessment and clean development mechanism (CDM) tools are supported by only a small number of the packages, which makes sense due to their complex character. Life cycle assessment is normally based on large packages of background data and assumptions; CDM tools likewise require detailed input to generate complete and accurate outcomes.

An overview of the functionalities supported by the packages in our review is illustrated in figure 4.
“LCA and CDM tools are only supported by a limited number of packages”

Figure 4:
Functionality supported by packages

- Detailed annual assessment
- Strategic implementation
- Monitoring and reporting
- Scenario analysis
- Projections
- Decision and engagement tools
- Workflow management
- Risk assessment
- Guidelines and data resource
- Financial analysis & costing
- Automatic data collection from meters
- Supply Chain analysis
- Simple estimate
- Guidance
- Carbon offsetting
- CDM Tools
- Life cycle assessment

Percentage of Packages that include Functionality

0% 20% 40% 60% 80% 100%

Functionality Available
Figure 5:
Functionality – Integration Matrix

Functionality – Integration Matrix
To compare the packages in our review, a ‘functionality – integration matrix’ has been created, which gives an overview of the packages in our review. Within the matrix, a distinction is made at two levels.

The first dimension involves the functionalities as described in the previous section. With respect to software packages providing multiple functionalities, coverage is indicated in the matrix as ‘broad’. A software package that contains one (or a few) functional features, representing a specific sub-process in a main process flow is indicated in the matrix as ‘deep’. Whether a package has a ‘broad’ or ‘deep’ orientation is illustrated on the Y-axis. Secondly, we distinguish between ‘fully integrated ERP’ and ‘dedicated sustainability packages’. The ‘integrated ERP packages’ offer the possibility to fully integrate in the company’s ERP system. The packages of SAP, Oracle and JD Edwards offer this functionality. The sustainability package of e3 Solutions, Enablon, We Sustain and iSystain offer direct interfaces with such ERP systems, and are therefore found to be more integrated than the packages that offer XML or EDI formats to integrate.

“External stakeholders can be informed about possible future scenarios and projections, including current and historical facts and figures.”

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### Figure 6:
Setting report boundaries options per package

<table>
<thead>
<tr>
<th>Sustainability Reporting Starter Kit for Oracle Hyperion</th>
<th>100%</th>
<th>80%</th>
<th>60%</th>
<th>40%</th>
<th>20%</th>
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<td>60%</td>
<td>40%</td>
<td>20%</td>
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<tr>
<td>CSR - System</td>
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<tr>
<td>Enablon SD</td>
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<td>Credit360</td>
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<td>80%</td>
<td>60%</td>
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<tr>
<td>Sustainability Resource Management (SRM)</td>
<td>100%</td>
<td>80%</td>
<td>60%</td>
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<tr>
<td>iSystain</td>
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<tr>
<td>CA ecoSoftware</td>
<td>100%</td>
<td>80%</td>
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<tr>
<td>SAP's Sustainability Reporting and Analytics Solutions</td>
<td>100%</td>
<td>80%</td>
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<tr>
<td>Carbon Management Tools - e3CAT, e3Clip and e3 ECM</td>
<td>100%</td>
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<tr>
<td>SBP 360</td>
<td>100%</td>
<td>80%</td>
<td>60%</td>
<td>40%</td>
<td>20%</td>
</tr>
<tr>
<td>Locus ePortal, Locus RMM (Resource Management)</td>
<td>100%</td>
<td>80%</td>
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<tr>
<td>WeSustain Enterprise Sustainability Management</td>
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<td>80%</td>
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<tr>
<td>Oracle Environmental Accounting &amp; Reporting</td>
<td>100%</td>
<td>80%</td>
<td>60%</td>
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<tr>
<td>Hara Environment and Energy Management (Hara)</td>
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Another distinction is made for the packages that do contain possibilities to integrate with MS Data Integration Server or Microsoft Excel (or any other integration possibilities), for example, the DM Strategists package. On the X-axis, in figure 5, the distinction is made depending on the integration possibilities of the packages. The matrix is based on the answers following from the questionnaire.

**Report format**
Reporting formats are required to transform various indicators and topics into formats that suit the information needs of stakeholders.

By following the indicators below, we find that the packages cover a great deal of reporting possibilities as standard. Most of the packages cover all the possibilities, with the exception of one package that covers four out of the five possibilities:

- Is there a function to administer the external information supply?
- Is there a possibility to graphically display management reports?
- Is there a possibility to create standard management dashboards?
- Does a list or report generator come as standard?
- Can reports be exported to MS Word and MS Excel?

**Set report boundaries**
Step 3 in the sustainability reporting process is to clarify the boundaries of the organization to guarantee complete and accurate data collection. As this mainly depends on the nature of the activities, the organizational structure and the relevant sustainability topics, there is no distinctive characteristic between the packages (figure 6). In practice, setting boundaries should be done in close consultation with financial controlling departments. These departments have good insight into understanding the organizational structure and experience in collecting and reviewing data within strict timelines. In addition to this, financial and sustainability should be aligned to ensure proper presentation, which can be understood by external stakeholders.

