



GLOBAL SUSTAINABILITY  
COMMUNITY OF PRACTICE

# A 'Triple-Bottom-Line' Sustainability Project Evaluation Methodology

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# Introduction

**Problems cannot be solved  
at the same level  
of awareness  
that created them**

Albert Einstein (1879 – 1955)

*Source: (cited Steer 2010, p.17)*



# The presenters (1)



**Alexander Belyakov**, Ph.D, is an instructor in the Certificate in Sustainability Management program at Ryerson University. He held positions as the Information Assistant the Urban Environmental Governance Program and Sustainable Development Program at the UNDP Ukraine, as the Associate Professor at Kyiv National Taras Shevchenko University, Ukraine. Alexander developed and published 8 course curricula and 5 books. He is also an author of numerous academic articles and more than 500 journalistic materials. Alexander is alumnus of International Program on the Management of Sustainability, Sustainability Challenge Foundation, and Course in Sustainable Environmental Management, Beahrs Environmental Leadership Program, University of California, Berkeley, USA, etc.

## The presenters (2)



**Thomas C. Esakin**, aka Tom, holds an MA in Sustainability and is Principal of Sustainability Change Solutions & Director-General of Sustainability Change Solutions de México, S.A. de C.V.; private enterprises based in Toronto, Canada and Villahermosa, Tabasco, México that engage corporate clients by tailor-crafting sustainable development solutions connected to: *Sustainability Planning and Sustainable Development Strategies (SDSs); Benchmarking; Employee engagement; Education and training programs; Research; Stakeholder engagement and; Briefings*. At Ryerson University, Tom is an instructor and “Subject Matter Expert” (SME) in sustainability, engaged with the G. Raymond Chang School of Continuing Education and its Certificate in Sustainability Management program.

# PMI Webinar Agenda

- **Context:**
  - The Project Team
  - Sustainability
  - Ryerson University *Certificate in Sustainability Management*
  - Ryerson Department of Campus Facilities & Sustainability
- **Defining Sustainability**
- **Project Outcome: Brief**
- **Sustainability Principles & a narrowed project**
- **The Toolkit - Performance Evaluation:**
  - Financial (Economic)
  - Environmental
  - Social
- **Project Application Form**
- **Scoring**
- **Impact of Project Deliverables**
- **Value of Project to PMs**
- **Q&A**
- **Ryerson University & Chang School**
- **Contact Us**

# The full team: to develop the sustainability project evaluation methodology

- ✓ Alexander Belyakov
- ✓ Thomas Esakin
- ✓ Salman Farooq
- ✓ Afshan Javaid
- ✓ Trisha Ready
- ✓ Olsi Subashi
- ✓ Irvin Tyli.

# The newness of sustainability / sustainable development (1)

- Popularised in 1987 by the UN World Commission on Environment and Development (aka The Brundtland Commission) in their report, *Our Common Future*.
- Expanded on and early action plans developed in 1992 at the first “Earth Summit “, the UN World Conference on Environment and Development.
  - It has been developing since then as a concept and practice.
- It is a field that is unique for it, literally, touches upon each and every field and discipline.
- It is developing & building the new paradigm for human societies.

## The newness of sustainability / sustainable development (2)

- It is resulting in new styles of: governance, economic theory & models, strategic planning & management, business operations & practices, accounting, metrics (benchmarks & indicators), scientific disciplines, research, even understandings about “time” & “interconnectivity” & “stakeholders”, and more.
- Being such a relatively new field, its practitioners often “create” and “innovate” the new sustainability knowledge & ideas that others can then use as a starting point to build on and better.
- Ryerson and its *Certificate in Sustainability Management* have helped create and innovate new frameworks for sustainability, including with this project.



# Ryerson University - *Certificate in Sustainability Management*

- The Chang School provides Continuing Education at Ryerson University.
- The Chang's Certificate in Sustainability Management is the first post-baccalaureate 3BL sustainability educational program in Canada.
- Unique and innovative, the word “transformative” is that most commonly used by our learners to describe this sustainability certificate program and its impact on them.

