



Network for  
Business Sustainability  
Canada

# A Dialogue about Sustainability in Canada's Railway Sector



## I. Purpose of this Report

The Railway Association of Canada's (RAC) Strategic Plan identifies sustainability, safety and supply chain competitiveness as priority areas for the sector over the period 2014 – 2016 (details in Appendix A). As a result, the RAC is in the process of developing a sector-wide sustainability strategy that will build literacy about railway sustainability programs and improve the social and environmental performance of RAC members.

As part of this process, the RAC convened stakeholders from non-governmental organizations (NGOs) and academia for a one-day workshop to identify critical sustainability issues for the sector. In organizing the workshop, RAC partnered with the Network for Business Sustainability: Canada (NBS), a not-for-profit based at Western University which provides research-based sustainability guidance. RAC is a member of NBS's Industry Association Council.

The issues raised during the workshop will be considered by the RAC's Sustainability Working Group for inclusion in the sustainability strategy.

Individuals from the universities and NGOs listed in Table 1 attended the workshop. Representatives from the RAC and member companies also participated, joining in discussion and providing background on the railway sector. RAC member companies CN, CP, Metrolinx and Bombardier were represented.

Table 1. UNIVERSITIES AND NGOS REPRESENTED AT THE RAC WORKSHOP

|   |                        |
|---|------------------------|
| David Suzuki Foundation                             | Pollution Probe        |
| Earth Day Canada                                    | Stratos                |
| International Institute for Sustainable Development | Sustainalytics         |
| McMaster University                                 | University of Waterloo |
| Nature Conservancy of Canada                        | Western University     |
| Pembina Institute                                   |                        |

### Engaging in civic dialogue

In 2014, NBS released a report on business and civic dialogue. The report provides models for businesses to engage with society around controversial, undefined issues. Through the RAC workshop, NBS was able to implement the report's recommendations. Dr. Thomas Webler, author of the report, designed and facilitated the workshop.

## II. Issues, Challenges and Future Paths

The workshop began with an introduction to existing sustainability efforts within the railway sector. Michael Gullo, the RAC's Director of Policy, Economic and Environmental Affairs, provided an overview of issues currently addressed by freight and passenger railway sustainability programs in North America. This list served as a starting place for the workshop participants (see Appendix B for list).

During the workshop, participants:

- A. Identified the most **relevant sustainability issues** to the sector;
- B. Discussed **challenges** to designing a sustainability program relevant to all RAC members; and
- C. Explored **paths** to continued civic dialogue and engagement by the RAC

We review these areas in turn.

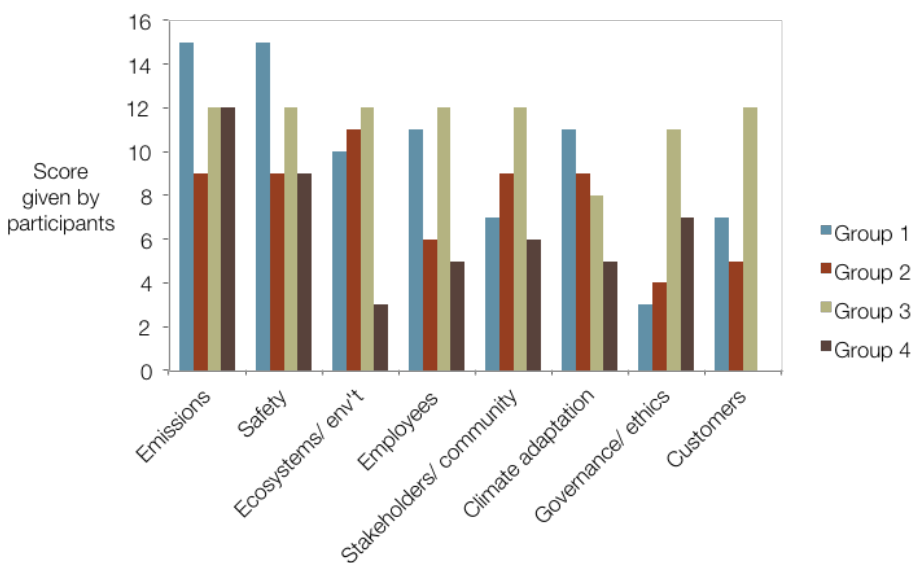
## A. The Most Relevant Sustainability Issues

Working in four small groups, participants identified issues and wrote them on Post-It notes. Each group then arranged its issues on a whiteboard, according to meaningful themes; and scored the issues in terms of importance, using sticky dots. A spokesperson from each group then presented the issues to the full session. (Appendix C provides details on the group process.)

