

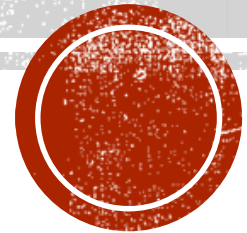
METRICS AND MEASUREMENTS FOR ASSESSING COMMUNITY IMPACTS FROM ENERGY INFRASTRUCTURE

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OUTLINE OF CHAPTER

- Community/Industry leadership
- Exploring factors that support sustainable community
- Exploring factors that support community resiliency
- Exploring metrics to assess/manage impacts
- Analysis of metrics



RESIDENT ATTITUDES/IMPACTS



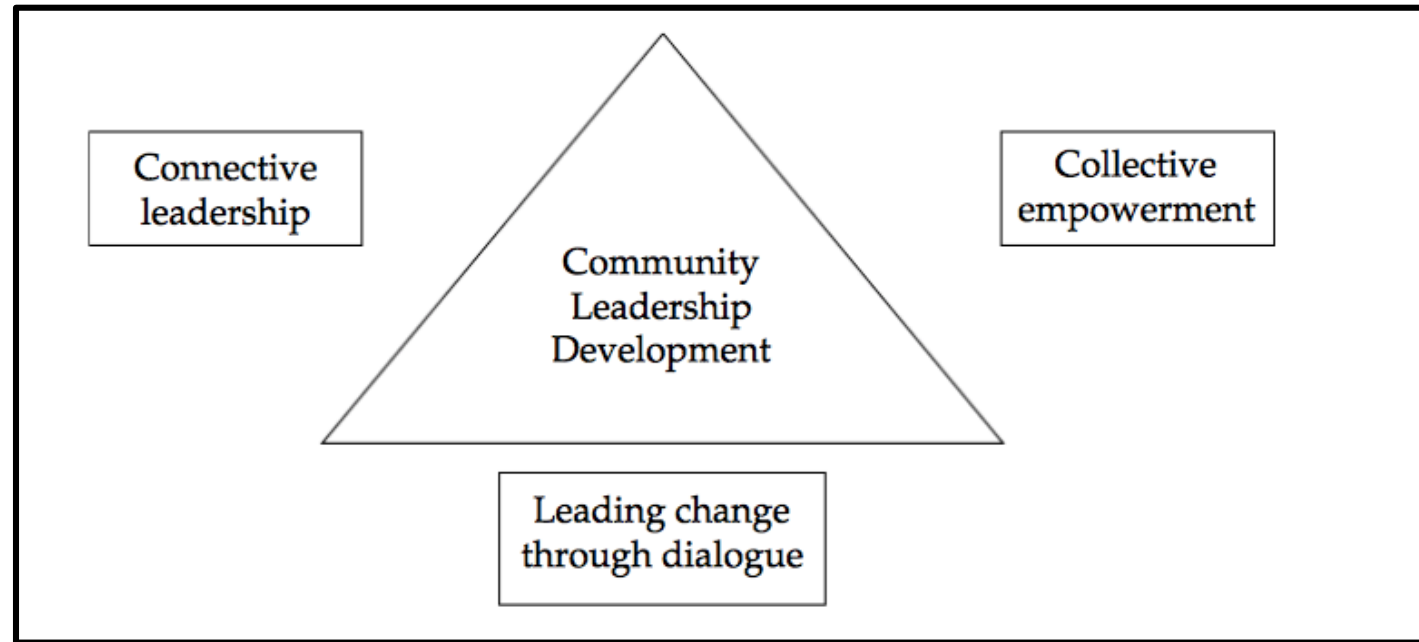
- Enthusiasm in initial stages
- Uncertainty as residents notice that expectations are not being met
- Panic as residents realize the magnitude of unexpected impacts
- Adaptation as the changes become viewed as permanent
- Agriculture
- Aesthetic Quality, Amenities, and Environmental Quality
- Social Impacts
- Physical Infrastructure
- Local Economic Impacts

(Lovejoy and Little 1979; Thompson and Blevins 1983; Freudenburg 1981; Gilmore 1976)



