

**INTEGRATION OF SUSTAINABILITY PERFORMANCE REPORTING AND  
XBRL**

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# Purposes

Examine the emergence of business sustainability performance, reporting and assurance in corporate reporting.

Examine the emergence of Extensible Business Reporting Language (XBRL) in corporate reporting.

Explore the use of XBRL in sustainability reporting

Discuss all five dimensions of sustainability performance including: economic, governance, social, ethical, and environmental (EGSEE) with a keen focus on economic sustainability performance.

suggest a model that integrates XBRL into all EGSEE dimensions of sustainability performance reporting by applying several existing taxonomies for financial and non-financial information relevant to the dimensions of sustainable performance.

# Corporate Sustainability: Winner of 2013 Axiom Gold Award

*Corporate Sustainability* explores business sustainability and accountability reporting and their integration into strategy, governance, risk assessment, performance management, and the reporting process. Written by renowned experts in the field of managing for sustainable performance, this important book also highlights how people, business, and resources collaborate in a business sustainability model.

A significant contribution on how to put sustainability principles to work, *Corporate Sustainability* offers real-life tools and practices for creating an authentic corporate framework for sustainability.

Joel Makower writes, “Companies seeking to embrace sustainability must navigate a thicket of policies and standards, from ethical performance to environmental protection to executive compensation – and do so transparently, comprehensively, and globally. Ann Brockett and Zabihollah Rezaee have created a valuable field guide to this brave new world of multiple bottom lines, providing guidance on how companies can engender public trust and investor confidence while pursuing their economic goals.”

## Corporate Sustainability

Integrating Performance and Reporting



Ann  
Brockett

Partner, Ernst & Young LLP

Zabihollah  
Rezaee

Professor of Accountancy,  
University of Memphis

# Business Sustainability, Greenleaf, October 2015

## Review by O.C. Ferrell:

Rezaee takes a more inclusive approach to sustainability performance and reporting by recommending that businesses use a multiple bottom line (MBL) approach rather than the more basic triple-bottom line approach. An MBL approach examines economic, governance, social, ethical, and environmental performance of an organization's activities to determine sustainability. This approach expands the definition of sustainability beyond environmental or economic indicators to advocate for a holistic methodology that factors in the well-being of the organization and its impact on stakeholders.

## Review and Interview by Forbes:

The review and interview conclude that business sustainability is about creating the right balance of short and long-term continuous improvement of both financial economic sustainability performance (ESP) and non-financial environmental, social and governance (ESG) sustainability performance. The interview can be found online at [Forbes](#)

## BUSINESS SUSTAINABILITY

Performance, Compliance, Accountability and Integrated Reporting

ZABIHOLLAH REZAEI



# Importance of Business Sustainability

- Demanded by Investors
- Mandated by regulators
- Reported by companies
- Now more than 8,000 global public companies disclose their ESP and ESG
- 6,000 European Companies will be required to disclose ESG and diversity, in 2017
- Hong Kong listed companies are now required to disclose both ESP and ESG (2015 and onwards).
- Business sustainability is advancing from greenwashing and branding to, very recently, business imperative

# Sustainability Framework

- Definition
- Create shared value for all stakeholders
- The main goal and objective function is to maximize firm value
- Time horizon
- Multidimensional nature of sustainability performance in all EGSEE areas
- Tensions among EGSEE