The groups each identified roughly 30 issues. The authors of this report have grouped the issues by general topics. (Appendix D shows all issues and the topical groupings.)

Figure 1 shows topics that were raised by at least three groups, and the highest score given to a related issue by each group. (Appendix C provides details on scoring.)

Figure 1. TOPICS RAISED BY AT LEAST THREE GROUPS



Here we provide additional detail on these topics.

- **Emissions.** Workshop participants advocated for reduced emissions of greenhouse gases (GHGs) and other pollutants (e.g. NO<sub>x</sub>, SO<sub>x</sub>, VOCs, particulates). They urged exploration of efficiencies, new fuels and even electrification. Some urged the railways to become involved in advocating for specific government policy. One participant commented: “A glaring omission [from previous railway sustainability lists] is anything to do with carbon pricing and clean economy. The top issue is carbon and GHGs. What’s the role of the industry and companies as it relates to carbon pricing? What role can business play in carbon emissions reductions?”
- **Safety.** Workshop participants advocated for the protection of employees, communities and the environment. Several groups explicitly linked safety to labor practices: “If training and development and workforce planning are covered, safety is much less of an issue,” said one participant; another commented: “Investments in employees improve safety, because workers are better trained, motivated and productive.” Safety is a particular issue with respect to the movement of dangerous goods. Participants advocated for better coordination between customers moving dangerous materials by rail, railways, and local emergency planners.
- **Ecosystems and other environmental issues.** Participants were interested in ways of protecting, restoring and valuing ecosystems. Railways should find ways to enhance the natural environment: for example, working with environmental groups to secure and protect critical habitats (e.g. for pollinators), and with other infrastructure operators for effective land use. They should also incorporate best practices in terms of valuing and reporting on their natural capital.

- **Employees.** Participants urged that railways create good jobs that contribute to individuals' and communities' livelihoods. They defined "good jobs" as well-paying, permanent jobs with opportunities for growth and promotion. Retaining and developing a quality workforce is also vital for other sustainability issues: "People are an input to a sustainability strategy." As employees retire, workforce planning and recruitment are critical.
- **Stakeholders/communities.** Participants advocated for open communication with multiple stakeholders, especially First Nations and communities. "The stakeholder piece is the heart of sustainability," said one participant. They also urged railways to consider and enhance their impacts on communities. These impacts are many and varied, from land use to employment to other forms of community investment. A passenger rail representative suggested that railway stations could become community hubs, with grocery stores and meeting places.
- **Climate adaptation.** Climate change threatens railway infrastructure and railways need to demonstrate that they have a plan for anticipating, monitoring and responding to this threat. Climate change will also affect other issues of concern: e.g. species migration, biodiversity and water quality. Thus railways should assess how their operations can or will be affected by these and other changes. Because of uncertainties associated with climate change, a participant commented, "Issues will be raised no one anticipated."
- **Governance/ethics.** Ethics, human rights and corruption are emerging issues and participants suggested that railways can address them through sustainability plans and statements or through codes of conduct for themselves and their suppliers. These issues are being raised in Canada by the global mining industry; railways should be proactive in considering them. "People think human rights refers to child labor," commented one participant. "But Aboriginal issues, or displacing people to work on a new project, fundamentally address human rights." Companies operating in Canada can violate human rights if they do not treat communities appropriately.
- **Customers.** Customer satisfaction is important and railways should pay special attention to groups for whom passenger rail access is critical: e.g. elderly, rural and Northern passengers. Prices should be kept affordable.