## Ryerson University – *Certificate Capstone projects*

- ✓ **The final course in the sustainability program (CKSS102) requires completion of a major “Capstone” project, whereby our learners partner with an enterprise or organisation to undertake a sustainability project that enables them, our learners, to apply in practice the theory and teachings they have acquired through the sustainability certificate program.**

# Ryerson Department of Campus Facilities & Sustainability

- Responsible at Ryerson for the sustainability of our university's operations (see: [www.ryerson.ca/campusfacilities](http://www.ryerson.ca/campusfacilities))
  - Ryerson's **SustainabilityMatters** webpage: <http://rusustainability.ca>
- Tonga Pham, departmental director, partnered with our sustainability certificate program on 2 separate projects:
  - 1) Baseline of sustainability at Ryerson; & then
  - 2) 3BL sustainability project methodology evaluation.

# Ryerson Department of Campus Facilities & Sustainability

- The methodology evaluation project team was asked by this department to develop a formal process to evaluate & score 3BL sustainability projects that seek funding and/or approval from the department, and for this methodology to:
  - have a ‘universality’, in that it applies to projects received from any of Ryerson faculty, researchers, administrators and staff (whether janitors to senior admin), students, and area stakeholders;
  - be adaptable to any aspect of university life, such as buildings and infrastructure, landscaping and design, service & program delivery, research, curriculum design & delivery, and more; and
  - justify its outcomes in ways that would be credible to any of the diverse pool of potential applicants (especially competitive scientists and students, and business-case minded administrators).

## Defining Sustainability (1)

***“Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.”***

“It contains within it two key concepts:

1. the concept of 'needs'...; and
  2. the idea of limitations imposed by the state of technology and social organization on the environment's ability to meet present and future needs.”
- It also incorporates the idea of “time”.

(see: UN World Commission on Environment and Development:

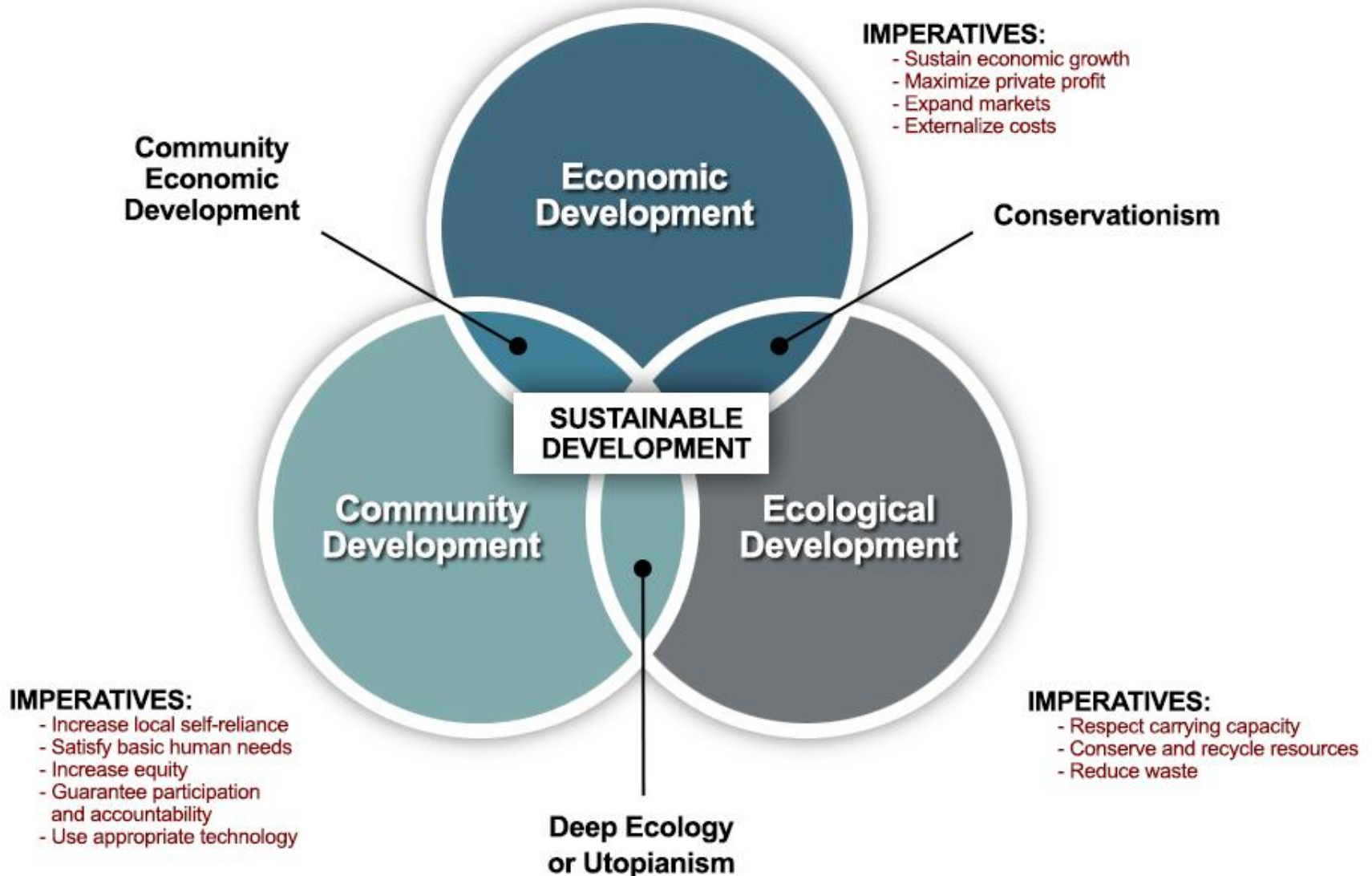
<http://www.un-documents.net/ocf-02.htm>)