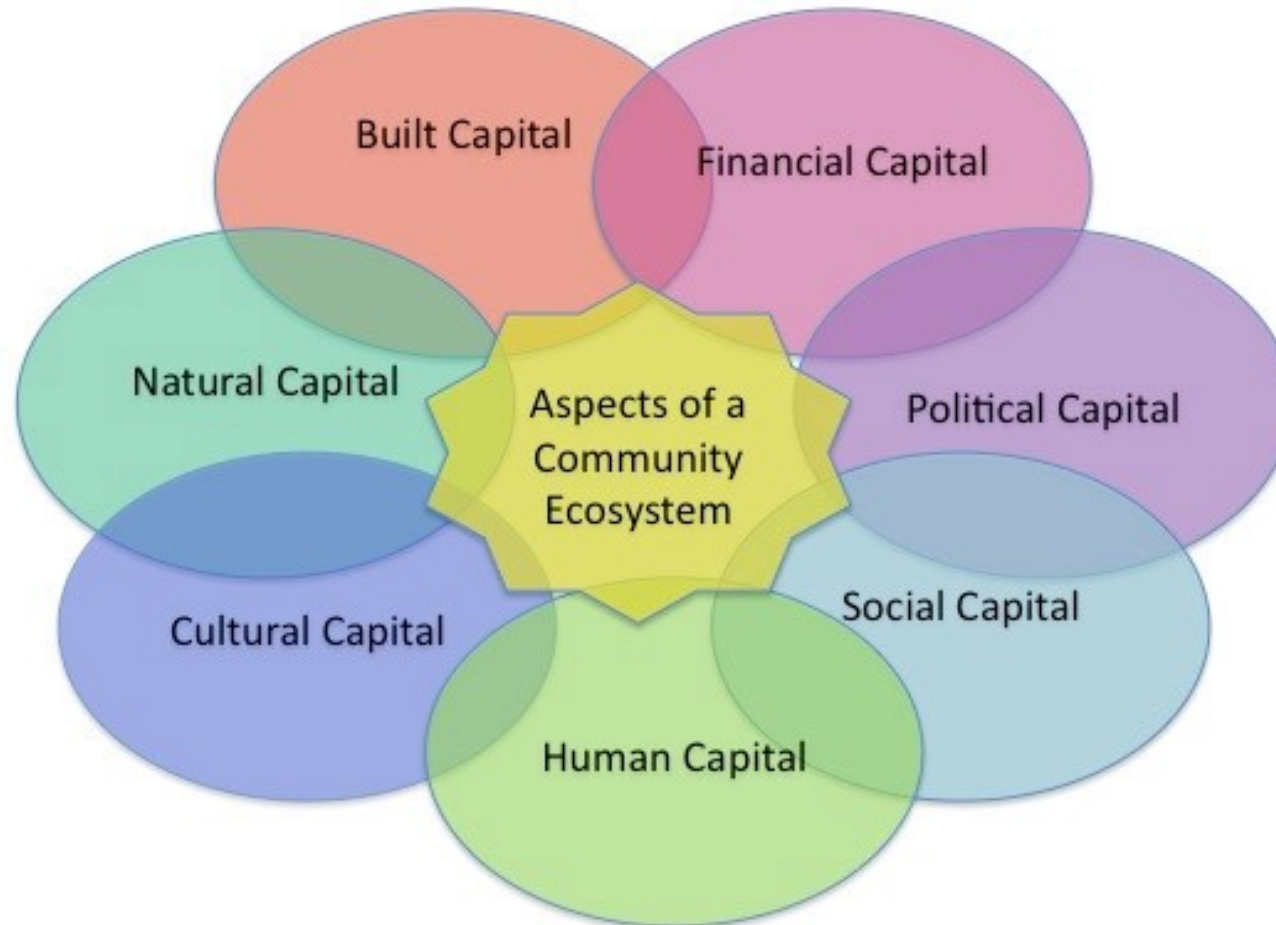
ASSUMPTIONS

- Build leadership capacity within the community and industry
- Willingness to engage in meaningful dialogue
- Willingness to commit resources to assessing impacts



DIMENSIONS OF COMMUNITY IMPACTS

Community Capitals Framework



Impact Dimensions

How can and how should development impact these areas?