## Themes

In addition to identifying specific issues, participants noted some broader themes or ways of thinking about the issues.

- **Traditional vs. forward-looking.** "Forward-looking" issues address emerging challenges or threats. These issues might include climate adaptation or human rights. Railways should also prepare for "black swan" events: rare but significant occurrences.
- **Enhanced benefits vs. reduced harm ("more good, less bad").** Participants recognized that railways improve society in many ways (e.g. lowering GHGs and reducing tax infrastructure burden. A sustainability plan should strive to improve these benefits further. Railways also produce threats to sustainability (e.g. ecosystem disruption), which should be reduced and managed.
- **Triple bottom line.** A traditional way of classifying sustainability issues is as environmental, social and economic. Participants noted that issues are actually complex and overlapping. One person commented: "Most issues touched upon at least two of these areas and many bridge all three pillars of sustainability."

## B. Challenges to Designing a Sustainability Program Relevant to All RAC Members

Several challenges exist to the development of a sector-wide sustainability program. The group discussed these briefly:

- **Diverse RAC membership.** RAC membership consists of both freight and passenger rail companies, with different revenue-generation models. As a result, identifying common issues may be problematic. Additional research may be required (e.g. benchmarking) to better understand areas of mutual benefit (e.g. fuel efficiency and emissions management).

Workshop participants also discussed how the RAC can implement a program that meets the needs of all members. Different issues may be best addressed by specific programs such as education and outreach, training, or standard or code of conduct development.

- **Company-based initiatives.** Several RAC members already have sustainability initiatives in place. Workshop participants discussed how the RAC’s sector-wide sustainability program can mesh with company-based initiatives:
  - The RAC may have more resources and be able to develop specific guidance for smaller companies.
  - The RAC could focus on higher-level, national issues, while individual companies address smaller local issues.
  - An industry-wide plan has additional advantages: e.g. forestalling regulation by demonstrating best practices or shared commitments.

## C. Paths to Continued Dialogue and Engagement by the RAC

Workshop participants discussed with whom the RAC should engage in the future; and what engagement approach it should take.

### Whom to engage with

Workshop participants identified many groups with whom the RAC could work as part of its sustainability initiatives. Table 2 shows these groups, classified into five categories.

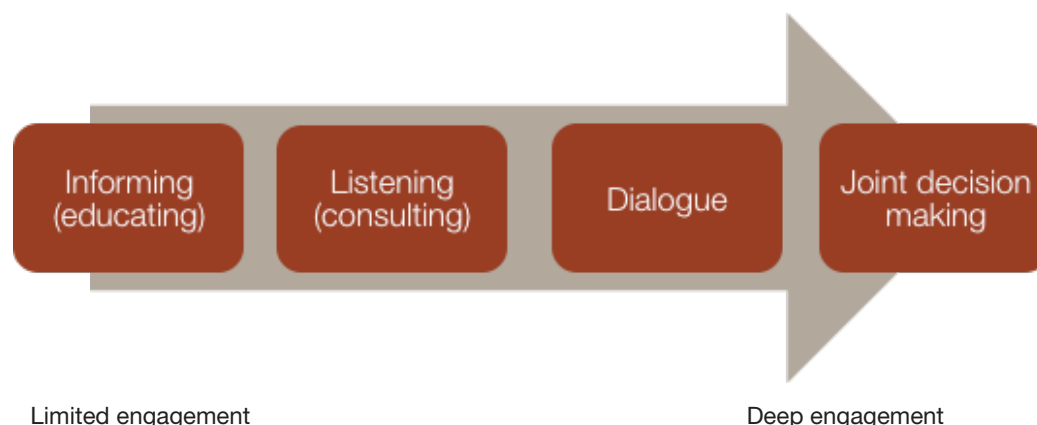
Table 2: POSSIBLE STAKEHOLDERS TO ENGAGE

