

# SUSTAINABILITY AND EDUCATION POLICY NETWORK

## THEME 1: DOCUMENT ANALYSIS METHODS

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# DATA COLLECTION METHODS

This document outlines the methods of data collection and analysis used to date in theme 1 research of the Sustainability and Environment Policy Network (SEPN). The purpose of Theme 1 is to compile and analyze existing policies in early childhood to grade 12 education (EC-12), and in post-secondary education (PSE) to help inform understandings of policy texts and dynamics in relation to Canadian environmental issues. This theme is iterative and work will be undertaken throughout the project, particularly in years 1-3 and 5.

## SEARCH TERMS

Table 1 lists the search terms that were used in all EC-12 and PSE document searches. In most cases, the search results for the basic terms (bolded) subsumed variations of the terms (e.g., a search for “sustain” produced results for “sustainability” and “sustainable”). If the basic term search results did not include the term variations, a search for the latter was also conducted. We used a Boolean search strategy combining terms using “OR” or “AND” to limit the searches.

**Table 1. Search terms for documents**

ENGLISH	FRENCH
“Sustain” “Sustainable development” “Sustainability” “Sustainable”	“Durable” “Développement Durable”
“Environment” “Environmental” “Environmental sustainability”	“Environnement” “Environnementale”
“Ecological”	“Écologique”
“Green”	“Vert”
“Climate Change”	“Climate Change”
“Aboriginal” “Indigenous” “First Nations” “Métis” “Inuit”	“Aborigène” “Indigène” “Premières Nations” “Métis” “Inuit”

## DOCUMENT COLLECTION SEARCH PROCEDURE

Below are the detailed procedures used for the collection of documents. In order to access as many relevant policies as possible, the following procedures were followed:

### Provincial Documents

#### SUB-THEME 1A. EC-12 DOCUMENT COLLECTION

##### 1. MINISTRY OF EDUCATION-SPECIFIC

Documents were collected by surveying the websites of all 13 provincial and territorial government Ministries/Departments of Education. Documents were collected in both English and French.

We collected both sustainability-specific and general (non-sustainability-specific) documents from all provincial and territorial Ministries/Departments of Education. Information for each document collected was stored on a spreadsheet prior to uploading to NVivo.

Sustainability-Specific Documents: For each province, we identified the Ministry/Department of Education's high-level documents that were (i) sustainability-specific, including those (ii) specifically concerned with the following five areas: curriculum, facilities/operations, governance, research, and community outreach.

All policies and plans linked to the respective sites were examined to see if any referenced either the term "environment" or "sustainability" or some variation of the two. In addition, the most recent annual reports and strategic plans for the ministry/department were collected where available. Targeted calls were placed to ministries/departments where there was unavailable or missing data.

##### Search Strategy:

- I. Searched the Ministry/Department's website for:
  - a) Basic terms (and parallel in French for French Ministries/Departments):
    - i. "sustain" OR "environment" OR "ecological" OR "green" OR "Aboriginal"
  - b) Term variations (and parallel in French for French Ministries/Departments): If the basic term search results did not include term variations (as indicated under search terms), the following terms were searched for:
    - i. "sustainable development" OR "sustainability" OR "sustainable" OR "environmental" OR "environmental sustainability" OR "indigenous" OR "First Nations" OR "Métis" OR "Inuit"
  - c) This survey was supplemented by searches through ministry/department search engines using the key words:
    - i. "sustainab\*" and "environment\*"
    - ii. The same searches were conducted in Google with adding "province" and "department of education", "ministry of education."

From the search results, we listed and archived all high-level documents pertaining to environmental sustainability within the Ministry/Department.

- II. To verify that we found all key material, including in the educational areas identified, we searched for the highest level document(s) (or website) in each of the five areas below:
  - a) Five areas:
    - i. Curriculum
    - ii. Facilities/Operations
    - iii. Research
    - iv. Community Outreach
    - v. Governance
  - b) Within these documents/websites, we conducted a basic term search for (and parallel in French for French Ministries/Departments):
    - i. “sustain” OR “environment” OR “ecological” OR “green” or “Aboriginal”
  - c) Term variations (and parallel in French for French Ministries/Departments): If the basic term search results did not include term variations (as indicated under search terms), the following terms were searched for:
    - i. “sustainable development” OR “sustainability” OR “sustainable” OR “environmental” OR “environmental sustainability” OR “indigenous” OR “First Nations” OR “Métis” OR “Inuit”

From the search results, we listed and archived all high-level documents pertaining to environmental sustainability within the Ministry/Department.

Non-Sustainability Specific Document(s): For each province, we located and archived the Ministry/Department of Education’s overall highest-level, non-sustainability specific document(s):

- I. Mission statement or equivalent declaration
- II. Education act
- III. Other higher level document(s) (e.g., website, strategic plan)
- IV. Budget allocation document(s)

## **2. OTHER PROVINCIAL MINISTRIES**

For each province, we identified the highest-level document for each of the provincial/territorial Ministries. This included one or more of the following:

- I. Mission statement or equivalent declaration
- II. Key act of the ministry
- III. Other highest level document(s)

## **SUB-THEME 1B. PSE DOCUMENT COLLECTION**

Sustainability-Specific Documents: For each institution, we located the institution's high-level documents that are (i) sustainability-specific, including those (ii) specifically concerned with the following five areas: curriculum, facilities/operations, research, community outreach, and governance. Governance high-level documents included policies, plans, and/or mandates relating to sustainability, in addition to any climate action plans and/or policies addressing the reduction of greenhouse-gas emissions from the institution.

### Search Strategy:

- I. Searched the Institution's website for:
  - a) Basic terms (and parallel in French for Institutions):
    - i. "sustain" OR "environment" OR "ecological" OR "green" OR "Aboriginal"
  - b) Term variations (and parallel in French for French Institutions): If the basic term search results did not include term variations (as indicated under search terms), the following terms were searched for:
    - i. "sustainable development" OR "sustainability" OR "sustainable" OR "environmental" OR "environmental sustainability" OR "indigenous" OR "First Nations" OR "Métis" OR "Inuit"

From the search results, we listed and archived all high-level documents pertaining to environmental sustainability within the Ministry/Department.

- II. To verify that we found all key material, including in the educational areas identified, we searched for the highest level document(s) (or website) in each of the five areas below:
  - a) Five areas:
    - i. Curriculum
    - ii. Facilities/Operations
    - iii. Research
    - iv. Community Outreach
    - v. Governance
  - b) Within these documents/websites, we conducted a basic term search for (and parallel in French for French Ministries/Departments):
    - i. "sustain" OR "environment" OR "ecological" OR "green" or "Aboriginal"
  - c) Term variations (and parallel in French for French Ministries/Departments): If the basic term search results did not include term variations (as indicated under search terms), the following terms were searched for:
    - i. "sustainable development" OR "sustainability" OR "sustainable" OR "environmental" OR "environmental sustainability" OR "indigenous" OR "First Nations" OR "Métis" OR "Inuit"

From the search results, we listed and archived all high-level documents pertaining to environmental sustainability within the Ministry/Department.