Community Empowerment

- ❖ Community control
- ❖ Self-governance
- ❖ Control of resources
- ❖ Co-management

Community Economic Development

- ❖ Jobs & job development
- ❖ Businesses
- ❖ Investments
- ❖ Partnerships

Community Wellness

- ❖ Physical, mental, social, spiritual health
- ❖ Relationship to the land
- ❖ Self-identity through tradition/culture
- ❖ Healing
- ❖ Strong families
- ❖ Supportive relationships

Community Learning

- ❖ Community as classroom
- ❖ Land as a classroom
- ❖ Schooling
- ❖ Literacy & adult basic education
- ❖ Skill development & training



FACTORS OF COMMUNITY RESILIENCY

- Economic diversity
- Financial resources
- Natural resources
- Local control
- Stakeholder-driven planning
- Smart transition planning
- Policy influence

- Good governance
- Human capital
- Social capital
- Community attractiveness
- Information
- Geography
- Health



COMMUNITY BENEFITS AGREEMENTS (CBA'S)

- Contractual agreements between represented community groups and developers
- Detail specific benefits a developer will provide to the community in exchange for public support of the proposed project.

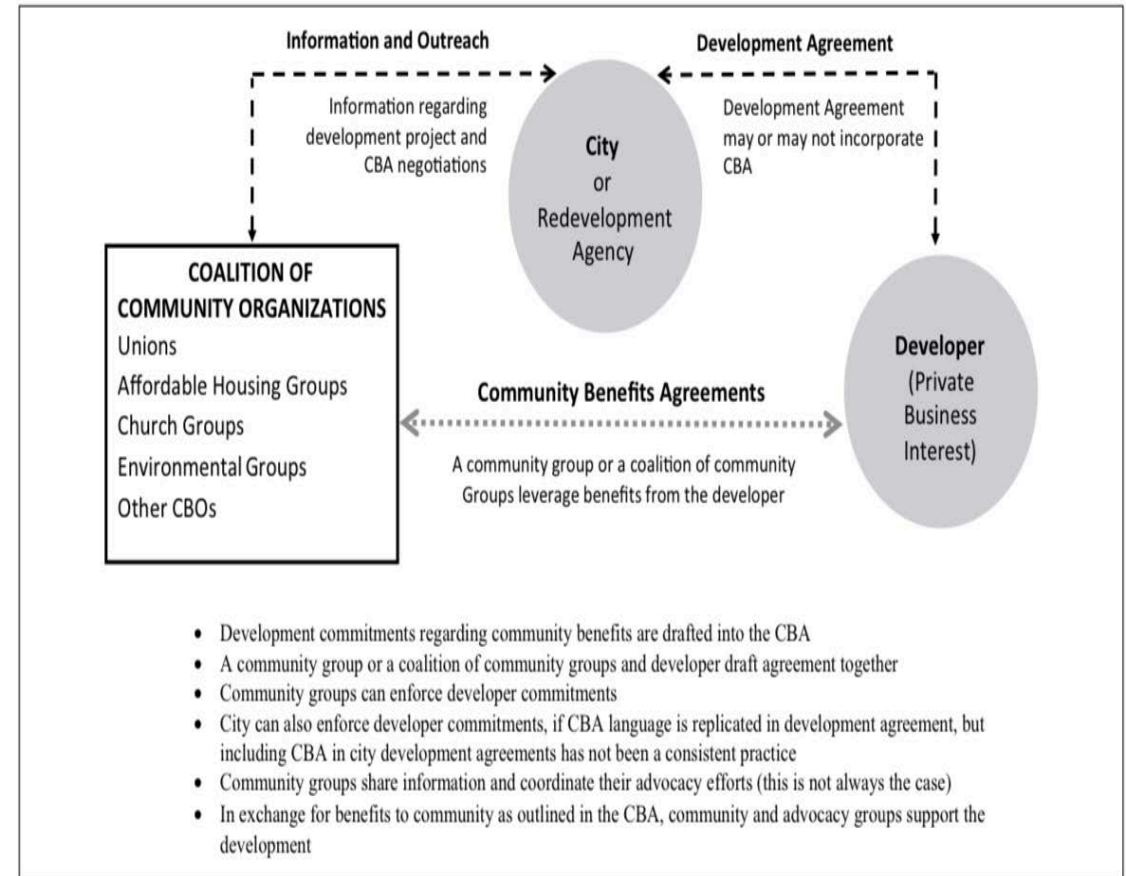


Figure 2. Conventional CBA.