| Category                  | Groups   |
|---------------------------|--|
| Community and government  | <ul style="list-style-type: none"> <li>• First Nations</li> <li>• Communities impacted (e.g. economic and or social impacts) by railways; consider accessing them through Federation of Canadian Municipalities or relevant provincial entities</li> <li>• Local government and emergency planners (although regulation may occur at federal or provincial levels)</li> </ul>  |
| Industry partners         | <ul style="list-style-type: none"> <li>• Railway suppliers (companies who sell products or services to railway carriers); they may offer sustainability innovations</li> <li>• Other industry associations (Canadian Urban Transit Association); US partners (Association of American Railroads, American Public Transit Association, American Chemistry Association)</li> <li>• Others involved in the transportation sector, to explore common issues and potential collaboration: Canadian Energy Pipeline Association, Canadian Electricity Association, highways</li> </ul> |
| Employees                 | <ul style="list-style-type: none"> <li>• Unions</li> <li>• Academics who can advise on recruiting workforce</li> </ul>   |
| Climate change specialist | <ul style="list-style-type: none"> <li>• Energy industry stakeholders (e.g. COSIA), which can advise on how to increase efficiency</li> <li>• Policy makers, for input on climate mitigation and adaptation</li> <li>• International Energy Trading Association, which is working with energy companies to put a price on carbon</li> <li>• Insurance Bureau of Canada (related to climate adaptation)</li> </ul>  |
| Customers                 | <ul style="list-style-type: none"> <li>• Freight user associations: e.g. FPAC, MAC, and CIAC.</li> <li>• Corporate customers who are sustainability leaders and may offer sustainability innovations or support collaborations with their corporate programs</li> <li>• Passengers</li> </ul>  |

## Engagement approaches

Facilitator Thomas Webler identified several ways that the RAC could engage with its stakeholders.

Figure 2: ENGAGEMENT CONTINUUM



- **Informing** represents limited engagement. The RAC would share information about its actions with stakeholders, “**educating**” them. Reporting provides a mechanism for such communication.
- **Listening** represents deeper engagement. The RAC would consult with stakeholders, asking for their feedback (e.g. on a report).
- **Dialogue** is a two-way conversation where both parties inform and listen to each other. Dialogue does not have to be linked to a formal decision.
- **Joint decision making** is the deepest form of engagement because it gives groups responsibility for making a final decision together. Here, the RAC acts as a **partner** with stakeholders, jointly setting an agenda and determining action.

Webler noted that many variations and combinations exist. For example, the RAC might start by **listening** to what stakeholders think before designing a **dialogue**. At the dialogue, it could **inform** the participants. **Joint decision making** could be used for any decisions from setting an agenda to deciding on final action priorities. He emphasized that consciously choosing amongst these approaches clarifies expectations: engagement is deemed successful when the organizer understands expectations and builds a flexible process that can meet everyone’s needs.

Several workshop participants advocated deep engagement. One commented: “For their opinion to be valued, [stakeholders] need a sense of ownership in the process. It shouldn’t just be ‘here’s our plan, what do you think’ — they need opportunity to help build it.” Webler summarized the discussion as supporting “education, consultation and some deeper engagement.”

Participants also cautioned that the RAC must be clear on the purpose of engagement and the priority stakeholders. To focus engagement, the RAC must identify which stakeholders matter the most.

### III. Conclusion and Next Steps

#### Engagement with workshop participants

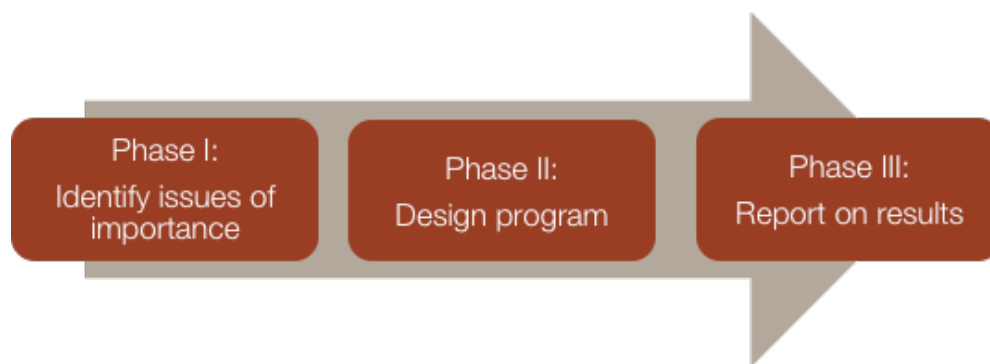
The RAC is committed to continuing to interact with workshop participants in these ways:

- This report has been shared with workshop participants and their feedback considered.
- In six months, a webinar/ meeting will reconvene participants to provide an update and offer additional opportunities for engagement.

#### Development of the RAC sector-wide sustainability strategy

The RAC will develop its sustainability strategy over a three-year period.

Figure 3: RAC SUSTAINABILITY PROGRAM DEVELOPMENT



Currently, the effort is in Phase 1. The RAC's Sustainability Working Group (SWG), composed of representatives from member companies, will review the issues raised by workshop participants. The SWG will also consider issues that have emerged from engagement processes with RAC members. The SWG will evaluate the issues proposed on the basis of materiality, and propose a final set of issues to the RAC Board of Directors. The SWG will also address strategy design (Phase II). For example, the strategy could focus on education, advocacy, or standards; it could incorporate practices such as codes of conduct, sanctions or rewards, third-party auditing, public reporting and certification. The SWG will consider how the strategy can serve the needs of diverse RAC members.

#### Civic dialogue for industry associations

This workshop represented a collaboration between the Network for Business Sustainability (NBS) and the RAC. It built on the NBS research-based report on civic dialogue, implementing the report's and recommendations. The result: a rich discussion and a strong foundation for the RAC's evolving sustainability plan.

Tima Bansal, NBS Executive Director, commented: "Railways are part of the Canadian identity. Yet, I don't think Canadians have always appreciated how railways contribute to who we are. We need to go from having them be part of our landscape to really defining who we are."

The RAC will seek to further enhance the positive impact of Canada's railways.

Appendix A: Priorities in RAC's Triennial Strategic Plan for 2014 – 2016

**Railway Association of Canada**

# Strategic Planning Report

PRIORITIES FOR 2014- 2016

## Strategic Priority #1 Safety

- 1 Improve RAC members' ability to develop a safety culture; address safety and security issues through training, tools and best practices.
- 2 Ensure governments and the public understand rail safety issues and railway strategies to address risk.
- 3 Identify and manage new and emerging rail safety and security issues, and develop pragmatic solutions.

## Strategic Priority #2 Supply Chain Competitiveness

- 1 Communicate the economic impacts of Canada's railway sector.
- 2 Collaborate with industries in the transportation supply chain.
- 3 Improve governments' and shippers' understanding of the role that railways play in the Canadian transportation supply chain.