**Include standard disclosures**
The next step in the sustainability reporting process is to define relevant indicators. In line with the GRI guidelines we requested the providers to indicate which indicators are available as standard in the packages. The indicators were taken from the GRI standard indicators focusing on various topics and subtopics in the fields of Economic, Environmental, Social, Human Rights, Society and Product Responsibility.

**Economic**
Indicators included the presence of standard entries for financial implications for the organization’s activities due to climate change and standard entries for significant financial assistance received from the government.

**Environmental**
This topic was divided into 19 questions. We focused on several points of interest in the field of, for example, materials, energy, water, emissions and biodiversity.

**Social**
The subtopics for the social category focused on standard entries regarding employees, broken down by a couple of different indicators (such as gender, age or contract). Health and safety indicators were also covered in this topic, as well as training and education of employees.

**Human rights**
The indicators for this topic focused mainly on standard entries for discrimination issues, child labor issues, supplier and human rights issues.

”Financial and sustainability should be aligned to ensure proper presentation, which can be understood by external stakeholders.”

”Most of the packages cover all the reporting possibilities”.

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Sustainability Reporting Systems

To gain insight into the social coverage of the packages, six questions were included covering this topic. For example, we asked whether the package includes standard entries for the number of actions taken in response to incidents of corruption.

Product responsibility

Our questionnaire also included questions regarding product responsibility. We asked whether standard entries for ‘green products and services’ and for health and safety assessment procedures were available in the package. The outcomes of this analysis show a significant variety in functionality. Please see figure 7 for the detailed outcomes of the analysis.

Publication of the report

The last step in the sustainability reporting process is to publish the report. As the possibilities for export of the report have already been analyzed in paragraph Report Format, we find that the final reporting processes (hard copy / online format / timing) are managed outside the system.

Other insights

The research shows some other relevant trends and insights in the area of (IT) infrastructure. The different systems in the IT market can be divided into stand-alone packages and packages that are part of a larger ERP system. All packages have the capability of a web interface, and some solutions do not even need a local client installation, as they are entirely in ‘the cloud’. More than 82% of the packages can be accessed on mobile devices.

In most cases the systems provide industry-wide accepted features, such as audit trails, evidence gathering and validation checks. License fees and structures available in the market differ. This makes it difficult to get an overall perspective of the cost effectiveness. Many packages have extensive reporting options that can be used without having any knowledge of the underlying data model. Almost all systems (94%) can be tailored to client-specific requirements. Depending on the size and impact of the system, the average implementation time is between one and three months.

Nearly all systems offer possibilities to implement a broad range of indicators and accompanying data collection/ reviewing processes. In addition, the options to report the data in the best information reporting formats are comparable.

All packages have the option to tailor their system to the GRI specifications, being the leading standard output format. In addition to the GRI related output, a wider range of industry-specific outputs is found. It is interesting to see that 53% of the packages are yet applicable to more specific guidelines, of which the main focus is on carbon and other GHG emissions. Overall, most packages offer broad functionalities, adding value by providing solutions which can be relatively easily adapted for fast implementation.

“Most of the systems provide industry-wide accepted features, such as audit trails, evidence gathering and validation checks.”

“Some solutions do not even need a local client installation, as they are entirely in the cloud.”
In recent years, organizations have greatly improved their management and their provision of financial and other information with the aid of IT systems. The advantages of using these systems are manifold: standardization of processes, better management information and a reduction of management costs. Although information technology offers great opportunities for achieving efficiency gains and reinforcing your global presence, it involves significant risks. KPMG has extensive knowledge regarding IT systems and various industries. We work with specialized advisors that combine these different fields of expertise. When advising you on the selection, implementation or assurance of systems and processes, they take into account the necessary aspects, including technical IT to end user requirements.

**KPMG Sustainability**

As sustainability and climate change issues, such as corporate responsibility reporting, move to the top of corporate agendas, KPMG can assist you to better understand the complex and evolving environment and help you optimize your sustainability strategy. KPMG’s Climate Change and Sustainability Services (CC&S) professionals provide sustainability and climate change assurance, tax and advisory services to organizations to help them apply sustainability as a strategic lens to their business operations. We have more than 25 years’ experience working with leading businesses and public sector organizations, which has enabled us to develop extensive relationships with the world’s leading companies and to contribute to shaping the sustainability agenda.
Word of thanks

We would like to thank all the different parties involved in this paper. We would especially like to thank the software vendors who provided valuable insight for this article: CA Technologies, CRedit 360 Ltd, CSR Nordic ApS, CRSware Inc., Dakota Software Corp, dmStrategists, LLC, e3 Solutions Inc, Enablon, Hara Software Inc., Locus Technologies, JD Edwards, Oracle, SAP NL B.V., SAS, Systar Pty Ltd., WeSustain GmbH.