## Defining Sustainability (2)

- *Entails equitable and reinforcing social, economic, and environmental dimensions.*
- The interconnexion of these 3-dimensions is commonly known as:
  - ✓ “sustainability” or
  - ✓ “sustainable development”
- And also known by various other names, such as:
  - ✓ “Triple-Bottom-Line” (3BL)
  - ✓ “People, Planet, Profits/Prosperity” (PPP or 3Ps)
  - ✓ “Corporate Social Responsibility” (CSR)
  - ✓ “Environmental, Social and Corporate Governance” (ESG).

# Defining Sustainability (3):

(see: [http://www.idrc.ca/en/ev-9322-201-1-DO\\_TOPIC.html](http://www.idrc.ca/en/ev-9322-201-1-DO_TOPIC.html) Chapter 1, Page 2)



## Defining Sustainability (4)



*Thinking in Systems: A web of interconnexions*



# Defining Sustainability (5)

- A “web of interconnexions” and not only “green” (not merely an ‘environmental’ practice)
- Sustainability Planning commonly involves an international-framework known as a “Sustainable Development Strategy” (SDS).
- SDSs draw from three different planning models:
  - Strategic Planning;
  - Community Planning; and
  - Environmental Planning.
- It is now seen as a fact of life for international business (see: [www.kpmg.com/global/en/issuesandinsights/articlespublications/pages/building-business-value.aspx](http://www.kpmg.com/global/en/issuesandinsights/articlespublications/pages/building-business-value.aspx))
- With that contextual background in mind, we move on to the Ryerson sustainability project evaluation methodology.

# **Project Outcomes:**

## **A 3BL sustainability project methodology evaluation for Ryerson University's Department of Campus Facilities & Sustainability**

- ✓ Toolkit
- ✓ Guidelines
- ✓ Application form
- ✓ Scoring Mechanism

# Embedding sustainability principles within a narrowed project

- The toolkit, guidelines, and application form were all intentionally designed in a way to "capacity build" (educate) a reader of the package in greater specifics of a 3BL sustainability, so that their personal understandings of sustainability could be broadened and deepened through a reading of the package.
- The project team originally encouraged that the methodology be more detailed in its subsections, especially on financial matters, however the client wanted a simpler methodology so it could be easily understood by the diversity of stakeholders who would use the toolkit package. Department of Campus Facilities & Sustainability asked us to use what we considered to be a basic methodological approach (for janitors were used as a target group as well).

# The Toolkit

- ❑ The three Sustainability dimensions (social / environmental / economic) represent **three sections of the toolkit** for evaluating prospective projects within the Ryerson University Campus.
- ❑ The toolkit contains a list of questions to **help applicants explore the ideas** they may consider to include in their own 3BL sustainability project proposal.
- ❑ The **applicants can be creative** in further exploring these ideas or in developing new methods to solve sustainability issues at Ryerson.