## Strategic Priority #3 Sustainability

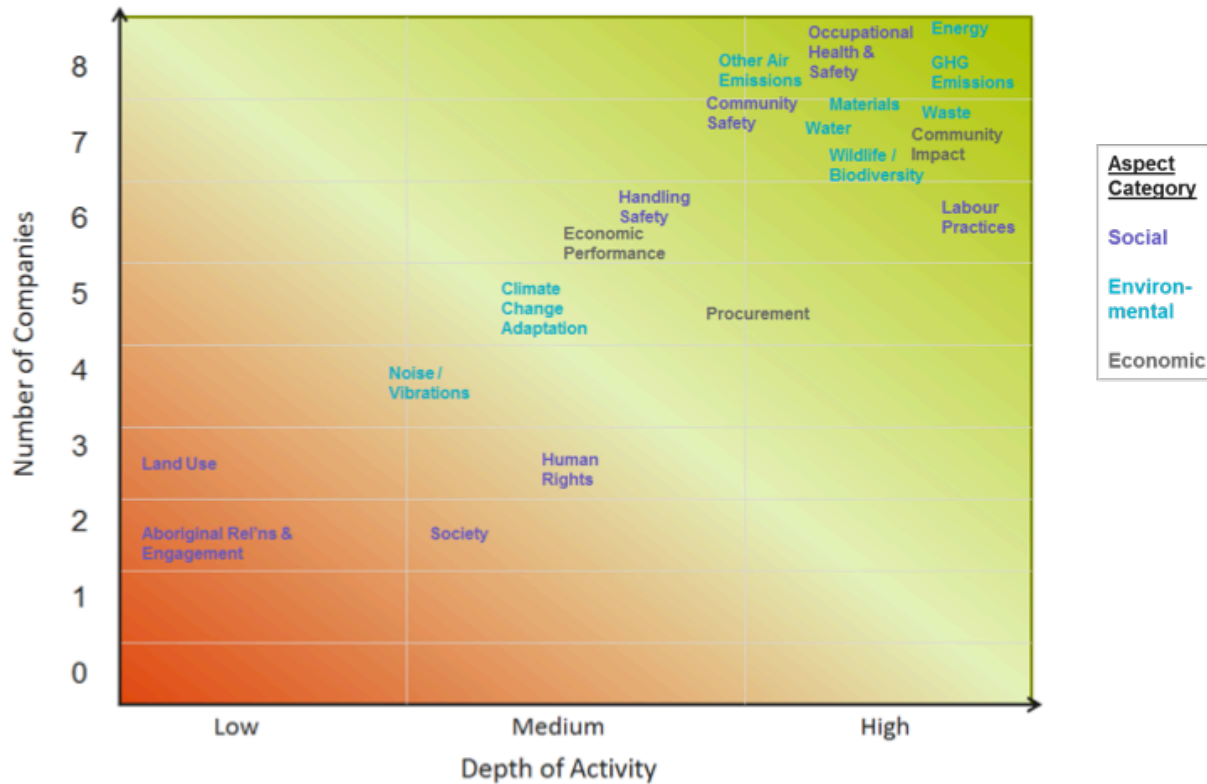
- 1 Design, discuss and implement a sector-wide sustainability strategy.
- 2 Ensure that best practices for optimizing performance are implemented across the sector.
- 3 Enhance literacy and recognition of industry initiatives and activities by governments, non-governmental organizations and the public.

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## Appendix B: Summary of Issues Identified in Existing Railway Sustainability Plans

This list, a compilation of issues identified in existing railway sustainability plans, served as a starting place for the workshop participants.



Source: Railway Association of Canada, Sustainability Issues Review, 2013 (completed by Stratos Inc).

## Appendix C: Methods

Here we describe how participants identified, categorized and scored issues during the session; and how this report presents those issues.

During the workshop, participants were organized into four groups of 4-6 people, designed to include a diverse mix of participants from the RAC and stakeholder interest groups.

In identifying relevant sustainability issues, groups followed a five-step process:

- 1. Identification:** Individuals identified issues, sometimes using the initial list prepared by the RAC as a reference point (see Appendix B). They wrote each issue on a Post-It.
- 2. Categorization:** Each group arranged its Post-Its on a white board, organizing them by meaningful categories.
- 3. Scoring:** Group members placed dots by the issues raised by their group which they found most meaningful. They used three sets of colored dots. Participants put blue dots on the issues they felt were of highest importance, green dots on issues of secondary importance and yellow dots on issues of lesser importance. They could put only one dot on each issue. They could also choose to issue no dots. There was no limit to how many issues could be weighed with any of the three categories of importance.
- 4. Interpretation:** The facilitator then asked each group to study its issues and their categorization and prioritization, and to discuss among themselves what was emerging from the exercise.
- 5. Presentation:** Workshop participants moved around the room as a spokesperson from each group presented results to the full workshop. All participants discussed common themes and differences among the groups. This conversation provided an opportunity for individuals to contribute additional knowledge, experience and interpretation.

In writing this report, we have introduced three additional steps:

- 6. Quantification:** We have converted the dots to numerical assessments. We assigned a value of 3 points to each blue dot, 2 points to each green dot and 1 point to each yellow dot. We summed these to provide a score for each individual issue.
- 7. Cross-group categorization:** We have organized individual issues according to broad topics, to facilitate presentation. These topics or categories can be seen in Appendix D.
- 8. Presentation:** Figure 1 (p. 3) shows the highest-scored issue within each topic area.