Non-Sustainability-Specific Document(s): For each institution, we located the institution's most recent overall highest-level, non-sustainability-specific document(s) that affect the institution's decision-making and directions:

- I. Mission statement or equivalent declaration for the entire institution
- II. Integrated plan/strategic plan/strategic research plan/academic plan/annual report
- III. Physical/campus plan
- IV. Budget allocation document(s)

## **SUB-THEME 1A. EC-12 CENSUS**

The EC-12 component of Theme 1 included the collection and analysis of data from all 390 school districts in Canada. The census data collected for these 390 districts was in part collected to allow for the selection of smaller samples of districts for qualitative site analysis research (how many are expected to be selected?). The data was analyzed also to enable greater understanding of factors contributing to sustainability policy implementation in a broader context at the EC-12 level across Canada.

A list of all EC-12 institutions in Canada (both English and French) was created. A total of 390 districts were identified at the time data collection began on April 1<sup>st</sup>, 2014. An excel database was created with the following information on each district:

### **1. SUSTAINABILITY INITIATIVES**

Data collected regarding sustainability initiatives included having undertaken a sustainability assessment (EcoSchools, or others); existence of a sustainability office or officer (a point of contact on sustainability-related issues); the existence of a sustainability policy, with data collected including policy date of implementation, type of policy document (PDF, MS Word, etc.), terminology used in policy title, and categorical type of policy data; information was also gathered on if the district signed a sustainability or environmental declaration (Talloires, Bruntland, etc.). To gather data on these variables, the following procedures were followed:

District web searches:\* As outlined in the section above, Boolean search was conducted within an institution's website search engine using the terms 'sustain' OR 'environment' OR 'ecological' OR 'green' OR 'Aboriginal.' If the first round of basic term search results did not include term variations, the following variations were entered into the website's search engine: 'sustainable development' OR 'sustainability' OR 'sustainable' OR 'environmental' OR 'environmental sustainability' OR 'Indigenous' OR 'First Nations' OR 'Métis' OR 'Inuit.' The term 'Aboriginal' was included within the search parameters in recognition that sustainability or environmental priorities may be taken up using different language depending on cultural context. Parallel terms were searched for in French among Francophone institutions. Policy sections of institution's websites were also reviewed in their entirety for any relevance to environmental, sustainability, green, or Aboriginal affairs to help ensure nothing was missed due to the content of a document not being accessible by character recognition in a text based web search. If any needed information was not available on the institution's website, a telephone call was made to the institution to find the appropriate information (e.g., year existing sustainability policy was developed).

\*same as PSE census data collection

Google web searches: The search terms and the term variations were also all entered into the Google search engine in a Boolean fashion along with the institution's name (e.g., Kootenay Lake School District AND sustainability) to ensure web-based searches were rigorous.

### **2. GEOGRAPHIC CHARACTERISTICS**

Geographic data included in the database included the location of the district in terms of province or territory. The latitude and longitude of the administrative centre of the district was also included.

### **3. DISTRICT CHARACTERISTICS**

Data was collected on other characteristics of the school district. This information included: the main language spoken in the schools in the district, if the school had a plan or policy related to Aboriginal education, the type of school district (public, separate, or charter; and if there was choice to attend any school in the district or if there were constraints based on which neighbourhood was lived in), the number of schools in the district, the student population in the district, and contact information for the District Superintendent, Facilities contact, and the school board members. This contact information was collected to facilitate later stages of the EC-12 project.

## **SUB-THEME 1B. PSE CENSUS**

The post-secondary education component of year one of the SEPN project centered on the collection and initial analysis of data from all 220 accredited post-secondary institutions in Canada. The census data gathered for these 220 institutions was in part collected to enable the selection of smaller samples of institutions for document content analysis (50 institutions selected), and later qualitative site analyses research (6 are expected to be selected). However, the data themselves were also analyzed as part of contributing to the broader understandings of the contextual factors associated with whether institutions have policies or other sustainability initiatives.

While literature examining sustainability initiatives in Canadian postsecondary education institutions exists, no high-level overviews of sustainability initiatives across all Canadian PSE institutions had been conducted to date. This portion of Theme 1 provided a census of documented sustainability initiatives in all Association of Universities and Colleges in Canada (AUCC) and Association of Canadian Community Colleges (ACCC) accredited PSE institutions in Canada in relation to factors of geographic and other institutional characteristics.

A list of all ACCC or AUCC accredited post-secondary institutions in Canada (both English and French universities) was created. A total of 220 separate institutions were accredited by at least one of the organizations at the time data collection began on October 15<sup>th</sup>, 2012 (ACCC, 2012; AUCC, 2012). An excel database was created with the following information on each institution:

### **1. SUSTAINABILITY INITIATIVES**

Data collected regarding sustainability initiatives included having previously undertaken a sustainability assessment (Sustainability Tracking, Assessment & Rating System (STARS), Cégep Vert du Québec, Campus Sustainability Assessment Framework (CSAF), or others); having signed a national or international sustainability or environmental declaration (Talloires, Halifax, PanCanadian Protocol, or the University and College Presidents' Climate Change Statement of Action for Canada); existence of a sustainability office or officer; and the existence of a sustainability policy or plan (hereafter both referred to as 'sustainability policy,' with data collected including policy year and terminology used in policy title). To gather data on these sustainability initiative variables, the following procedures were followed:

**Institutional web searches:** As outlined in the section above, Boolean search was conducted within an institution's website search engine using the terms 'sustain' OR 'environment' OR 'ecological' OR 'green' OR 'Aboriginal.' If the first round of basic term search results did not include term variations, the following variations were entered into the website's search engine: 'sustainable development' OR 'sustainability' OR 'sustainable' OR 'environmental' OR 'environmental sustainability' OR 'Indigenous' OR 'First Nations' OR 'Métis' OR 'Inuit.' The term 'Aboriginal' was included within the search parameters in recognition that sustainability or environmental priorities may be taken up using different language depending on cultural context. Parallel terms were searched for in French among Francophone institutions. Policy sections of institution's websites were also reviewed in their entirety for any relevance to environmental, sustainability, green, or Aboriginal affairs to help ensure nothing was missed due to the content of a document not being accessible by character recognition in a text based web search. If any needed information was not available on the institution's website, a telephone call was made to the institution to find the appropriate information (e.g., year existing sustainability policy was developed).

**Google web searches:** The search terms and the term variations were also all entered into the Google search engine in a Boolean fashion along with the institution's name (e.g., McGill University AND sustainability) to ensure web-based searches were rigorous.

**External database searches:** Both the official Association for the Advancement of Sustainability in Higher Education (AASHE) website (AASHE, 2012) and the official website for Cégep Vert-Environnement Jeunesse (Environnement Jeunesse., 2012) were searched as an additional way to determine if an institution had completed a sustainability assessment process (i.e., AASHE STARS or Cégep Vert). In addition, research partners, the Association for the

Advancement of Sustainability in Higher Education (AASHE), and the Sierra Youth Coalition (SYC), were consulted to confirm Canadian institutions that had undertaken an assessment through AASHE STARS rating system or the Campus Sustainability Assessment Framework (CSAF).