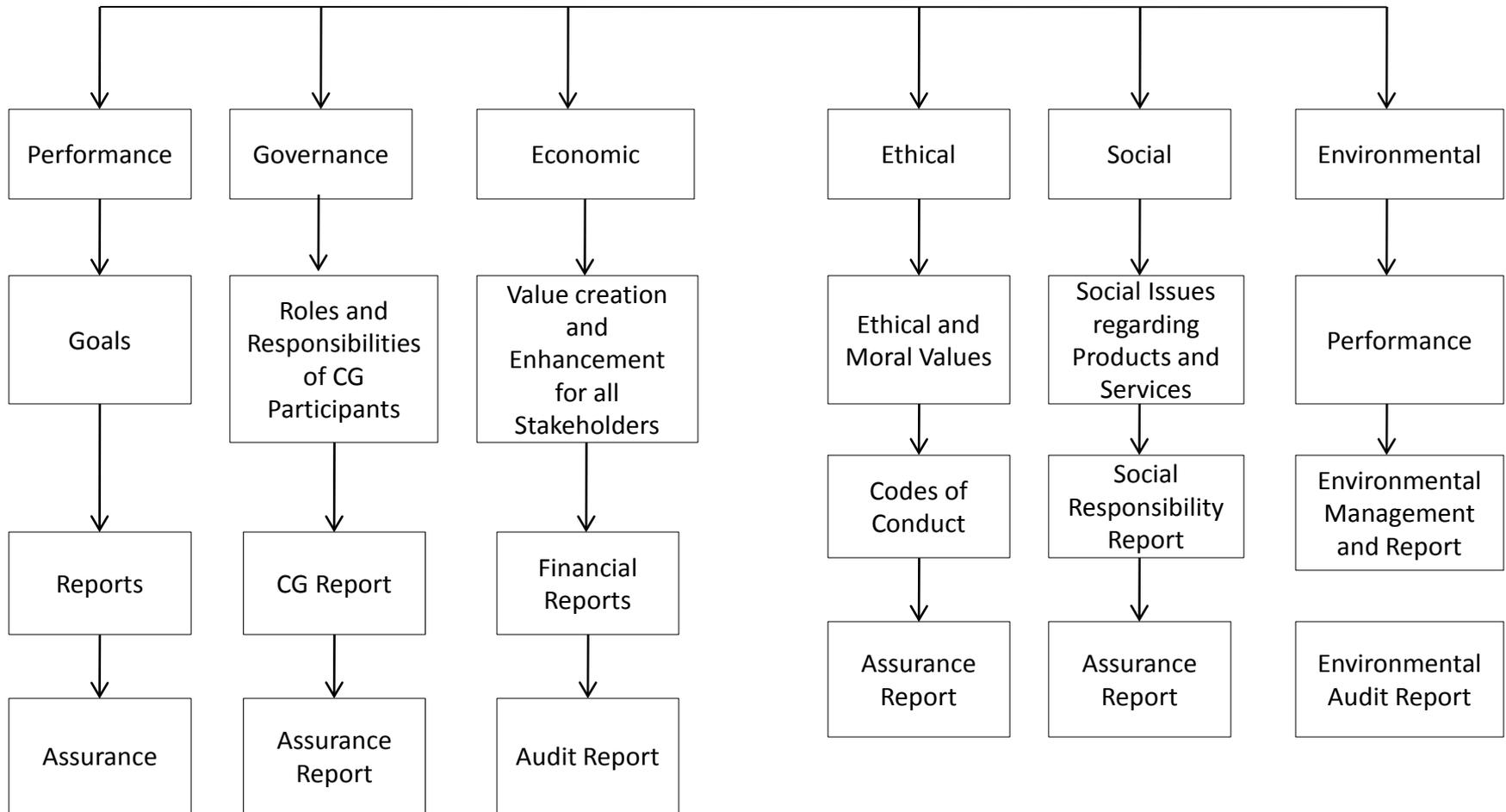
# Tensions Between ESP and EESG Sustainability Performance

- ESP and EESG can complement/complete each other or compete/conflict each other.
- Tensions can also exist among different dimensions of EESG sustainability performance.
- The most severe tension (and thus potential conflict of interest) is between the financial and non-financial dimensions of sustainability performance.
- Consideration of non-financial EESG sustainability activities can create both synergies and conflicts.