## Appendix D: Issues Raised by Groups During Workshops

This chart shows the issues that each group identified and the scores given to each issue. The authors of this report have grouped the issues by topics for easier presentation. Issue descriptions are those provided by the groups. See Appendix C for details on scoring.

| GROUP 1   |        | GROUP 2   |        | GROUP 3   |        | GROUP 4  |        |
|---|--------|---|--------|---|--------|--|--------|
| Issues  | Scores | Issues  | Scores | Issues  | Scores | Issues   | Scores |
| <b>GHG and other emissions</b>                                    |        |   |        |   |        |  |        |
| Reduce emissions (GHGs)   | 15     | Energy use (by company)   | 9      | Greenhouse gas emissions                                    | 12     | Greenhouse gas emissions – totals, sources, targets, trends  | 12     |
| Reduce emissions (NOx, SOx, CO2)                                  | 15     | Carbon  | 9      | Non-greenhouse gas emissions                                | 12     | Non-greenhouse gas emissions – NOx; SOx; p.m.                | 8      |
| Energy consumption and sources                                    | 8      | Offsets – carbon  | 6      | Non-fuel-based emissions – particulate matter (p.m.), odors | 7      | Policy advocacy stance – carbon pricing; emissions reduction | 6      |
|   |        | Mitigation  | 4      | Energy  | 5      | Energy use – reductions; type/quantity; source               | 5      |
| <b>Climate adaptation</b>   |        |   |        |   |        |  |        |
| Climate change and adaptation (mitigate infrastructure risks)     | 11     | Climate change adaptation   | 11     | Climate change adaptation                                   | 8      | Climate adaptation – modeling; planning                      | 3      |
|   |        | Adaptation broadly e.g. species movement regarding climate change | 6      |   |        |  |        |
| <b>Ecosystems and other environment</b>                           |        |   |        |   |        |  |        |
| Reduce dependence of people on cars; move to trains.              | 10     | Natural capital – ownership, stewardship                          | 11     | Environmental remediation                                   | 12     | Water use  | 3      |
| Habitat protection and restoration (for pollinators)              | 9      | Biodiversity – lack of understanding                              | 6      | Waste   | 10     | Biodiversity and habitat preservation                        | 2      |
| Make parking hubs more green/energy-efficient (i.e. solar panels) | 7      | Wildlife  | 6      | Water   | 5      | Soil contamination   | 2      |
| Ecological goods and services                                     | 6      | Offsets – biodiversity  | 6      | Wildlife biodiversity                                       | 4      | Soil reclamation   | 1      |
| Incentivizing the reduction of product waste (freight customers)  | 6      | Impact assessment/ benefits of new projects                       | 6      |   |        |  |        |
| Reducing wildlife fatalities (continue to)                        | 4      | Conservation protect land   | 4      |   |        |  |        |