The Talloires Declaration (1990), Halifax Declaration (1991), Pan-Canadian Protocol for Sustainability (2007), and the University and College Presidents' Climate Change Statement of Action for Canada (2008) were also examined to see which Canadian postsecondary education institutions were signatories on the given documents.

## **2. GEOGRAPHIC CHARACTERISTICS**

Geographic data included in the database included the location of institutions in terms of city and province. The size of the community the institution was located in was also included as data and was retrieved from Statistics Canada (Orton, 2009).

## **3. INSTITUTIONAL CHARACTERISTICS**

In addition to collecting data on institutions' sustainability initiatives and geographical characteristics, additional data were collected on other institutional characteristics. These included institution type (University, Non-cégep College, or Cégep based on AUCC (AUCC, 2012), ACCC (2012), and Cégep (Fédération des cégeps, 2012) listings. There were 94 Universities, 88 Colleges (non-Cégep) and 38 Cégeps in Canada at the time of data collection, for a total of 220 accredited post-secondary institutions. We also collected data on whether institutions are a member of the U15 Group of Canadian Research Universities ([www.U15.ca](http://www.U15.ca)). Data were also collected on whether institutions were ranked as one of the three categories used in national post-secondary rankings undertaken by MacLeans Magazine. Other data collected included student population (as listed in institution's 2011-2012, including all full-time and part-time undergraduate and graduate students). Finally, data on whether an institution was public or private; the language of institution (French or English, as indicated by the primary language of an institution's website); and designation as an Aboriginal institution (using the criteria of the Aboriginal Institutes' Consortium, 2005), were also collected.

## **4. NOTES ON DATA COLLECTION**

Due to the high frequency of scanned documents in policy sections of institutional websites, policy sections of institution's websites were reviewed in their entirety for any relevance to environmental, sustainability, green, or Aboriginal affairs to guarantee the researchers did not miss anything due to content of a document not being accessible by character recognition in a text based web search. In addition, all policies and plans linked to the respective sites were examined to see if any referenced either the term "environment" or "sustainability" or some variation of the two.

If any needed information was not available on the institution's website, phone calls were made to the Office of VP Administration to ascertain the appropriate information. SEPN partners from the Association for the Advancement of Sustainability in Higher Education (AASHE) and the Sierra Youth Coalitions were consulted to confirm Canadian institutions that have participated in the STARS rating system, as well as the Campus Sustainability Assessment Framework (CSAF).

## National Documents

A list of current relevant national documents (2005-present, as well as any prior documents still referenced in current regional policy) were compiled through (a) a poll of SEPN research team members and (b) a thorough web search. The aim was to locate all national policies or recommendations, which include a focus on sustainability in relation to education, with the search terms situated in the title, keywords, or abstract of the document. We are interested in national or intra-provincial policies or mandates, which may be affecting sustainability uptake provincially or institutionally.

### Search Strategy:

- I. Searched the Ministry of Aboriginal Affairs and Northern Development Canada (AANDC, currently Indigenous and Northern Affairs Canada) website, the Ministry of the Environment website, and the Canadian Commission for UNESCO (CCU) databases for:
  - a) Basic terms (and parallel in French documents):
    - i. “Canada” AND “education” AND “policy” OR “recommendations” AND “sustain” OR “environment” OR “ecological” OR “green” OR “Aboriginal”
  - b) Term variations (and parallel in French for French documents): If the basic term search results did not include term variations (as indicated under search terms), the following terms were searched for:
    - i. “sustainable development” OR “sustainability” OR “sustainable” OR “environmental” OR “environmental sustainability” OR “indigenous” OR “First Nations” OR “Métis” OR “Inuit”

From the search results, we listed and archived all policy-related documents pertaining to sustainability. A supplementary search was conducted using the same terms (and parallel in French for French documents) in Google.ca to make sure no documents were missed from searching the previously mentioned search engines.

- II. To verify that we found all key material, including in the educational areas identified, we searched for the highest level document(s) (or website) in each of the five areas below
  - a) Five areas:
    - i. Curriculum
    - ii. Facilities/Operations
    - iii. Research
    - iv. Community Outreach
    - v. Governance
  - b) Within these documents/websites, we conducted a basic term search for (and parallel in French for French Ministries/Departments):
    - i. “sustain” OR “environment” OR “ecological” OR “green” or “Aboriginal”
  - c) Term variations (and parallel in French for French Ministries/Departments): If the basic term search results did not include term variations (as indicated under search terms), the following terms were searched for:
    - i. “sustainable development” OR “sustainability” OR “sustainable” OR “environmental” OR “environmental sustainability” OR “indigenous” OR “First Nations” OR “Métis” OR “Inuit”

From the search results, we listed and archived all high-level documents pertaining to environmental sustainability within the Ministry/Department. A supplementary search was conducted using the same terms (and parallel in French for French documents) in Google.ca to make sure no documents were missed from searching the previously mentioned search engines.

## International Documents

A list of current relevant international documents (2005-present, as well as prior documents still referenced in current regional policy) were compiled through (a) a poll of SEPN research team members and (b) a thorough web search.

This search included international policy documents relating to how sustainability education should be approached globally, or across multiple national contexts ( i.e. not specific to a particular national context, for example, policy documents from a country other than Canada). The aim is to locate all international documents that may influence policy as it pertains to sustainability education in Canada.

### Search Strategy:

- I. Searched the UNESCO databases and Google.ca for:
  - a) Basic terms (and parallel in French documents):
    - i. “education” AND “policy” OR “recommendations” AND “sustain” OR “environment” OR “ecological” OR “green” OR “Aboriginal”
  - b) Term variations (and parallel in French for French documents): If the basic term search results did not include term variations (as indicated under search terms), the following terms were searched for:
    - i. “sustainable development” OR “sustainability” OR “sustainable” OR “environmental” OR “environmental sustainability” OR “indigenous” OR “First Nations” OR “Métis” OR “Inuit”

From the search results, we listed and archived all policy-related documents pertaining to sustainability in education.

## DATA ANALYSIS METHODS

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Based on the initial theme 1 data collected, quantitative and qualitative data were analyzed as follows.

### QUANTITATIVE DATA ANALYSIS

#### Pairwise Associations

To measure the relationship between pairs of variables, we calculated pairwise measures of association. The database contains three types of variables: dichotomous (yes/no), nominal (e.g., province), and continuous or numeric (e.g., student population). Quantifying the strength of association between these different data types required three different measures:  $\Phi$ , Kramer’s V, and the point biserial correlation ( $r_{pb}$ ). The three measures are conceptually or computationally related, but are appropriate for different data types.  $\Phi$ , or the mean square contingency coefficient, is a measure of association between two dichotomous variables. Kramer’s V is an extension of  $\Phi$  to nominal data.  $r_{pb}$  can quantify the strength of association between a binary and a continuous variable. We calculated these measures of association using the R statistical language (R Core Team). We used the appropriate measure of association for all pairs of variables in the dataset. For all three measures of association; 0 indicates no relationship, and progressively larger values indicate a stronger relationship. We considered values under 0.05 to be a negligible relationship, 0.06-0.19 to be a weak relationship, 0.2-0.29 to be a moderate-weak relationship, 0.3 to 4.9 to be a moderate relationship, and 0.5 and higher to be a strong relationship.