“Complicated problems faced by our clients require a multidisciplinary approach that helps them cut through complexity”
## Quotes

In the questionnaire, we offered the software vendors the possibility to tell us what is unique about their system. Please find below some quotes, provided by the software vendors.

<table>
<thead>
<tr>
<th>Vendor</th>
<th>Quote</th>
</tr>
</thead>
<tbody>
<tr>
<td>CA ecoSoftware</td>
<td>&quot;CA ecoSoftware offers the “Ability to do program and sustainability project portfolio management for the selection and management of the sustainability program (...) with a high degree of flexibility to workflows, processes, and business needs.”</td>
</tr>
<tr>
<td>CRedit360</td>
<td>&quot;Credit360 was designed by sustainability professionals to meet the complex and unique demands of sustainability data management and reporting (...) and offers a flexible tool which facilitates data collection and reporting against the full breadth of sustainability issues.”</td>
</tr>
<tr>
<td>CSR System</td>
<td>CSR System offers a combination of fast data availability, a simple and intuitive interface and a simple set-up, full audit trail, resulting in a low total cost of ownership.</td>
</tr>
<tr>
<td>Sustainability Resource Management (SRM)</td>
<td>“Our primary focus is to provide a flexible, low-priced, quick-to-implement solution our customers can grow with overtime.”</td>
</tr>
<tr>
<td>ProActivity Suite</td>
<td>“ProActivity Suite offers “integration of regulatory topics within the software.”</td>
</tr>
<tr>
<td>SBP360</td>
<td>“SBP360 was designed for effectiveness, adaptability, scalability, and affordability across industry sectors.”</td>
</tr>
<tr>
<td>Carbon Management Tools - e3CAT, e3Clip and e3 ECM</td>
<td>“E3 Carbon Management Tools includes, among other things, the following functionalities: “Multiple Organizational Hierarchies, Near Real-Time Tracking and Reporting, Client-specific Key Performance Indicators (KPIs), Fully Auditable System of Record and Accurate, automated and defensible Carbon Accounting.”</td>
</tr>
<tr>
<td>Enablon SD</td>
<td>“Enablon SD is “a robust, highly flexible and comprehensive sustainability reporting solution to help companies collect, monitor and report the various sustainable development metrics with full transparency and audit ability.”</td>
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<th>Service Provider</th>
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<tbody>
<tr>
<td>Hara EEM (Hara Environmental and Energy Management)</td>
<td>“Hara EEM offers a set of unique functionalities including Best Practices Content, A Smart Meter integration, Data Validity Checking possibilities, and a Facility Manager fast entry screen.”</td>
</tr>
<tr>
<td>iSystain</td>
<td>“iSystain offers a performance measurement facet applied to entire suite, including a responsive UI, Translation editor that supports a corporate standard language; incredibly saleable and affordable.”</td>
</tr>
<tr>
<td>JD Edwards EnterpriseOne Environmental Accounting &amp; Reporting</td>
<td>“Fully integrated into JD Edwards EnterpriseOne Financials with market-leading Oracle Business Intelligence Enterprise Edition data warehouse and pre-built dashboards.”</td>
</tr>
<tr>
<td>Locus ePortal, Locus RMM (Resource Management Module)</td>
<td>“100% web-based, integrated platform for compliance, environmental and sustainability management.”</td>
</tr>
<tr>
<td>Oracle Environmental Accounting &amp; Reporting</td>
<td>“Fully integrated into Oracle E-Business Suite Financials with market-leading Oracle Business Intelligence Enterprise Edition data warehouse and pre-built dashboards.”</td>
</tr>
<tr>
<td>Sustainability Reporting Starter Kit for Oracle Hyperion Financial Management</td>
<td>“Integrates Sustainability Reporting with Financial Reporting”</td>
</tr>
<tr>
<td>SAP’s Sustainability Reporting and Analytics Solutions</td>
<td>“Full integration with GRI indicators, Integration with SAP backends, auditability, etc.”</td>
</tr>
<tr>
<td>SAS Sustainability Reporting</td>
<td>“SAS Sustainability Reporting has the most mature and sophisticated capabilities for integrating disparate data regardless of source and forecasting future performance for individual or aggregate programs.”</td>
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<tr>
<td>WeSustain Enterprise Sustainability Management (ESM)</td>
<td>“Our modular and easy-to-use software not only provides support for efficient and reliable sustainability reporting, but also provides solutions for all relevant functions beyond reporting to support effective sustainability management.”</td>
</tr>
</tbody>
</table>
The information contained herein is of a general nature and is not intended to address the circumstances of any particular individual or entity. Although we endeavor to provide accurate and timely information, there can be no guarantee that such information is accurate as of the date it is received or that it will continue to be accurate in the future. No one should act on such information without appropriate professional advice after a thorough examination of the particular situation.