# Definitions: Triple Bottom Line

- **Some definitions focus on protecting the “triple bottom line”.**
  - Human impact...      **➡ People**
  - Environmental impact... **➡ Planet**
  - Financial impact...      **➡ Profit**
- **Sustainability means balancing these interests for long-term success.**

# Entity Performance



# Sustainability Promoting Organizations

Several Organizations are currently promoting sustainability including:

**The Global Reporting Initiative (GRI), 2013G4** sustainability guidelines, promotes integrated reporting on the five EGSEE dimensions of sustainability performance with the ethical dimension being incorporated into other dimensions.

<http://www.globalreporting.org/>

**The International Integrated Reporting Council (IIRC)**, in 2013 developed the International Integrated Reporting Framework

<http://www.theiirc.org/consultationdraft2013>

**Sustainability Accounting Standards Board (SASB)** is currently developing sustainability accounting standards intended to assist public companies in disclosing material sustainability issues for the purpose of mandatory filings to the SEC, such as the Form 10-K and 20-F through the first quarter of 2015.

<http://materiality.sasb.org>

# Sustainability (ISO) Standards

- ISO 9,000: Provides a set of requirements for a quality management system to improve quality of products and services.
- ISO 14,000: Addresses various aspects of environmental management from the requirements for an environmental management system (EMS) guideline to environmental performance, reporting, and auditing.
- ISO 20,121: Entitled “Sustainability Events”; addresses resources, society, and environment which can generate significant waste.
- ISO 26,000: Addresses the triple bottom line’s (TBL) key financial and nonfinancial performance relevant to people, planet, and profit.
- ISO 31,000: These standards set out principles, frameworks, and processes for risk assessment and management.

# Sustainability/Integrated Reporting and Assurance

- **Mandatory:** In recent years many countries (e.g., Australia, Austria, Canada, Denmark, France, Germany, Malaysia, Netherlands, Sweden, Hong Kong, and the United Kingdom) have adopted stand-alone sustainability/integrated reports.
- **Voluntary:** More than 8,000 companies worldwide issue sustainability reports.
- **Auditors also provide assurance on these reports.**

# Assurance Standards in Sustainability Reporting

- PCAOB Auditing standards in the United States
- International Auditing and Assurance Standards (IAAS)
- The International Standard on Assurance Engagements (ISAE) 3000
- ISAE 3400
- AA1000AS
- American Certified Public Accountants (AICPA) AT 101
- The Canadian Institute of Chartered Accountants (CICA) Handbook Section 5025
- ISO Standards

# Extensible Business Reporting Language

XBRL is an XML-based (Extensible Markup Language) platform for the analysis, exchange, and reporting of financial information, with the purpose of integrating business reports and technology solutions.

The standardized XBRL format allows all market and corporate governance participants to electronically share financial information to the extent that investors have access to the same information as analysts.

The XBRL tags are prepared according to applicable taxonomies such as GAAP for financial reporting, tax rules for tax purposes, or specific regulatory definitions for regulatory filings.

XBRL makes it easier to generate, compile, validate, and analyze business and financial information.

<http://www.dipity.com/timeline/SEC-XBRL/> XBRL reporting

# XBRL

**XBRL Definition:**XBRL defines and tags data using standard definitions which provide a mechanism for consistent structure and the use of the XBRL taxonomy (US GAAP, IFRS, extended customized, GRI sustainability).

## **Costs and Benefits of XBRL**

Adopting XBRL might be a significant investment, but XBRL provides cost savings through usage. Not only are the primary users finding benefits through XBRL, but also secondary users such

as investors will be able to search and locate information in a more timely fashion.