#### Spinograms/Spine Plots

We plotted spinograms (otherwise known as spine plots) to visualize the relationship between two variables. The widths of the bars correspond to the relative frequencies of the first variable. The heights of the bars correspond to the relative frequencies of the second variable in every level of the first variable. Spinograms are similar to stacked histograms, except the widths of the bars correspond to the relative frequencies of the first variable. Spinograms/spine plots allow simultaneous visualization of relative frequencies of both variables.

## Multidimensional Statistics

Non-metric multidimensional scaling (NMDS) is a non-parametric ordination technique. Non-parametric means that the technique makes fewer assumptions about the normality of the data. Ordination compresses the variation in a dataset in an easily visualizable and interpretable way. Similar objects will be close to each other and dissimilar objects will be farther from each other. We performed NMDS on variables in order to visualize how they were interrelated.

## QUALITATIVE CONTENT ANALYSIS

### PSE Institution Selection Criteria

While documents from all 13 provincial and territorial Ministries/Departments of Education were analyzed, a sample of 50 educational institutions was selected for in-depth data analysis of high-level documents. Institutions were selected based on the following criteria to ensure a range of policy and practice types, as shown in Figure 1.

Figure 1. Possible categorization of policy/practice implementation

		Practice	
		Low	High
Practice	Low	Low Practice Low Policy	High Practice Low Policy
	High	Low Practice High Policy	High Practice High Policy

The selection was determined based on proportional representation in each of the institutional demographic categories outlined above.

- Range of regional locations
- Range of urban/rural
  - Note: some schools have campuses in multiple locations
- Range of size of institution (total student body)
- Ratio of 2:1 used in selecting universities to colleges when applicable
- Range of undergraduate, comprehensive, and medical-doctoral (McLean's categories)
- Range of size of annual budget
- Some members of U15, some outside
- Pre-existing relationships and research access (all SEPN Partner PSE institutions were included as well as institutions of collaborators, to enhance network learning and include coast-to-coast representation)
- Approximately 3 post-secondary institutions per province (limited selection available in PEI & NFL, only one institution each in the territories)
- Include a range of post-secondary First Nations, Métis, and Inuit institutions (only three are accredited, possibly include several others as well – suggestions welcome)
- Range of extent to which sustainability appears to be incorporated into institutional policy and practice (see figure 1 below, mainly selecting on range of policy uptake at this stage).

Once institutions were selected as above, documents were collected and information archived on a spreadsheet prior to uploading on to NVivo. All collected documents were then uploaded to NVivo 10 on SEPN's NVivo Server, a networked qualitative analysis software program.

## **NVivo Data Management and Analysis**

For each of the 50 postsecondary institutions selected for in depth data analysis of highest-level documents in Nvivo, we developed criteria for choosing which types of documents to code and include in sets. We outline the details for inclusion in coding below and details for inclusion within particular sets within the set book at the end of this document. A set is simply a shortcut to a group of sources or documents. It is used to define the scope of a query within a particular group of documents in the qualitative data analysis program called Nvivo. The set book included at the end of this document outlines the data management and analysis process in Nvivo as it pertains to theme 1 document analysis. Please refer to this set book for all document analysis and use existing sets wherever possible. If you make a new set for a particular query, please use Z as the first letter for all individually produced sets and name your set using the acronyms listed in the set book.

For high level sustainability specific documents, we coded all of the sustainability policies and/or plans that were available at the time of data collection for each of the institutions in our sample. These coded sustainability specific documents can be queried in the following two key sets: B-EC12-DA-SC-Sust, which contains all of the coded documents that have been coded with the sustainability analysis codebook for EC-12; D-PSE-DA-SC-Sust, which contains all of the sustainability-specific documents for the final theme 1 sample of 50 postsecondary institutions. Second, we did not code climate change documents for institutions in the sample (set X), although these may be coded at a later date. Climate action plans or other climate focused plans or policies can be searched via text query using set X outlined in the set book section of this methods document. Similarly, facilities and operations policies with a specific focus on sustainability have not been coded but can be queried using text and other queries using set Y.

We also coded the single highest-level general policy document for each postsecondary institution in the sample. The choice of document type for each of the single highest-level policy documents requires some explanation. First, in almost all cases, the single highest-level general policy document was a 'strategic plan.' In a few cases this varied slightly and was a 'draft strategic plan' (Queens University) or a 'strategic focus' document (Dalhousie University). If any type of overall high-level strategic document was unavailable, we coded either the highest level research or academic plan, with which one was selected being determined by availability (if only one existed, we selected that document). In cases where institutions had both, we selected the one with the greatest depth (length of document) and breadth across the policy areas of governance, research, academic processes, facilities and community outreach. In the one case where such a decision was necessary, which was McGill University, the strategic academic plan was coded because of its greater length and breadth of focus.

## **EC-12 Document Selection Criteria: for Coding and Sets**

We coded the highest-level general policy documents (strategic plans) and sustainability-specific policy documents for each ministry of education. The coded EC-12 documents can be searched via sets A, B and E-K. Further description of these sets can be found in the set book at the back of this document.

## **Inductive Coding**

Inductive coding was undertaken through an initial pilot phase of coding, through which codes were initially developed and discussed amongst the team in a process of developing codebooks, before full coding all of documents was undertaken.

The pilot phase for the content analysis of the EC-12 and PSE documents began with the strategic plans and sustainability-specific governance highest-level documents (all documents at EC-12 level and half at PSE level, i.e., 25 documents in total). This coding process required the researchers to inductively code. New themes were coded until a point of saturation point (few to no new codes emerging – as determined by researchers individually and as a group), and through an extensive consultative and collaborative process, two codebooks were 'finalized' - one for general documents and one for sustainability-specific documents. Due to the iterative nature of the coding process, it is possible to add further codes to the shared codebooks as they are identified.

The main codes were created with an explicit definition of the code itself, as well as indication of when to use the code within a given document. These codes were then further broken down into other levels of sub-codes, depending suggested themes teased out of the text. Each of these sub-codes were also explicitly defined as well as indicating when to use it in coding. While the general and sustainability-specific document codebooks possessed the same main codes, different sub codes emerged within these different types of documents. Please refer to both the General and Sustainability Codebooks for a complete list of all codes.

Following creation of the formalized codebooks, full coding of all documents was undertaken in NVivo. During the coding procedure, coders read each line of text and images assign codes using the appropriate code book. Sub-codes are applied as appropriate. See the General and Sustainability Codebooks for further information.

## **Intercoder Reliability**

The coding process took approximately six months and several times during the first two months, all coding researchers coded the same document and then discussed regarding any variations in their coding practices. Problematic codes were modified or more clearly defined.

## Deductive Attributes

Alongside inductive coding, researchers recorded information for each document using the deductive checklist below (see Table 2). Data from the checklist was entered as attributes of the document within NVivo 10, or in other words, each document was labeled or tagged with information regarding the following categories.