| GROUP 1  |        | GROUP 2  |        | GROUP 3                             |        | GROUP 4  |        |
|--|--------|--|--------|-------------------------------------|--------|--|--------|
| Issues   | Scores | Issues   | Scores | Issues                              | Scores | Issues   | Scores |
| <b>Ecosystems and other environment (continued)</b>                                      |        |  |        |                                     |        |  |        |
| Amalgamate infrastructure by talking to other corridor operators (and minimize land-use) | 4      | Decommissioning  | 4      |                                     |        |  |        |
| Parking – economize, lessen footprint  | 4      | Land protection  | 3      |                                     |        |  |        |
|  |        | Native species   | 3      |                                     |        |  |        |
| <b>Safety, e.g. spills</b>   |        |  |        |                                     |        |  |        |
| Safety of employees, community, environment (i.e. via recognition and rewards and voice) | 15     | Spills/releases/incidents                                  | 9      | Occupational safety                 | 12     | Information sharing about dangerous goods – type, timing | 9      |
|  |        | Relative growth of crude percent                           | 5      | Handling safety                     | 12     | Rolling stock – maintenance, service                     | 3      |
|  |        | Employee level safety training                             | 4      | Community safety                    | 12     | Water crossings  | 2      |
|  |        | Product information  | 4      |                                     |        | Spill prevention   | 2      |
|  |        | Energy transport   | 4      |                                     |        |  |        |
|  |        | Who pays/manages spills                                    | 3      |                                     |        |  |        |
|  |        | Product plans regarding spills – emergency response        | 2      |                                     |        |  |        |
| <b>Employees (work condition)</b>  |        |  |        |                                     |        |  |        |
| People strategy (i.e. more than labor practices)   | 11     | Jobs (creation, retention, number years turnover)          | 6      | Employee training and development   | 12     | Skills development and succession planning               | 5      |
|  |        | Job quality: wages, security, benefits, working conditions | 5      | Workforce planning                  | 10     | Type/quality of jobs provided                            | 2      |
|  |        | Workforce diversity/equity                                 | 1      | Labor practices                     | 9      |  |        |
| <b>Stakeholders/ community (incl First Nations)</b>                                      |        |  |        |                                     |        |  |        |
| Community investment (i.e. giving back, planting trees, enhancing ways of life)          | 7      | Aboriginal relations and engagement                        | 9      | Stakeholder engagement              | 12     | First Nations – engagement; land rights; FPIC            | 6      |
| As transportation hubs, how can we synergize efficiencies? (I.e. grocery shopping)       | 6      | Social remediation (community)                             | 9      | (Economic) community impact         | 10     | Community sustainability partner                         | 6      |
| Land securement  | 2      | Stakeholder engagement                                     | 5      | Aboriginal relations and engagement | 9      | (Environmental) noise/vibrations/urban quality of life   | 6      |

| GROUP 1   |        | GROUP 2  |        | GROUP 3                                      |        | GROUP 4   |        |
|---|--------|--|--------|--|--------|---|--------|
| Issues  | Scores | Issues   | Scores | Issues                                       | Scores | Issues  | Scores |
| <b>Stakeholders/ community (incl First Nations) (continued)</b> |        |  |        |  |        |   |        |
|   |        | Aboriginal relations, engagement, safety response plans, FPIC, | 4      | Social remediation (community)               | 9      | Social justice  | 3      |
|   |        | Aboriginal employment  | 4      | Human rights                                 | 8      | Nuisance noise, dust  | 3      |
|   |        | Traditional use value  | 2      | Land use                                     | 7      | Land use, land stewardship  | 2      |
|   |        |  |        | Transportation oriented planning             | 7      |   |        |
| <b>Customers</b>  |        |  |        |  |        |   |        |
| Improve commuter experience for all (i.e. elderly)              | 7      | Future passenger rail i.e. subsidies, public/ private          | 5      | Customer satisfaction                        | 12     |   |        |
| Improve user experience through apps                            | 4      | Rural access   | 5      |  |        |   |        |
| Price of train (passenger, freight)                             | 2      |  |        |  |        |   |        |
| <b>Governance and ethics</b>                                    |        |  |        |  |        |   |        |
| Tying metrics to performance                                    | 3      | Third-party verification/ validation (standards)               | 4      | Ethics                                       | 11     | Internal governance – process; target; reporting  | 7      |
|   |        |  |        |  |        | Industry-led safety standards   | 2      |
| <b>Supply chain/ procurement</b>                                |        |  |        |  |        |   |        |
|   |        |  |        | (Environmental) product design and lifecycle | 10     | Supply chain perspective (local and global)   | 7      |
|   |        |  |        | (Economic) procurement                       | 10     | Supply chain – environmental engagement and reporting; local procurement, training and engagement | 2      |
|   |        |  |        | Materials                                    | 8      |   |        |
| <b>Other</b>  |        |  |        |  |        |   |        |
| Harmonization with natural, social and economic environments    | 3      | Modeling   | 2      | Economic performance                         | 12     | National public interest  | 1      |

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