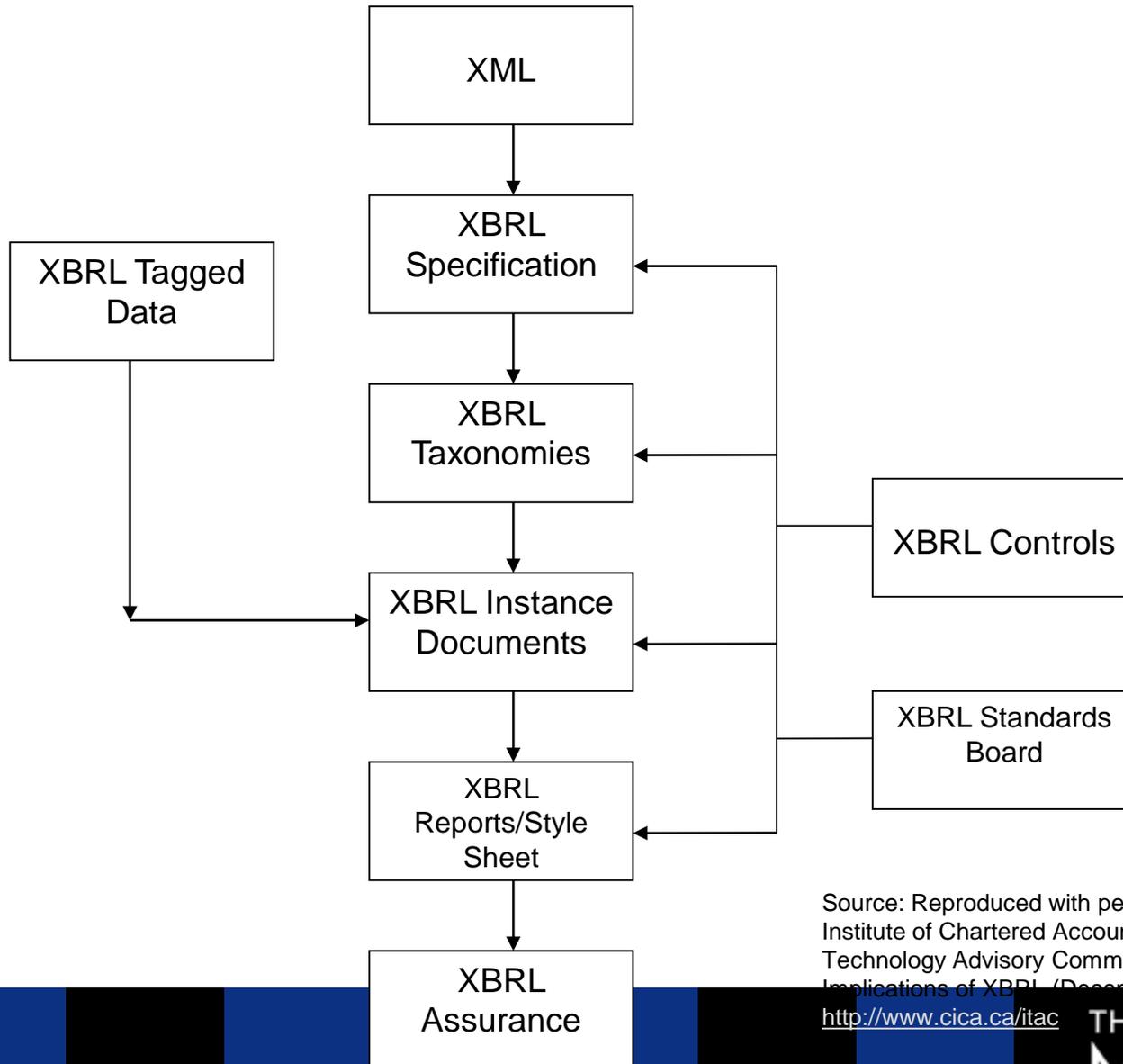
## **XBRL Application**

The SEC, in September 2004, proposed a voluntary plan for all public companies to submit their financial statements using XBRL, beginning with the 2004 calendar year-end report filings. The first mandatory e-filing using XBRL format is now implemented under the call report modernization project for about 8,400 financial institutions. More than 9600 public companies in the United States filled XBRL-formatted information with the SEC (SEC 2012).

## **Future of XBRL**

XBRL is expected to substantially reduce manual effort in the preparation of financial statements,, improve financial statement comparability, and level the playing field for investors to gain access to real-time, online financial information.