# Financial (Economic) Performance Evaluation Toolkit

Subsections	Target
<b>Financial Projections and Project Cost Estimates</b>	Measuring and identifying a credible system of project cost estimation
<b>Budgeting System</b>	Proper evaluating of forecast budgets and tracking expenditures against those budgets
<b>Indicator Analysis</b>	Measuring of the project financial profitability
<b>Funding</b>	Identifying the funding sources and their delivery process
<b>Financial Sustainability</b>	Evaluating the project from its cost/profit analysis
<b>Governance</b>	Decision-making, accounting based processes involved in the project financial planning and delivery
<b>Reporting and Monitoring</b>	Enabling a constant check on the financial/accounting activities and helping review the project performance progress made at every step

# Environmental Sustainability Evaluation Toolkit (1)

Subsections	Target
<b>Green Office</b>	Referring to projects, which promote redesigning existing facilities or developing new ones according to green office principles in all aspects – eco-friendly furniture, maximizing day light etc.
<b>Green Procurement</b>	Focusing on criteria on purchasing environmentally friendly, local and/or Fair Trade products and subsequent university purchasing policies
<b>Institutional capacity building for environmental sustainability</b>	Covering questions related to possibilities for projects to contribute to sustainability planning processes at Ryerson, establishment of green teams, research on environmental sustainability, teaching sustainability
<b>Utility Conservation</b>	Focusing on possibilities of renewable energy use, increasing energy efficiency on campus, and promoting reduction of utilities use in general

# Environmental Sustainability Evaluation Toolkit (2)

Subsections	Target
<b>Biodiversity</b>	Covering criteria related to project supporting of biodiversity, natural resources and life support systems on campus, caring for overall campus ecological integrity.
<b>Carbon Footprint</b>	Proper identifying of possibilities on reducing carbon dioxide emissions and air pollution in general, as well as improving indoor air quality.
<b>Ecological Footprint</b>	Focusing on possibilities of reducing ecological footprint of on campus activities and services
<b>Environmental Sustainability, Cooperation</b>	Covering possibilities related to awareness rising on environmental sustainability issues, as well as prospective cooperation with external stakeholders, such as other researchers, community organizations/ representatives etc.

# Social Sustainability Evaluation Toolkit (1)

Subsections	Target
<b>Awareness, Education and Training on Sustainability</b>	Identifying proper criteria on educating the public on how to balance the complex interaction between development and the environment
<b>Stakeholder Engagement</b>	Focusing on project aspects in efficient stakeholder participation in sustainability planning and practice
<b>Sustainability Research</b>	Further enhancement in existing areas of research strength and expertise and create new opportunities with high impact in strategic emerging areas of scholarly, research and creative activity
<b>Branding Ryerson as a Sustainable University</b>	Establishing a high reputation for Ryerson, which will rest upon the strength of its faculty, research and initiatives



# Social Sustainability Evaluation Toolkit (2)

Subsections	Target
<b>Equity</b>	Covering evaluating criteria for gender inclusion, equality in decision-making processes and lower levels of disparity.
<b>Institutional and Governance Aspect</b>	Focusing on the effective institutional framework for sustainable development at all levels of Ryerson University.
<b>Quality of life</b>	Identifying project tools for an implementation of the health and well-being of individuals and communities' criteria within Ryerson University's structure.

# Project Application Form

- ❑ Incorporates the **three sustainability dimensions (social / economic / environmental)**.
- ❑ Includes the **project chart requirements** designed from the Project Management Body of Knowledge of the international Project Management Institute (PMI).
- ❑ Comprises **three areas** where the project writer describes how environment, social and economic development are impacted, improved or affected from the project implementation.
- ❑ The project **writers will need to indicate the impact** on the three sustainability dimensions and how a 3BL approach has influenced the project idea and project goals.

# Project Application Form: The Sections

## Project Application Form Sections

1. Project Background

8. Project Environmental Sustainability Impact

2. Project Scope

9. Project Social Sustainability Impact

3. Project Purpose

10. Project Stakeholders

4. Strategic Alignment

11. Project Costs

5. Project Benefits

12. Funding Source

6. Goals and Objectives

13. Project Partners

7. Project Economic Sustainability Impact

# The Scoring

- ❑ Evaluation of individual 3BL sustainability projects submitted to the department utilises the full toolkit and its set of mega-criteria of:
  - 127 questions;
  - 13 sections; and
  - 22 sub-sections.
  
- ❑ Three options were developed for the scoring of projects:
  - Calculating “yes” answers;
  - A 4-point scale; and
  - Assign weighting coefficients.

# The Scoring - First Option: Calculating the number of “yes” answers

- The toolkit or set of mega-criteria will be used to score as it is, by calculating **the total number of “yes” answers** out of the equal number of questions.
- The projects will be ranked and those with **highest ranking** (that being, those with the most “yes” answers acquired) will be considered for final selection.