COMMUNITY BENEFITS AGREEMENTS (CBA'S)

Financial Incentives or Assistance: annual or one-time payment, share of tax revenue, discounts, “community benefit funds”, affordable housing.

Employment: jobs, particularly in communities with few existing opportunities; training and/or apprenticeships.

Social Initiatives: transportation upgrades, improved community facilities, strengthening capacity for local participation in decision making, and other initiatives which reflect the needs of residents not currently benefitting from economic growth

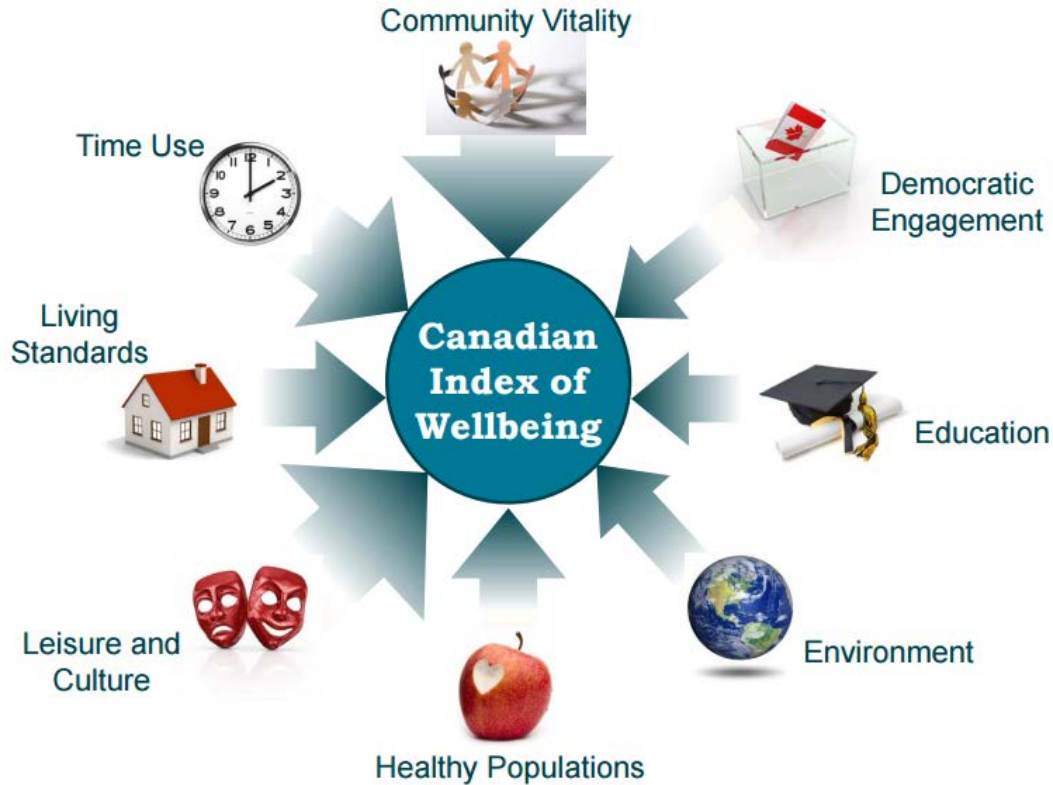


Steelhead LNG Corp. (Steelhead LNG) and the Malahat First Nation (Malahat Nation) are pleased to announce the successful completion of a Mutual Benefits Agreement (MBA) and Long-Term Lease supporting the proposed development of Malahat LNG, a liquefied natural gas (LNG) facility



CANADIAN INDEX OF WELLBEING / GPI

- **Community Vitality**
- **Democratic Engagement**
- **Education**
- **Environment**
- **Healthy Populations**
- **Leisure and Culture**
- **Living Standards**
- **Time Use**



CANADIAN INDEX OF WELLBEING/GPI

- Development of an indicator framework assesses progress and trends over time.
- Indicators provide specific information on the state or condition of something
- Good indicators provide essential information about the health and functioning of a system

Help shape happy and healthy communities in Waterloo Region!

Take the Wellbeing Waterloo Region Survey.

In only 30 minutes, you can help shape future priorities and identify where change is needed most in our community.