**Table 2. Each document was labeled according to the following categories, or attributes**

Attributes	Description	Categories
Date: Inception	When was the document first created/published?	Date (Month, day, year) Ex. January 1 <sup>st</sup> , 2001
Date: Updated	When was the latest revision/update to the document?	Date (Month, day year) Ex. January 3 <sup>rd</sup> , 2009
Author	Who authored the document?	Single Author, Multiple Authors
Audience	Who is the intended audience?	Campus Community, Administrators, etc.
Type (of document)	Refers to the kind of document and applies only to Governance-Sustainability documents	Policy, Plan, Mandate, Assessment, Climate Action Plan
Status	Whether the document is a final document or a draft; completed internally or externally (applicable primarily to Sustainability Assessments)	Draft, Final
Sustainability-Specific	An attribute to identify sustainability-related documents (useful primarily to draw information for sustainability-related documents only)	Sustainability-Specific
Sustainability Assessment	A PSE audit, report, or assessment conducted for an internal or external audience	Internal, External
AASHE	Is the document from an AASHE school?	AASHE, Non-AASHE

## GLOSSARY

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**Aboriginal Education Program:** This category was filled as a 'yes' if the district website indicated an explicit policy or program geared towards Aboriginal learning

**Aboriginal Postsecondary Education Institution:** have the following attributes: 1) Board directed and controlled by Aboriginal communities; 2) Aboriginal faculty that ensure a holistic approach to education; 3) Infusion of First Nations culture, history, traditions, and values throughout curriculum; 4) Methods of instruction that address Aboriginal learning styles; 5) Integration of community throughout education process; 6) Aboriginal support staff that focus on creating student support networks; 7) Elder support and teachings; 8) Programs that ensure recognition and preservation of Aboriginal knowledge and history; and 9) Community-based program and service delivery (Aboriginal Institutes' Consortium, 2005)

**Address:** Physical address of where an institution's highest level administrative building is located. Includes GIS coordinates

**Association for the Advancement of Sustainability in Higher Education (AASHE):** A non-profit organization of colleges and universities that are working to advance sustainability in higher education

**Association of Canadian Community Colleges (ACCC):** national, voluntary membership organization representing colleges and institutes in Canada; provides accreditation for colleges in Canada. Currently operating as "Colleges and Institutes Canada"

**Association of Universities and Colleges of Canada (AUCC):** national, voluntary membership organization representing colleges and universities in Canada; provides accreditation for colleges and universities in Canada. Currently operating as "Universities Canada"

**CÉGEP Vert:** Sustainable development certification program created by Environnement Jeunesse in 2011 for colleges in Quebec. Currently 34 colleges in Quebec participating

**Level 1 Certification:** requires creation of an Environmental Action and Consultation Committee (EACC), development and adoption of a sustainability policy, training of employees and Education for Sustainable Development (ESD), and the organization of at least four awareness-raising activities

**Level 2 Certification:** requires drawing up and completing an environmental assessment under the CÉGEP Vert framework and developing and implementing a sustainability action plan to put sustainability policy into effect

**Level 3 Certification:** requires creation of an environmental intervention fund and the creation of annual report on sustainability efforts

**Excellency Certification:** requires certified institutions continue to fulfill criteria for Levels 1, 2, and 3 while implementing continual improvement on existing efforts in relation to sustainability

**Code:** To select source content and define it as belonging to a specific node (theme, place, person, etc.) within the NVivo database of sources

**College:** A postsecondary education institution that grants certificates, diplomas, associate's degrees, and/or bachelor's degrees. Typically refers to a technical, applied arts, or applied science school. Tend to offer specialized professional or vocational education in specific employment fields

**Community:** City, metro-area, or town in which an institution is situated or in some cases, adjacent to

**Community Outreach:** Refers to any strategic priorities or high-level mandates for community outreach or engagement in relation to environmental sustainability within the educational institution or body

**Community Population:** Population of the city, metro-area, or town in which an institution is situated or in some cases, adjacent to

**Content Analysis:** The thematic analysis of qualitative data

**Curriculum:** Refers to any high-level environmental sustainability mandates in relation to academic programming within an educational institution or body

**Discourse:** a produced collection of ideas and concepts through which meaning is given via social and physical phenomena

**Discourse Analysis:** The process of analyzing bodies of text for meaning

**Eco Schools:** An environmental education and certification program for grades K-12 that helps school communities develop both ecological literacy and environmental practices to become environmentally responsible citizens and reduce the environmental footprint of schools. Taken from [http://ontarioecoschools.org/about\\_us/index.html](http://ontarioecoschools.org/about_us/index.html)

**Education:** Refers to formal education from EC-PSE, and includes the different educational institutions/bodies of: curriculum, facilities/operations, governance, research, and community outreach

**Educational Body:** Refers to a body responsible for determining educational mandates. In the case of this study, it is used to refer to provincial/territorial Ministries of Education as well as at the national level to Indigenous and Northern Affairs Canada (INAC), which are the scope of study for document analysis at the EC-12 level

**Educational Institution:** Refers to a specific institution, which is the scope of study for document analysis at the PSE level within the study

**Environment:** Refers to the ecological use of the term, and not to other types of institutional, educational, etc., 'environments'

**English-Speaking:** Institution where English is the primary language used for official communication

**Facilities/Operations:** Refers to any high-level environmental sustainability mandates in relation to physical facilities and operations (e.g., mandates to do with energy, waste, water, food, and other aspects of the physical environmental footprint of educational institutions and bodies, including institutional facilities plans and campus maps)

**French-Speaking:** Institution where French is the primary language used for official communication

**Governance:** Refers to any high-level environmental sustainability mandates in relation to how the educational institution or body is governed and managed

**Halifax Declaration:** Declaration of sustainability created for and by presidents of higher learning institutions. Originally convened in 1991 in Halifax, Canada, currently has over 30 signatories, spanning 10 countries

**High-level Documents:** Refer to (i) any textual material (e.g., strategic plans, mission statements, maps), and (ii) at a scope that can be analyzed across the country (e.g., curriculum foundational documents versus all grades and subject area curricular documents)

**Institution Size:** Small (<=5,000), medium (5,001-20,000), and large (>20,000) based on total student body

**Maclean's Institution:** Postsecondary education institutions in Canada that are ranked on quality based Maclean's magazine criteria. Includes 19 undergraduate focused institutions, 15 comprehensive institutions (institutions with a significant degree of research activity and a wide range of undergraduate and graduate programs), and 15 medical-doctoral institutions (institutions offering a broad range of Ph.D. programs and have medical schools)

**NVivo:** A qualitative data management and analysis software program

**NVivo Attribute:** An NVivo attribute is used to describe a classified source. For example, a source may be classified as 'sustainability specific' with attributes for 'sustainability policy', 'sustainability plan', and 'climate action plan'

**NVivo Node:** An NVivo node is a collection of references about a specific theme, place, person, or other area of interest. References are gathered by 'coding' sources such as plan, policies, and other documents

**Pan-Canadian Protocol for Sustainability:** Declaration of sustainability created for and by presidents of colleges in Canada. Originally convened in 2007 by the ACCC, currently has 59 signatories, spanning all 10 provinces. Private: Institution controlled or managed by a body most of whose members are not selected by a public authority (Canadian Information Centre for International Credentials, 2013)