# The Scoring – Second Option: e

## The 4-point scale

- “Yes” questions are evaluated on 4-point scale.
- Each criterion is worth a score of between 0 and 4 points corresponding to a level of fulfillment between “no mention” or “very insufficient” and “pace-setting creative approach” or “outstanding”.

Scores	Generic	Scoring Levels Total (%)
0	No mention or very insufficient / very little	0%
1	Some/little/partial mention or coverage, below average	33%
2	Most important aspects covered, average	66%
3	Better than average, innovative approach	100%

# The Scoring – Third Option: Assign weighting coefficients to criteria based on their importance

## Criteria and Weighting Coefficients

Criteria 1: C1	Weighting coefficient (K1):	Criteria 2: C2	Weighting coefficient (K2):	Criteria 3: C3	Weighting coefficient (K3):	$V = \sum K_n * C_n$ <b>TOTAL SCORE V =</b> $K1 * C1 + K2 * C2 + K3 * C3$
Number of Students and employees impacted:  3 - Above half, 2 - About half, 1 - Less than half	0.8	Impact on reduction of paper use:  1 - Impact expected, 0 - Impact not expected	0.5	Availability of co-funding:  1 - Available, 0 - Not available	1	
3		1		1		$0.8 * 3 + 0.5 * 1 + 1 * 1 = 3.9$
2		0		0		$2 * 0.8 + 0 * 0.5 + 0 * 1 = 2.8$
1		1		0		$1 * 0.8 + 1 * 0.5 + 1 * 1 = 2.3$

# Impact of Project Deliverables (1)

- Through this partnership with Ryerson's Department of Campus Facilities & Sustainability, these Capstone course learners developed **an authentic 3BL sustainability project** for their client.
- The project generated **sustainability thinking and ideas** for the Director of Campus Facilities & Sustainability at Ryerson University.
- The project team developed what the department considers to be a **“very sophisticated, comprehensive, and advanced” outcome.**
- Through the project, the department came to realise that it was launching a new sustainability programme without actually having yet developed an actual programme (plan, budget, etc.), so a call for projects will happen after this planning process is completed.



## Impact of Project Deliverables (2)

- The department is still building Ryerson's new 3BL sustainability programme and **this project methodology developed is a “destination” the department is working toward**, with an even-more simplified version of the toolkit and application form to be used in the call-for-projects.
- The introduction of the evaluation tools in the institutional life of the university indicates the **official endorsement of sustainability** as a strategic or business objective at Ryerson.

# The value of this project to PMI and PMs (1)

- Understanding that **sustainability is the new paradigm**, not a fad, and so successful PMs of tomorrow are those who begin to understand and account for sustainability today.
- Assist Project Managers by helping **expand thinking on 3BL sustainability** and what it is as a concept and practice.
- Provide PMs with a framework for understanding the **depth & breadth of sustainability factors** that can be considered.

## The value of this project to PMI and PMs (2)

- Provide PMs with a **framework for engaging a diversity of seemingly unconnected stakeholders** in a sustainability project.
- Provide PMs with a **tangible and adaptable framework for applying 3BL sustainability practices within a project.**
- **Detail of 3 options for scoring sustainability projects.**

***Thank-you!***

**Q & A**

# Ryerson University

- Ryerson is Canada's leader in innovative, career-focused education. It is a distinctly urban university with a focus on innovation and entrepreneurship.  
Ryerson has a mission to serve societal need and a long-standing commitment to engaging its community.
- Located in downtown Toronto, Canada, Ryerson offers more than 100 undergraduate and graduate programs. Culturally diverse and inclusive, the university is home to 28,000 students, including 2,300 master's and PhD students, nearly 2,700 faculty and staff, and more than 140,000 alumni worldwide.

(see: [www.ryerson.ca](http://www.ryerson.ca))

# Ryerson University – The Chang School

The G. Raymond Chang School of Continuing Education is Canada's leading provider of university-based adult education

(see: <http://ce-online.ryerson.ca/ce>):

- ✓ 92 certificate programs.
- ✓ Courses toward 13 part-time degree programs.
- ✓ Nearly 1,500 courses, seminars, and workshops.
- ✓ 23 certificates that can be completed entirely at a distance.
- ✓ Courses towards accreditation by 13 professional institutes and associations.

The Chang School is home of Ryerson's *Certificate in Sustainability Management*:  
(see: [www.ryerson.ca/ce/sustain](http://www.ryerson.ca/ce/sustain)).

# *Even more questions?*

*Please contact us:*

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