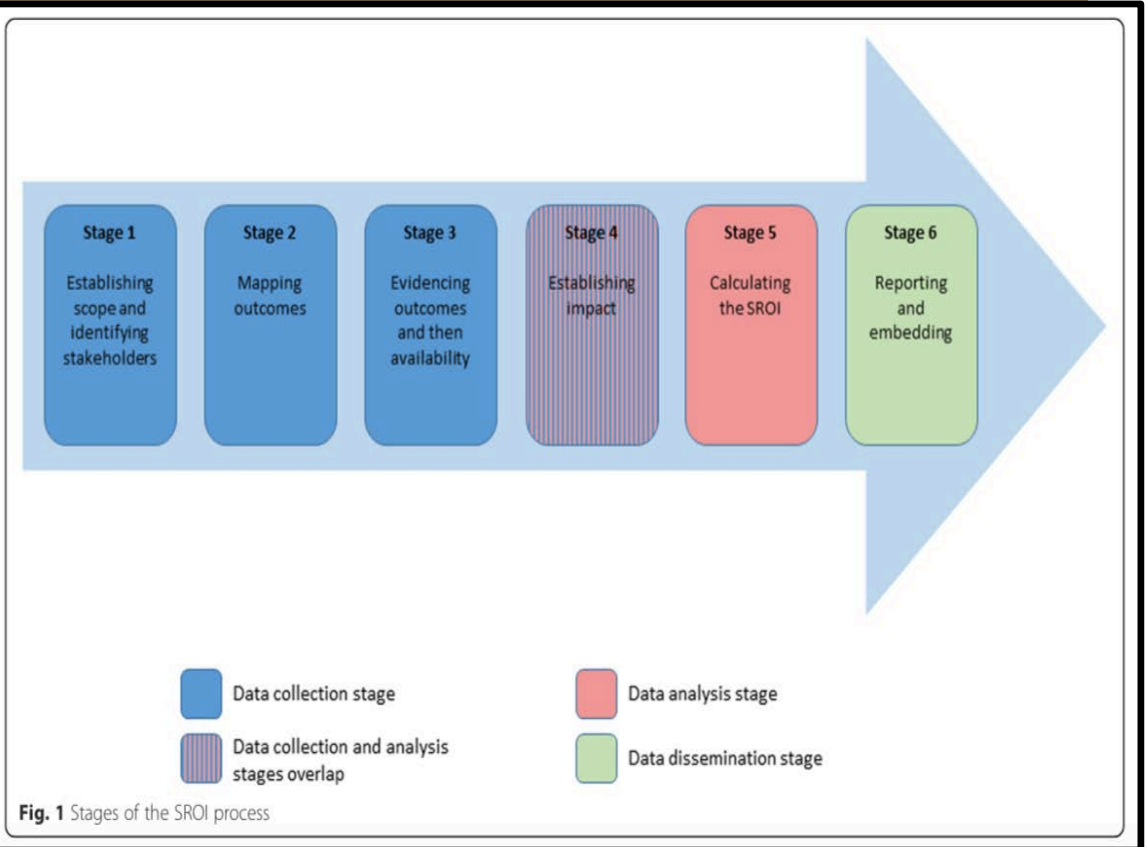
Let's make Waterloo Region a better place to live, work, play and connect.

www.CIW.ca/WaterlooRegionSurvey



SOCIAL RETURN ON INVESTMENT (SROI)

