



**Product name:** Envizi (formerly: Enterprise Sustainability Platform)  
**Company name:** Envizi (formerly: Global Carbon Systems)  
**Product review date:** September 2012  
**Review Update:** November 2013

## SOFTWARE EVALUATION SUMMARY



| Features                                                                | Outcome | Assessment Highlights                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
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| <b>Set-up, navigation and consolidation of organization and sources</b> | ●       | <p>Envizi's team deploys a formally structured process to engage with new customers, provide training, set up the system and create processes to upload relevant company data in the system. The set-up must be done by Envizi's team or and Envizi services partner. The software can support multiple consolidation approaches, and combinations thereof, including Joint Ventures.</p> <p>Envizi's team states that its standard practice is to work with clients to determine reporting needs, the emission factors (EF) and <i>GHG body</i> (this is the terminology used by Envizi for: 'source of EFs') to use for each customer.</p> <p>During set up, Envizi's team activates functionalities, including <i>account styles</i> and <i>reports</i>, on a customer by customer basis, tailoring the system set-up to the customer's needs (e.g. a financial institution in the U.S. would not see account styles relevant for industrial emissions or reports that are not relevant for the U.S. market).</p> |
| <b>GHG gases, sources and scopes</b>                                    | ●       | <p>The software covers the 7 Kyoto GHGs, supports common emissions sources and enables separate calculations for scope 1, scope 2 and scope 3 emissions, for the organization as a whole and for individual facilities or organizational units.</p> <p>Envizi includes a library of over 400 <i>account styles</i>. <i>Account styles</i>, together with <i>Utility types</i> are used to represent different types of GHG emission sources, e.g. by: differentiating between sources and sinks, associating a scope, creating indicators against which emissions can be rated (e.g. to calculate GHG emissions per m<sup>2</sup> in buildings, per unit of production in industrial facilities, etc.), specifying if and when the account is used (e.g. in which report it should or should not be used).</p>                                                                                                                                                                                                       |



| Features                                                 | Outcome | Assessment Highlights                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
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| <b>Activity data</b>                                     | ●       | Envizi supports several approaches to upload customer data, including through <i>Connectors</i> , which process information from different sources (email, ftp, IP messages) and read and parse through different file formats (e.g. xls, csv, txt and word documents). The <i>meters</i> module enables the automatic collection of data from meters, including electricity smart meters, at short intervals. Envizi directly links to smart meters, receiving data updates at 15 minutes intervals and performing tariff validation tasks. The system's ability to automatically capture, assess, manage and process smart meter data, and data coming from other sources (via data automation), is distinctive.                                                                                                                                                  |
| <b>Availability and use of emission factors and GWPs</b> | ●       | The system includes an Emission Factor database and an Emission Factor selection process, designed to identify the most appropriate emission factors available for each calculation (custom specific > city/provincial level > national level > continental level > earth). The system supports the creation of custom emission factors. Typically Envizi's team works together with the clients to determine the EFs and the source of EFs to use. The initial creation of custom emission factors can only be done by Envizi's team. Once the custom emission factor database is set up, users can manage their emission factors independently. Clients must provide their own assurance about the appropriateness of the choices made and, ultimately, the calculations results.                                                                                 |
| <b>GHG emissions calculations</b>                        | ●       | Using a case study dataset we calculated emissions for a fictitious company and benchmarked the software's output against the output of GHG Protocol tools. Upon testing the software produced accurate results in accordance with the methods in the GHG Protocol                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>GHG emissions reporting</b>                           | ●       | <p>Envizi's dashboard provides users with a flexible tool to analyze GHG inventory data. The system includes various dashboard templates (available through a <i>dashboard selection</i> page). Each dashboard shows multiple graphs (or tables) in one web page and enables users to analyze inventory data from a variety of perspectives through the ability to select the variable, time period, KPI and organizational sub-unit displayed.</p> <p>80+ different reports can be made available to the users in addition to a library of <i>report templates</i>, which enable users to create personalized report formats.</p> <p>The system enables the creation of benchmarks and key performance indicators (KPIs) and produces reports and dashboard screens to track performance and progress, including by create rankings vs. the KPIs.</p>              |
| <b>Targets, policies and programs</b>                    | ●       | <p>The system includes <i>Targets</i> and <i>Programs</i> modules, where users can create emission reduction scenarios/plans and program activities. In each of these modules, and for each of the targets or programs created, the system prompts users to include a description. More general descriptions or company policies could be included using the <i>Notes</i> functionality.</p> <p>The <i>target</i> module enables the creation of (typically top down) targets and includes <i>model scenario</i> functionalities. The <i>Programs</i> module enables the creation of action plans and the monitoring of their progress over time, also at local level (e.g. this functionality may be used by facility managers of individual facilities). The program module links to billing or meter data to provide measurement and verification reporting.</p> |