# XBRL Operation



Source: Reproduced with permission from The Canadian Institute of Chartered Accountants. 2005. Information Technology Advisory Committee: Audit & Control Implications of XBRL (December). Available at: <http://www.cica.ca/itac>

# Integration of Sustainability Reporting and XBRL

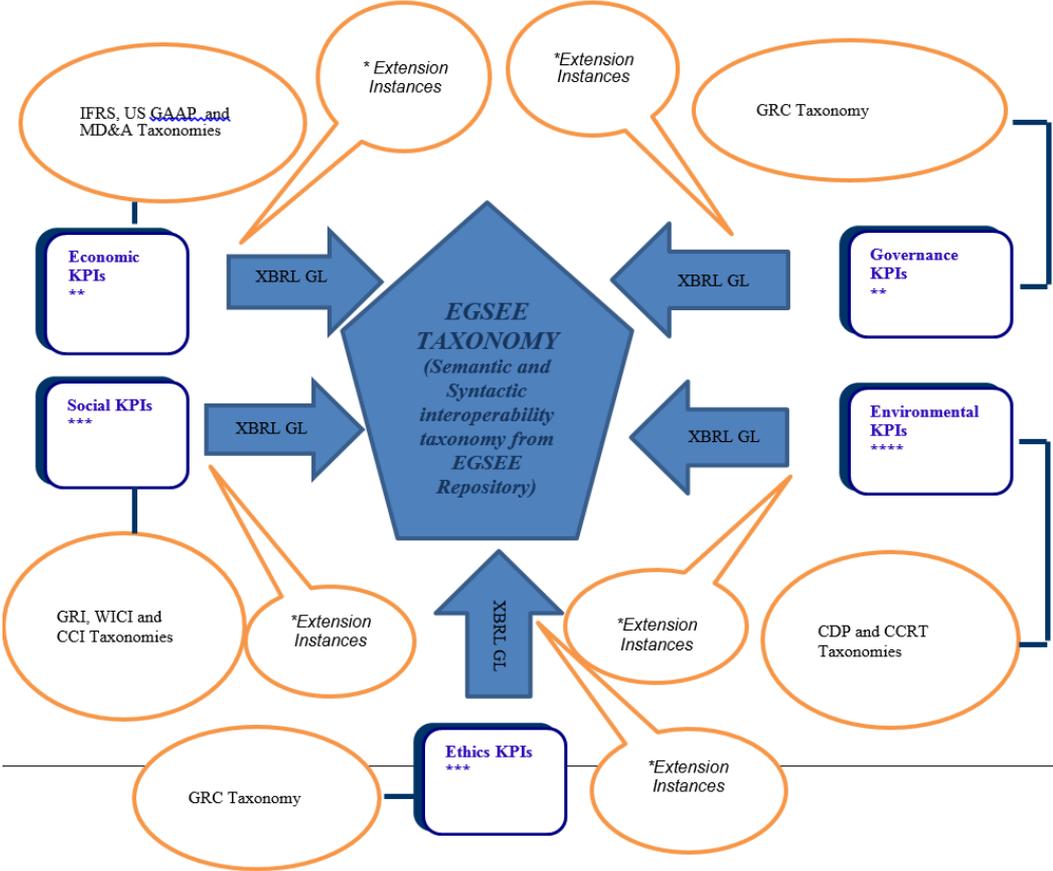
We develop our three-step model to apply XBRL into the five EGSEE dimensions of sustainability performance.