**Province:** Any of the ten jurisdictions within Canada that receive their authority to govern from the Constitution Act, 1867. Includes Alberta, British Columbia, Manitoba, New Brunswick, Newfoundland and Labrador, Nova Scotia, Ontario, Prince Edward Island, Quebec, and Saskatchewan

**Public:** Institution controlled or managed by a body most of whose members are elected or appointed by or under the scrutiny of a public authority (Canadian Information Centre for International Credentials, 2013)

**Qualitative Research:** emphasizes the qualities of entities, focuses on processes and meanings; quantity, amount, intensity, or frequency are not experimentally examined or measured (if measured at all); "stresses the socially constructed nature of reality, the intimate relationship between the researcher and what is studied, and the situational constraints that shape inquiry"; "researchers emphasize the value-laden nature of inquiry; seeks answers to questions that stress how social experience is created and given meaning" (The SAGE Handbook of Qualitative Research, 2011, p. 8)

**Quantitative Research:** "Emphasize measurement and analysis of causal relationships between variables, not processes. Proponents claim that their work is done from within a value-free framework" (The SAGE Handbook of Qualitative Research, 2011, p. 8)

**Research:** Refers to any strategic priorities or other high-level mandates for research in environmental sustainability within the educational institution or body

## School Type:

**Public:** Public school districts are non-religious school districts

**Separate:** Separate school districts are religious. These districts are usually catholic, but may be protestant or another religion

**Charter:** Charter schools are publicly funded independent schools that function under a charter; Alberta is the only province in Canada that has enabled Charter schools

**Hospital School:** Hospital-based school authorities provide a safe learning environment for students with disabilities under the guidance of the Ministry of Education curriculum

**Choice:** Many students must attend a school within their correct 'ward', or neighborhood. "Choice" refers to the explicit statement of the district that a student does not have to attend a school within their ward, and can attend a school of their choice within the district

**Student Population:** Number of students in attendance at a given institution as reported in the institution's annual report; includes both full-time and part-time students

**Sustainability:** Refers to uses of 'sustainability' in EC-12 and PSE contexts which at minimum include a focus on environment (i.e., environment must be in the mix of social, economic, cultural considerations of sustainability, but with a flexible context-driven definition of sustainability)

**Sustainability Assessment:** A survey of the environmental and/or sustainability situation at a given institution; can look at sustainability issues in governance, facilities, education, research, and community

**Sustainability Declaration:** An international declaration for sustainability in higher education (either the Talloires or Halifax Declaration) that includes Canadian postsecondary institutions as signatories

**Sustainability Office or Officer:** A designated office or person responsible for facilitating sustainability initiatives across the whole institution

**Sustainability Policy:** A high level governance document (be it a policy, plan, strategy, or mandate) that addresses the implementation of environmental management and/or sustainability across the entire institution

**Sustainability Tracking, Assessment and Rating System (STARS):** A transparent, self-reporting framework for colleges and universities to measure their sustainability performance; facilitated through AASHE framework. There are currently 21 STARS rated schools across 7 provinces in Canada. Institutions are assigned an overall numeric score based on a composite of scores for sustainability in Academics, Engagement, Operations, and Administration

**STARS Bronze:** Minimum score required – 25

**STARS Silver:** Minimum score required – 45

**STARS Gold:** Minimum score required – 65

**STARS Platinum:** Minimum score required - 85

**Talloires Declaration:** Declaration of sustainability created for and by presidents of institutions of higher learning. Originally convened in 1990 in Talloires, France, currently has over 400 signatories, spanning 52 countries

**Terminology:** The term or terms used in the title of a postsecondary education institutions sustainability policy that reflect the orientation of the institution to sustainability: terms include sustainability, sustainable development, and environment/environmental

**Territory:** Any of the three jurisdictions in Canada that receive their authority to govern as mandates of the Canadian Federal government and operate as parts of Canada's federal realm. Includes the Northwest Territories, Nunavut, and Yukon

**U15:** The 15 leading research-intensive universities in Canada

**University:** A postsecondary education institution that provides both undergraduate and graduate education programs and conducts research. Sometimes include professional schools such as medical schools and law schools. Universities award Bachelor of Arts (B.A.) and Bachelor of Science (B.Sc.) degrees for undergraduates, Master of Arts (M.A.) and Master of Science (M.Sc.) degrees for graduates, and Doctorate of Philosophy (PhD) degrees for graduates. Professional schools award specialized doctorates to graduates, such as Doctor of Medicine (M.D.), Juris Doctorates (J.D.), etc. (Statistics Canada, 2009)

**University and College Presidents' Climate Change Statement of Action for Canada:** A national declaration for responding to climate change created for and by presidents of institutions of higher learning in Canada. Currently has 31 signatories spanning 7 provinces

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## **APPENDIX A: SUSTAINABILITY CODEBOOK**

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SEE [WWW.SEPN.CA](http://WWW.SEPN.CA) OR EMAIL NICOLA CHOPIN AT NICOLA.CHOPIN@USASK.CA

## **APPENDIX B: GENERAL CODEBOOK**

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SEE [WWW.SEPN.CA](http://WWW.SEPN.CA) OR EMAIL NICOLA CHOPIN AT NICOLA.CHOPIN@USASK.CA

## APPENDIX C. DATA ANALYSIS SET BOOK

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### INTRODUCTION

Sets are a flexible way of grouping your sources and nodes using NVivo data management software. A set can include any number of sources or nodes and a source or node can belong in multiple sets. While there are multiple uses for 'sets' in Nvivo, we mostly use them for two purposes within the SEPN project. First, we use them to group items (policy documents) around a particular thematic (Sustainability or Climate Change) and/or area of analysis (EC-12 or PSE) in the SEPN project. For instance, we create sets to search all pertinent documents in a particular sample. Second, we use sets to define the scope of particular queries in the analysis and writing stages. QSR offers a useful introduction to this function of sets: "As the scope of a query—for example, you could make a set for related documents (stored in different folders) and run a Text Search query." Whereas the former function of sets (grouping items in relation to themes/areas) requires an agreement on the properties of a set by multiple team members so as to ensure continuity across research (i.e., sets included in this set book), the latter function can be used more intuitively in the analysis and writing stages wherein a particular set may be used by only one person for one paper (in which case it should be identified by using that researcher's initials in the set name). This 'set book' outlines the principle sets used for analyzing particular areas of the SEPN project and offers guidelines for making individual researcher sets in Nvivo.

### GUIDELINES

When using 'sets' to query a particular sample in the SEPN project, please use the sets that we have decided upon and which are listed in section 3 under 'SEPN Team Sets' below. However, if you are using sets to define the scope of your query in relation to a particular thematic or a particular attribute, you can follow the steps and guidelines outlined below.