| Features                                       | Outcome | Assessment Highlights                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
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| <b>Uncertainty analysis capability</b>         | ●       | <p>Users requiring uncertainty calculations need to communicate this requirement during implementation.</p> <p>The system has the ability to estimate the uncertainty related to emission factors, activity data and energy content for all scope 1 emission sources, provided the uncertainty information is available.</p> <p>The system calculates a 'confidence factor' for individual activity data entered in the calculations, according to a methodology devised by Envizi. The confidence factor is used to indicate the accuracy of the emissions calculated based on 3 factors: quantity of historical data, variability of actual data and ratio of accrued to actual data.</p> <p>In principle the system can estimate uncertainty values for scope 2 and scope 3 emissions, but at the time of the evaluation, no customer had required such analysis and Envizi had not collected the relevant uncertainty parameters.</p> <p>A number of existing clients report uncertainty according to the NGER Uncertainty methodology.</p> |
| <b>Workflow management functionality</b>       | ●       | <p>The system includes pre-set workflows for data approval, surveys and utility bill verification. If workflows are implemented, managers can set up roles for different users and the system automatically runs rules and generates alerts.</p> <p>The system includes functionality to track the details of users who capture or change data manually. If review and approval workflows are used, the changes made and the approval statuses are recorded. These records can be viewed in <i>reports</i> as well as in the <i>data review</i> tab.</p> <p>Notes, documentation and records of task approvals and audits are stored by the system. Documentation of training must take place outside the platform.</p> <p>The information on the person responsible for the overall inventory (or parts thereof) can be recorded in the system. The system does not require or prompt the user to enter this data.</p>                                                                                                                         |
| <b>Quality assurance &amp; quality control</b> | ●       | <p>The software provides <i>Data Variance</i> reports that identify variances (in activity data) from historical averages and other exceptions and outliers. With manual data capture, rules can be setup, to identify variances and outliers and to stop (or warn) the capture of data that might be wrong. Additional reports available include: <i>Missing Data</i>, <i>Data in Arrears</i> and <i>Incomplete Data</i>.</p> <p>The software allows access to third party verifiers but the documentation of their work takes place out-of-system. Verifiers have access to the emissions calculation tables, which are not normally available to the standard user. These tables will display activity data and emission factors used. Verifiers also have access to reports that detail anomalous or missing data (automatically flagged by the system according to general system rules) and can access the <i>audit history</i> information to verify changes in individual records over time.</p>                                        |



| Features                                     | Outcome | Assessment Highlights                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
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| Tracking and documenting choices and changes | ●       | <p>The software records the user, date and time of all data entry and data changes. All changes are kept in record and visible to the user.</p> <p><i>Notes</i> fields are readily available in the system and, if desired, users can use such fields to document decisions and changes. With the possible exception of explanations for changes in consolidation approach, the system can support the documentation of most decisions concerning the inventory, e.g. related with: organizational boundaries, operational boundaries, quantification method, emissions factors, activity data. The system, however, does not produce 'ready to use' reports summarizing such changes.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Ease of use                                  | ●       | <p>Overall the software interface is user-friendly, the main command tabs are clearly visible and their labels generally provide a clear indication of the functionalities available. A <i>search</i> functionality enables searches by <i>meter</i>, <i>account</i> or <i>location</i>. An <i>explore organization</i> functionality provides a way to navigate the organization and to zoom-in to a desired organizational level (e.g. selecting a specific country or facility). The dashboard provides users with added flexibility and tools to analyze GHG inventory data and we found it straightforward to use. A possible drawback of the system is its complexity. Users have to learn, remember, navigate, and use appropriately a large set of functionalities and the specific rules and procedures embedded in the system (Envizi's way of 'thinking' about GHG management). The large number of functionalities available to users may become difficult to manage, especially for inexperienced users. E.g. during the first hours of use, the tester found it easy to 'lose track of where he was' in the organization (e.g. obtaining reports about an individual facility rather than the whole organization or vice versa).</p> <p>Envizi's team seems aware of this possible drawback and has created a structured process to introduce new customers to the software and help with an initial training and 'handholding'. Moreover system functionalities are activated on a customer by customer basis, tailoring the system set-up to the customer's needs, thus reducing complexity. Finally Envizi introduced new dashboard functionality in 2013, to streamline and facilitate data query.</p> |
| Training, documentation and support          | ●       | <p>The company has a well-structured customers' engagement process, which includes several training modules delivered at several stages during the initial phases of: system configuration and set-up, establishing ongoing data processes and historic data load. Users are provided with an Envizi product manual, which provides a good overview of the product and of its main functionalities. Initial training and manual were sufficient for the tester to start using and exploring Envizi.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |



## GENERAL COMMENTS:

Envizi is a well-established supplier with offices in New York and Sydney as well as partner representative offices in the UK, Singapore, Hong Kong and South Africa. Envizi has customers locations in 112 countries. Customers include major multinationals (e.g. Canon, Deloitte, Microsoft). The company estimates that, combined, customers operate Envizi in about 70,000 locations. Envizi is commercialized and implemented independently or in partnership with a number of *solution partners*.

The software includes a variety of modules and can support a broad array of GHG emission calculations (*Account types* in Envizi's terminology). The software platform was built in 2004 for smart meter data management. Envizi's ability to automatically capture, assess, manage and process smart meter data, and data coming from other sources (via data automation), is distinctive. Another strength of the system is the large number of functionalities it supports and the multiple tools available to the users.

A possible drawback of the system is its complexity, as the large number of functionalities available to users may become difficult to manage, especially for inexperienced users. Envizi tries to prevent and address this risk by playing an active role in the management of the users' set up, tailoring the system to specific user needs (limiting the functionalities visible to the customer) and providing extensive training during early implementation stages.

On balance, the system's appears well suited for large organizations and multi-nationals that need to manage significant complexity.

**ENVIZI COMMENTS:**

*This space is made available to the software provider to add, if desired, comments on GHGMI's review process or outcome. The statements below reflect the views of the software provider alone. GHGMI cannot express any opinion on the comments below, as they were not assessed by GHGMI during the software review process.*

Envizi acknowledge that the enterprise nature of the platform is not always ideally suited to small organizations or infrequent users of the system. To address this we are undertaking a major User Experience project and expect to address these concerns in a Q3 2014 release.