1. We establish the EGSEE conceptual framework for integrating financial and nonfinancial information in a single business report.
2. we develop the technical support basis for integrated financial and nonfinancial information-based reporting with XBRL technology which map data across dash baords based on KPIs.
3. we build the application model in the pilot program and bring the integrated framework EGSEE semantic into XBRL

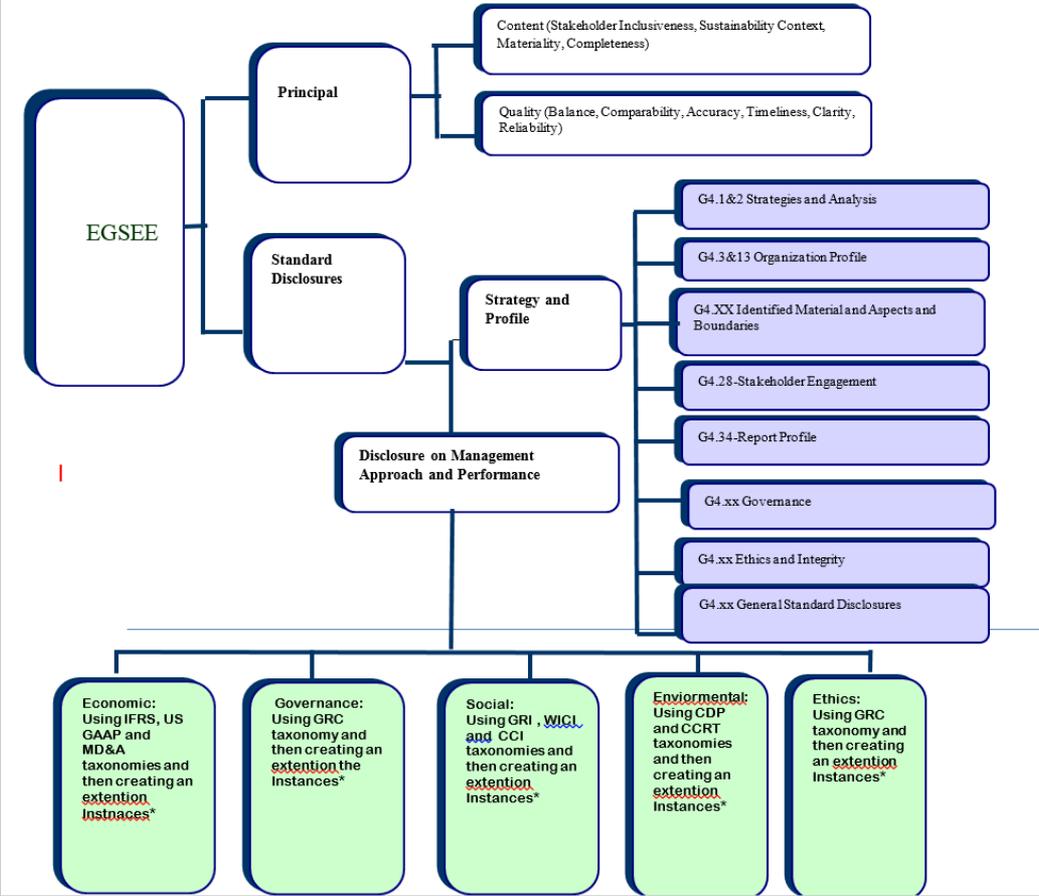
# Proposed Model of Integrating XBRL and EGSEE

- We suggest a model to integrate XBRL into all dimensions of sustainability performance reporting (EGSEE) begins with the compilation of existing financial reporting taxonomy requirements (i.e., IFRS, US GAAP, MD&A) and best practices for non-financial taxonomies (i.e., (e.g., GRI, CCI, WICI, GRC, CDP, CCRT and IS-FESG).
- The EGSEE-XML platform starts querying for component of EGSEE repositories and filtering capabilities help to sort data through all metadata using a single user interface.
- We apply *SASB's Materiality Map* into EGSEE-XML (SASB 2013), which is relevant to sector specific materiality, sustainability taxonomy.
- We suggest XBRL extension on various EGSEE dimensions of sustainability performance by using SASB's materiality map to the perspectives of all stakeholders.