If you need to create a new set, click on the 'create' tab, then click on 'set.' A 'new set' box will appear, where you will need to write a name for your set and a short description. Please follow these four rules when naming and describing a new set:

1. Always check to see if one of the existing sets in the 'collections' folder of the SEPN project can be used before deciding to make a new set to define the scope of a query in relation to particular attributes or thematics.
2. If you need to make a new set to define the scope of your query, please name the set in the following manner. 1) Write the letter 'Q' (for query), followed by a slash; 2) Write the acronym for the area of analysis such as EC12 or PSE, followed by a slash; 3) Write your initials in capital letters followed by a slash and then a name for your inquiry or paper topic. For example, if researcher Andrew Bieler (initials AB) wanted to make a set to query within high level general policy documents (G = General High Level Doc) of postsecondary institutions who are leading in sustainability initiative score, he would write the following: Q-PSE-AB-G-Sustainability leaders.
3. Please refer to acronyms in the appendix when naming new sets.
4. Write a complete and thorough description of each set you create including an explanation of its name and utility and add this to the set in NVivo. Set descriptions are visible if you right click on a set and then click on 'set properties' where you will see any description you or another team member has created.

After you have named and described your set, you will then need to manually go through source folders to find the documents for your set. Add documents to a set by right clicking and scrolling to the option 'add to set', whereupon you will see the list of existing sets including the one you have just created.

When using sets to query, results will be shown in two or more windows: a) summary list showing the list of sources brought up by your query, as well as the percentage of the document that includes the specific codes or phrases

queried; b) text panel showing the sections of text revealed by your query; c) further windows with graphs, tables or other illustrations depending on the query type. In the description of set properties outlined below, we make reference to summary lists since it is often important to differentiate the number of sources brought up by a query versus the number of institutions.

## SEPN TEAM SETS

Sets are organized in alphabetical order in the collections folder of Nvivo under 'Sets.' The best way to organize sets in Nvivo is by name, with the most important or frequently used sets beginning with 'A,' etc.

### Main Sets

Alphabetical position	Name	Description
A	A-EC12-DA-GC-Gen	EC-12 General Policy docs
B	B-EC12-DA-SC-Sust	EC-12 Sustainability docs
C	C-PSE-DA-GC-Gen	PSE General Policy docs
D	D-PSE-DA-SC-Sust	PSE Sustainability docs

### DESCRIPTION OF MAIN SETS

#### A

Name: A-EC12-DA-GC-Gen

Explanation of set name: A= alphabetical position in hierarchy of group sets, for EC-12. DA = Document Analysis. GC=coded with the general codebook. Gen=General high level docs.

Set Description: This set contains all of the coded, highest-level general policy documents for each ministry of education in Canada. This contains the one highest-level strategic plan for each ministry of education in Canada.

Set Properties: As of December 2014, there are 8 items in this set including strategic plans for AB, NL, NS, SK, YT, QC, BC and ON.

#### B

Name: B-EC12-DA-SC-Sust

Explanation of set name: B = alphabetical position in hierarchy of group sets, for EC-12. DA=Document Analysis. SC=Sustainability codebook. Sust = sustainability specific docs.

Description: This set contains all of the coded documents that have been coded with the sustainability analysis codebook for EC-12. Therefore, it contains the highest level sustainability-specific documents (one per province), curriculum frameworks, and subject curriculum frameworks.

Set Properties: As of December, 2014 there are 88 items in the set.

## C

Name: C-PSE-DA-GC-Gen

Explanation of set name: C = alphabetical position in hierarchy of group sets. PSE=Postsecondary. DA = Document Analysis. GC = Coded with the general codebook. Gen = General high level documents

Set Description: This set includes the highest-level general policy document for each post-secondary institution included in the final sample of fifty institutions for theme 1 content analysis. The highest-level general policy documents are predominantly 'strategic plans' and these were chosen wherever possible. Where there is no strategic plan collected for an institution in the theme 1 sample we have chosen either a 'strategic research plan' or an 'academic strategic plan,' with document choice determined by depth (length) and breadth across 5 areas of governance, operations, education, research, and community outreach.

Set Properties: As of December 2014, this set contains 56 items (PDFs). There is one PDF per institution in the sample of 50, each representing a high-level general policy document. There are two exceptions to this rule: Queens has 6 PDFs for one policy document and Winnipeg has two PDFs for one policy document.

Notes: When using this set, please double check the number of sources listed for your query to see if it is the same as number of institutions.

## D

Name: D-PSE-DA-SC-Sust

Explanation of set name: D = alphabetical position in hierarchy of group sets. PSE = Postsecondary. DA = Document Analysis. SC = Sustainability codebook. Sust= Sustainability specific document (highest level).

Set Description: This set contains all of the sustainability-specific documents for the final theme 1 sample of 50 postsecondary institutions. It contains all sustainability policies and plans that are currently coded and within this sample in Nvivo.

Set Properties: This set contains sixty-three items (PDF documents) pertaining to sustainability policies or plans for a total of 40 schools. X number of institutions have both policies and plans, thus the number totals more than 40. There is one notable exception to document type in this set, which is the appearance of Okanagan's 'strategic plan' (a non-sustainability-specific document) This plan is included because AASHE described it as a 'sustainability plan' and SEPN thereafter referred to it as such during census research.

## **SIGNIFICANT GROUP SETS**

Following the four main sets, we categorized significant group sets using letter E and onwards. We begin with EC-12 general policy document sets (E-F), then list EC-12 sustainability document sets (G-K). We then list PSE general policy document sets (L-T), and end with PSE sustainability document sets (T-Y). The letter Z is reserved for all other sets. Depending on research needs, the alphabetical ordering of these sets may be changed in the future.

### **E**

Name: E-PSE-SC-Sust-Plans

Explanation of set name: E = Alphabetical position. PSE = Postsecondary. SC = Sustainability codebook. Sust-Plans = Sustainability Plans.

Set Description:

### **F**

Name: F-PSE-DA-SC-SustPolicies

Explanation of set name: F = Alphabetical position. PSE = Postsecondary. SC = Sustainability codebook. SustPolicies = Sustainability Policies.

Set Description:

### **G**

Name: G-PSE-DA-GC-StratResearchPlans

Explanation of set name: G = alphabetical position. PSE = Postsecondary. DA=Document Analysis. GC=coded with the general codebook. StratResearchPlans = Strategic Research Plan documents.

Set Description: This set contains all of the strategic research plans for postsecondary institutions included in our sample of fifty for theme one content analysis. As of December 2014, it includes X number of documents.

### **H**

Name: H-EC-12-DA-SC-SCF

Explanation of set name: H = alphabetical position in hierarchy of group sets, for EC-12. DA= Document Analysis. SA=Sustainability codebook. SCF=subject curriculum framework.

Set Description: This set contains all of the subject-specific curriculum frameworks for EC-12, analyzed with the sustainability codebook. It is one of the three subsets that comprises Set B.

### **I**

Name: I-EC12-DA-SC-CCF

Explanation of set name: I = alphabetical position in hierarchy of group sets, for EC-12. DA= Document Analysis.

SA=Sustainability codebook. CCF=cross curricular framework.

Set Description: This set contains all of the cross curricular frameworks for EC-12, analyzed with the sustainability codebook. It is one of the three subsets that comprises Set B.

## **J**

Name: J-EC12-DA-Sust-Facilities

Explanation of set name: J = alphabetical position. EC12= early childhood to grade 12. DA = Document analysis. SC = Sustainability codebook. Facilities or operations.

Set Description: This set contains all of the facilities or operations documents focused on sustainability issues for EC-12.