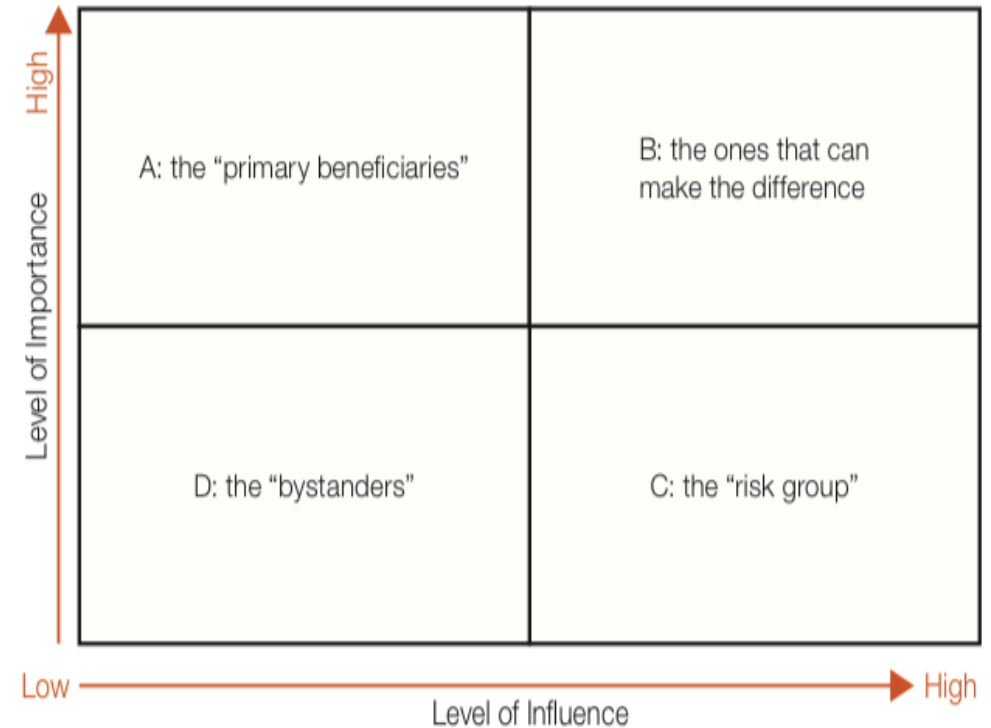
- Social return on investment (SROI) is a form of Cost-Benefit Analysis
- Measures values that are not traditionally reflected in financial statements,
 - Ex: social, economic and environmental factors.



Principles

1. Involvement of stakeholders
2. Inclusion of both positive and negative impacts
3. Proper valuation
4. Attributability
5. Transparency and verifiability

Figure II: Importance and Influence matrix¹⁰



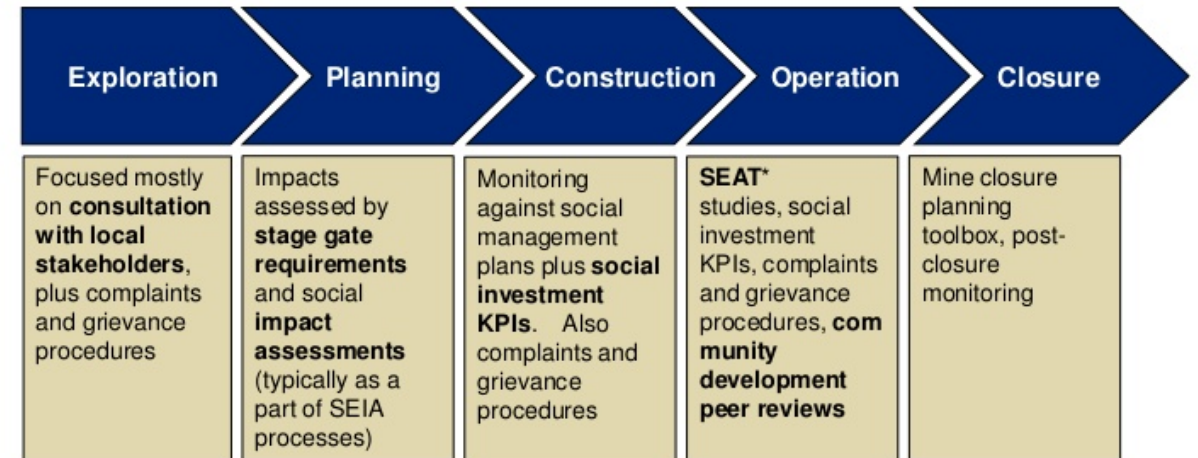
SOCIO-ECONOMIC ASSESSMENT TOOLBOX (SEAT)

- The Socio-Economic Assessment Toolbox (SEAT) is a series of steps that companies can follow to
 1. Better understand their objectives
 2. Measure their socio-economic impacts within the company and within the surrounding communities.
- Originally designed for AngloAmerican companies, but the framework is free to access online



HOW DO WE MEASURE IMPACT?