# INTEGRATED EGSEE AND XBRL GL USED TO SHOW EQUIVALENCE BETWEEN EXISTING TAXONOMIES



# Development EGSEE TAXONOMY Architecture (Adopted from GRI 3.1 and G4 guideline, 2013)



# XBRL Projects in EU

- Seven 7 mandatory or quasi mandatory filings
- Belgium – BNB – Mandatory Filing – 2007
- Denmark DCCA – Mandatory Filing – 2011
- Italy Infocamere – Mandatory Filing – 2011
- Spain – Collegio Registradores – 2009 - Mandatory Filing
- UK Companies House – Mandatory Filing – 2008/2011
- Germany – Bundesanzeiger– Quasi mandatory
- Netherlands – Ch.of Comm./SBR – 2015 Mandatory
- Estonia – eRIK –BR– Mandatory –2010 – Mandatory
- Voluntary filings in Luxembourg and Sweden, France, Ireland, Poland

# Credibility of taxonomy development process:

- EGSEE aligned with taxonomy development approaches used by financial accounting standard bodies (IASB, FASB)
- Linkage documents: Guidance for using EGSEE Framework in combination with other frameworks (ISO26000, CDP, GRI, WICI)
- Related strategic content :
  - »Linkage between EGSEE and IIRC framework
  - »Materiality – Based on SASB framework for non-financial information

The integration of multiple compliance frameworks and multiple repositories called **repository EGSEE metadata** and filtering capabilities help to sort data through all metadata using a single user interface.

# XBRL-GL and Extensions

- XBRL-GL integrate taxonomies and prepare a hierarchy of the data elements into EGSEE semantic and consequently develops an extensions by XBRL GL which are mappings an instances document based on KPIs as defined by Brockett and Rezaee (2012).
- XBRL extension on various EGSEE dimensions of sustainability performance by using SASB's materiality map in the context of EGSEE issues to generate EGSEE-XML materiality.
- The KPIs should be integrated into EGSEE by extension fully consider the interoperability via XBRL GL which are mappings an instances document derived from the company's activities pertaining to EGSEE sustainability performance dimensions.

# SERVICE ORIENTED ARCHITECTURE (SOA) AND EGSEE TAXONOMY

- Recently, Mota et al, (2015) proposed a technological framework involving service oriented architecture (SOA) and XBRL to perform continuous monitoring of sustainability indicators for GRI to mitigate the challenges related to the integration of systems, building a scale model for internationalization and standardization of information. In line with Mota et al, (2015) SOA-XBRL integration model into EGSEE data are suggested to find integration for infrastructure and architecture to promote the access and retrieval of EGSEE information.

# EGSEE TAXONOMY AND ONTOLOGY IMPLEMENTATION PROCESS

- The ontology is a well-established standard in conceptualization of Corporate Sustainability (Madlberger et al. 13) Consequently, the study extracted data in a Semantic Repository and transform into an Web Ontology Language (OWL) class hierarchy EGSEE relations based on the GRI standard to build a basic corporate sustainability data can be linked to this ontology. The combination of a top-down with a bottom-up approach for ontology engineering that enables the use of semantic technologies and across XBRL taxonomies ( Zhu et al., 2007; Jimei et al, 2011;Madlberger et al., 2013; Hare et al; 2013 ).

# Conclusion

- The future of corporate reporting is in XBRL and sustainability.
- The number of business organizations providing sustainability information regarding their EGSEE performance is on the rise.
- Business sustainability has extended the type and amount of financial and non-financial information that business organizations provide to their stakeholders regarding their EGSEE sustainability.
- XBRL can provide the technological foundation for the communication of both financial and non-financial information to stakeholders.
- In this conceptual paper, we examine the EGSEE dimensions of sustainability performance and their integration into XBRL GL instance documents that contain tagged key performance indicators (KPIs) on both financial and non-financial information.
- We propose the use of XBRL taxonomy for EGSEE reporting in order to harmonize the document structure for online communication by organizations.

# Questions?

## Thank you for your attention!