## **K**

Name: K-EC12-DA-SC-Sust

Explanation of set name: I = alphabetical position. EC12 = early childhood to grade 12. DA = Document analysis. Sust= sustainability specific documents.

Set Description: This set contains all of the coded, sustainability-specific documents for each ministry of education in Canada (All Governance and Curriculum documents) . It is one of the three subsets that comprises Set B. \*This is the set used for Theme 1 K-12 Content Analysis Paper.

Name: K-EC12-DA-Sust-CC

Explanation of set name: K = alphabetical position in hierarchy of group sets, for EC-12. DA = Document Analysis. CC = Climate change specific documents.

Set description: This set contains all of the climate change specific documents at the EC-12 level.

## **L**

Name: L-PSE-DA-Facilities

Explanation of set name: L = alphabetical position. PSE = Postsecondary. DA=Document Analysis. Facilities =

Set Description:

## **M**

Name: M-PSE-DA-Gen-Maps.

Explanation of set name: M = alphabetical position. PSE= postsecondary. DA = Document analysis. Gen= General policy document. Maps = Campus maps.

Set description: This set contains all of the postsecondary campus maps collected for theme one content analysis. The maps are not coded but can be searched using text queries and may be useful for site analysis. As of December 2014, this set includes X number of maps.

## **N**

Name: N-PSE-Gen-Universities

Explanation of set name: N= Alphabetical position. PSE = Postsecondary. Gen=general docs. Universities.

Description: This set contains all of the general documents or strategic plans for all universities (only) included within the sample of 50 postsecondary institutions for theme one content analysis.

## **O**

Name: O-PSE-Gen-Colleges

Explanation of set name: O = Alphabetical position. PSE=postsecondary. Gen = general docs. Colleges.

Description: This set contains all of the general documents or strategic plans for all non-Cegep colleges (only) included within the sample of 50 postsecondary institutions for theme one content analysis.

## **P**

Name: P-PSE-Gen-Cegeps

Explanation of set name: P = alphabetical position. PSE = Postsecondary. Gen = general documents. Cegeps.

Description: This set contains all of the general documents or strategic plans for all cegeps (only) included within the sample of fifty postsecondary institutions for theme one content analysis.

## **Q**

Name: Q-PSE-Gen-U15

Explanation of set name: Q = Alphabetical position. PSE = Postsecondary. Gen = General policy documents. U15 = group of 15 research universities across Canada.

Description: This set contains all of the general documents or strategic plans for all 15 of the U15 university members included within our sample of 50 postsecondary institutions selected for theme one content analysis.

## **R**

Name: R-PSE-Gen-Large

Explanation of set name: R = alphabetical position in hierarchy of group sets. PSE = Postsecondary. DA = Document Analysis. Gen = General high level documents. Large = large size postsecondary institutions in the sample.

Set Description: This set contains all of the high-level general policy documents (strategic plans) for large PSEs in our sample of fifty for theme one content analysis. See theme one content analysis spreadsheet for more details on institutional size.

## **S**

Name: S-PSE-DA-Gen-Medium

Explanation of set name: S = alphabetical position in hierarchy of group sets. PSE = Postsecondary. DA = Document Analysis. Gen = General high level documents. Medium = medium size institutions in the sample.

Set Description: This set contains all of the high-level general policy documents (strategic plans) for medium sized PSEs in our sample of fifty for theme one content analysis. See theme one content analysis spreadsheet for more details on institutional size.

## **T**

Name: Q-PSE-DA-Gen-Small

Explanation of set name: Q = alphabetical position in hierarchy of group sets. PSE = Postsecondary. DA = Document Analysis. Gen = General high level documents. Small=small sized institutions in the sample.

Set Description: This set contains all of the high-level general policy documents (strategic plans) for small sized PSEs in our sample of fifty for theme one content analysis. See theme one content analysis spreadsheet for more details on institutional size in relation to student population.

## **U**

Name: U-PSE-SustPlans

Explanation of set name: U = alphabetical position in hierarchy of group sets. PSE= Postsecondary. DA = Document Analysis. Sust=Sustainability specific document. Plans=Sustainability plans.

Set Description: This set contains all of the sustainability plans for postsecondary institutions included in the theme 1 content analysis sample.

Set Properties: As of December 2014, this set contains 29 items. Saskatchewan's plan includes 7 PDFs, so if this plan shows up in your query please differentiate number of sources from number of institutions.

## **V**

Name: V-PSE-DA-SustPolicies

Explanation of set name: V = alphabetical position in hierarchy of group sets. PSE = Postsecondary. DA = Document Analysis. Sust = Sustainability Specific Documents. Policies = Sustainability policies.

Set Description: This set contains all of the sustainability policies for postsecondary institutions included in the theme 1 content analysis sample.

Set Properties: As of December 2014, this set contains 34 items. UBCV's policy includes 2 PDF documents, so if this policy shows up please be sure to differentiate number of sources from number of institutions.

## **W**

Name: W-PSE-DA-AASHE-Sust

Explanation of set name: W = alphabetical position. PSE=Postsecondary. DA=Document analysis. AASHE = Association for the Advancement of Sustainability in Higher Education schools. Sust = sustainability specific policies and plans.

Set Description: This set contains all of the sustainability policies and plans for AASHE rated institutions included in theme one content analysis. As of December 2014, this set includes X documents.

## **X**

Name: X-PSE-DA-Sust-CC

Explanation of set name: X = alphabetical position in hierarchy of group sets. PSE=Postsecondary. DA = Document Analysis. Sust=Sustainability specific. CC = Climate change specific documents.

Set Description: This set contains all of the climate change focused documents within the set of sustainability-specific documents for postsecondary institutions included in our final sample for theme 1 content analysis. This set contains all of the climate action plans or other climate focused plans/policies but not general facilities or operations plans.

Set Properties: As of December 2014, this set includes 23 documents pertaining to 22 institutions. UBCV has its climate action plan in two PDF documents, so if this is in your query summary list than your number of sources will be different from your number of schools.

## **Y**

Name: Y-PSE-DA-Sust-Facilities.

Explanation of set name: Y = alphabetical position. PSE=postsecondary. DA=Document analysis. Sust=sustainability specific docs. Facilities = facilities or operations documents.

Description: This set contains all of the sustainability specific facilities or operations documents, such as environmental performance or energy reports on school operations. This does not include climate change focused documents, which can be seen in set J.

Set Properties: As of December 2014, this set includes 17 items.

## **Z**

Please use Z as the first letter for all individually produced sets and name your set using the acronyms listed below. If you need to invent an acronym please be concise and include a description of it under set properties in Nvivo. Please offer a full description for each set created under letter Z. Please refer to part two of the set book for further details.

## SET BOOK APPENDIX

Please refer to these acronyms when making new sets.

Site = Set created for site analysis queries

DA = Document Analysis, used for content analysis queries of documents

GC = Coded with the general codebook

SC = Coded with the sustainability codebook

EC12 = early childhood to grade 12

PSE = Postsecondary

Gen = General high level doc

SP = Strategic plans

R = Research strategic plans

A = Academic strategic plans

Sust = Sustainability specific documents

CF = Curriculum framework

SCF = Subject curriculum framework

CC = Climate change specific documents

F = Facilities or operations documents