- Activity across the mining lifecycle (typically 30 to 50 years per mine):

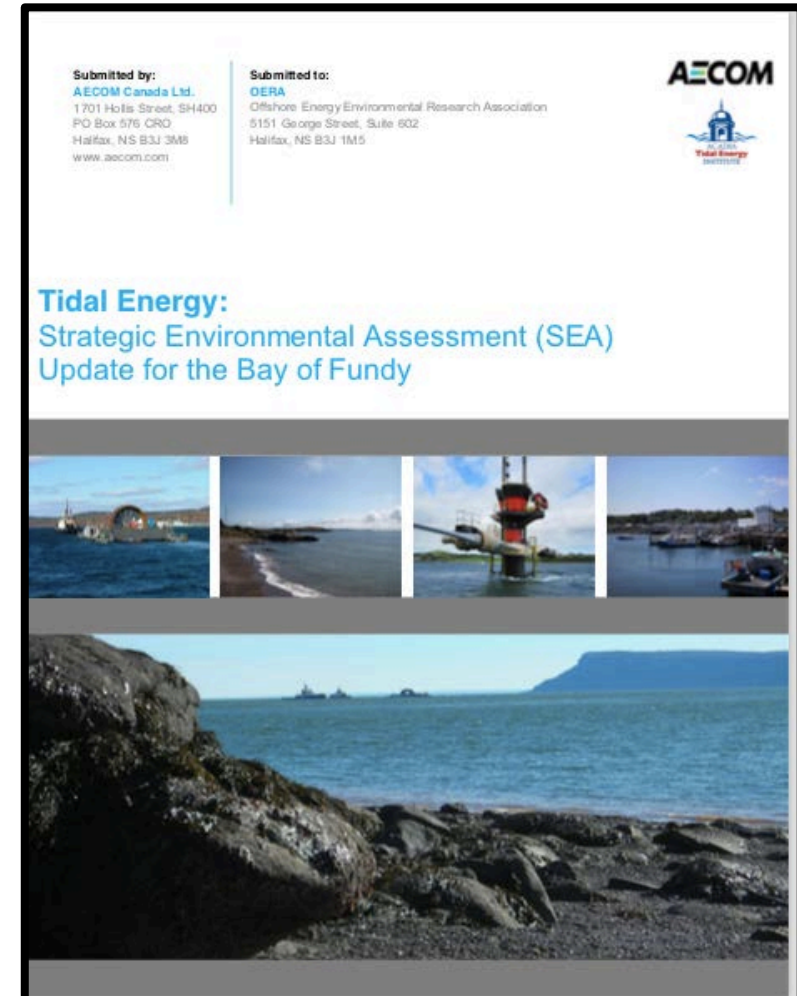


- We also measure at country level for taxes, procurement, wages etc

*SEAT: Socio-Economic Assessment Toolbox. Freely available at www.angloamerican.com/seat

STRATEGIC ENVIRONMENTAL ASSESSMENT (SEA)

- A tool that contributes to informed decisions in support of sustainable development w/regards to a project
- Assesses cumulative effects of multiple project components
 - Impact Centred – human/physical
 - Institution Centered - social and economic



ANALYSIS OF THE METRICS

- **Focus**
- Level(s) of Analysis
- Resources Required or Available
- **Timeline**
- Data: Objective or Subjective
- Perspective: Static or Dynamic
- Results
- **Responsibility**
- **Stakeholder Involvement**

	SEAT	CIW
Focus	Social and economic	Environmental and social
Level(s) of Analysis	Company and community	Originally a national measure, but can be scaled down
Resources Required	50% of the time of a project manager, two assistants, help from general manager and staff	Dataverse data repository available for data on certain populations
Timeline	4-6 months, completed approximately every 3 years	No defined timeline, often established by communities
Subjective v Objective Data	Both	Both
Static v Dynamic Measure	Dynamic	Static
Results	Framework, recommendations	Percentage change over time using 1994 as a baseline
Responsibility	The company, but third-party support is advised (e.g. NGOs)	CIW and community organisation(s)
Stakeholder Involvement	Unique and specific stakeholder consultation activities for many	Customisable Wellbeing

FINAL THOUGHTS

- Commitment to partnerships
- Commitment to resourcing
- Commitment to supporting communities
- Commitment to social acceptance/social license

